Certificate of Attendance

Advanced Clinic: Breast Surgery CPT Coding

April 8, 2004

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NAME

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Presenter

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Advanced Clinic: Breast Surgery CPT Coding

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BREAST

About Lolita M. Jones Consulting Services
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BIOGRAPHY:

Lolita M. Jones, RHIA, CCS, is an independent consultant specializing in hospital outpatient and ambulatory surgery center coding, billing, reimbursement, and operations. Ms. Jones recently launched her web-based coding program at www.EZMedEd.com. She has over 15 years of experience in publishing, training, and auditing for the hospital outpatient and freestanding ambulatory surgery center (ASC) markets. Ms. Jones has earned both the Registered Health Information Administrator and Certified Coding Specialist credentials from the American Health Information Management Association (AHIMA) in Chicago, IL. Ms. Jones resides in Fort Washington, Maryland, and she has developed six (6) specialty manuals for freestanding ambulatory surgery centers (ASCs) as well as comprehensive manuals for the following ambulatory payment classification (APC) training programs:

Basic CPT Outpatient Coding Clinic: This 6.5 hour program is designed for (Future/Beginning/Current) Coding Specialists, Coding Managers, Reimbursement Specialists, Compliance Auditors, Hospital-Based Clinic Managers, and ALL hospital staff responsible for outpatient coding including emergency room, ancillary department and hospital-based clinic staff. The contents include general guidelines, steps for coding, and official CPT guidelines for surgical procedures that are commonly performed in the hospital outpatient setting. Exercises based on actual ambulatory surgery operative reports will be used to strengthen the attendees' understanding of the guidelines presented.

APC Institute: Impact on Emergency Services: This 3 hour program is designed for Emergency Department: Directors, Managers, Supervisors, and Nurses; Registration Staff, Health Information Managers, Coding Specialists, and Cast Room Technicians.
The contents include APC Grouping Logic, Mapping Logic for ED Medical Visits, APCs for Emergency Department Services, Modifiers –25 and –27, Emergency Screening without Treatment, Critical Care, "Clotbuster" Drugs, Tissue Adhesive Wound Closure, and Documentation Guidelines**.**

APC Institute: Outpatient Compliance Action Plan: This 6.5 hour program is designed for Compliance Department Staff (Corporate Officers, Directors, Managers, Analysts, Auditors); Health Information Management Staff (Directors, Coding Managers/Supervisors, Coding Specialists); Risk Managers, APC Coordinators, Reimbursement Specialists, Decision Support Analysts, Outpatient Billing Supervisors, Outpatient Billing Specialists, Software Vendor Product Managers, ALL staff responsible for facility component outpatient coding in: Registration, Hospital-Based Clinics, Ancillary Departments, and the Emergency Department. The contents include: Brief Overview of APCs; CPT Surgery Coding Compliance; and APC Compliance Issues: site-of-service billing, reason for visits, discontinued surgery, medical visits, "limited follow-up services," colorectal cancer screening, observation stay without recovery, critical care, interventional radiology, modifiers, unlisted procedure codes, units of service, UB-92 claims data, and higher level APC groups.

APC Institute: Clinical Documentation Strategies: This 6.5 hour program is designed for nursing, utilization management, case management, and other health care professionals responsible for health records documentation. The contents include ambulatory payment classification (APC)-related clinical documentation requirements and management tips for the following sites of service: Emergency Room, Observation Beds/Unit, Ambulatory Surgery, Hospital-Based Outpatient Departments/Clinics, Pain Management Clinic, Series/Recurring Services, Partial Hospitalization Program, Cast Room, Ancillary Testing Areas, and Utilization Management.

APC Institute: Coding Guidelines for Hospitals - This 1 or 2 day program is designed for all technical, clinical and managerial staff responsible for facility component outpatient coding that will directly impact ambulatory payment classification (APC) payments. The contents include: Ambulatory Surgery Reimbursement under APCs, APC Data Reporting Requirements, Medicare Hospital Outpatient Edits, Outpatient Billing Procedures and Guidelines, Ambulatory Claims Rejection Monitors, Peer Review Ambulatory Surgery Review, Coding System Reviews, How to Use ICD-9-CM, How to Use CPT, and CPT Coding Guidelines By Body System (Integumentary, Musculoskeletal, Respiratory, Cardiovascular and Lymphatic, Hemic and Lymphatic, Digestive System, Urinary, Male Genital, Laparoscopy/Hysteroscopy, Female Genital, Endocrine, Nervous, Eye and Ocular Adnexa, Auditory).

Modifier Clinic: Hospital Outpatient Issues: This 6.5 hour program is designed for coding, reimbursement, compliance, billing, database management, ancillary, and clinic staff responsible for modifier programming, reporting, billing, and auditing. The contents include: Modifier Reporting Requirements, Official Medicare Guidelines, Recommended Hospital Front-End Modifier Edits, Electronic/On-Line UB-92 Reporting of Modifiers, Coding and Billing Aborted/Discontinued Procedures, ICD-9-CM vs. Medicare Coding Guidelines, Unsuccessful vs. Aborted/Discontinued Procedures, Documentation of Reduced/Discontinued Procedures, Testing Potential Coders, Software Encoder Modifier Edits, Interventional Radiology Procedures, Information System Upgrades, Data Quality Review, Radiology Modifier Reporting Issues, Ancillary Department Modifier Reporting for Hospitals, and Exercises/Case Studies.

APC Institute: Hospital Financial and Operational Issues: This 6.5 hour program is designed for hospital executives, directors, chargemaster coordinators, coding/reimbursement staff, and information system/database managers who will implement ambulatory payment classifications (APCs). The contents include: General Overview of APCs, APC Data Reporting Requirements, APC Policy Issues, Developing a Plan of Action, Conducting Hospital-Wide APC Education, and Assessing Current Outpatient Operations for: Overall Hospital, Management Information Systems, Business Office/Patient Accounts, Health Information Management, Ancillary Departments/Chargemaster, Emergency Room, Hospital-Based Clinics, Hospital-Owned Satellite Facilities, Hospital-Based Physician Coding and Billing, and Utilization Management.

APC Institute: Billing and Reimbursement Issues. This 6.5 hour program is designed for Chief Financial Officers, Vice Presidents of Finance, Controllers, Chargemaster Coordinators, Database Managers, Software Vendor Product Managers, Coding Managers, Reimbursement Specialists, Director of Patient Accounts/Business Office, Outpatient Billing Supervisor/Coordinator, Outpatient Billing Specialists. The contents include: Durable Medical Equipment and Prosthetics, Pre-operative Registration, Outpatient Service "Red Flags," Chargemaster/Charge Entry, Claims Preparation, Claims Payment, Tracking and Reviewing Medicare Billing Guidelines.

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AMBUALTORY SURGERY CENTER
TRAINING PROGRAMS

ASC Clinic: Multi-Specialty Procedures - This 6.5 hour program is designed for Freestanding ambulatory surgery center (ASC) Managers (Business, Nurse, Reimbursement), Directors, Administrators, Coding Supervisors, Coding Specialists, and Billers. The contents include: Current Freestanding ASC Structure, Proposed Freestanding ASC Structure, Medicare Coding Requirements, Medicare Billing Requirements, Coding Ambulatory Surgery, How To Use CPT When Coding Ambulatory Surgery, and CPT Coding Guidelines By Body System (Integumentary, Musculoskeletal, Respiratory, Cardiovascular and Lymphatic, Hemic and Lymphatic, Digestive System, Urinary, Male Genital, Laparoscopy/Hysteroscopy, Female Genital, Endocrine, Nervous, Eye and Ocular Adnexa, Auditory).

ASC Clinic: Dermatology & Plastic Surgery - This 6.5 hour program is designed for all technical, clinical and managerial staff responsible for facility component freestanding ASC coding and billing. The contents include: exercises based on actual outpatient operative reports; and CPT coding guidelines for topics such as: tissue expander, pedicle flap, pressure ulcer, skin grafts, nail avulsion and excision, scar revision, burn treatment, lesion excisions, wound repair, adjacent tissue transfer/rearrangement, breast surgery, free flaps with microvascular anastomosis.

ASC Clinic: Eye & Oculoplastic Surgery - This 6.5 hour program is designed for all technical, clinical and managerial staff responsible for facility component freestanding ASC coding and billing. The contents include: exercises based on actual outpatient operative reports; and CPT coding guidelines for topics such as: cataracts. intraocular lens, keratoplasty, trabeculectomy, strabismus surgery, punctum plugs, tarsorrhaphy, trichiasis correction, retinal detachment repair, vitrectomy.

ASC Clinic: Gastroenterology Procedures- This 6.5 hour program is designed for all technical, clinical and managerial staff responsible for facility component freestanding ASC coding and billing. The contents include: exercises based on actual outpatient operative reports; and CPT coding guidelines for topics such as: hernia repair, nasogastric intubation, percutaneous gastrostomy tube, hemorrhoidectomy, abscess/cyst drainage, dental procedures, covered and noncovered colorectal cancer screening, gastrointestinal endoscopy, esophageal dilation.

ASC Clinic: Orthopaedic Surgery - This 1 or 2 day program is designed for all technical, clinical and managerial staff responsible for facility component freestanding ASC coding and billing. The contents include: exercises based on actual outpatient operative reports; and CPT coding guidelines for topics such as: ganglion cyst, joint injections, decompression fasciotomy, treatment of fractures/dislocations, skeletal anatomy of the hand and foot, surgical knee arthroscopy, bunionectomy, toe-to-hand transfer with microvascular anastomosis.

ASC Clinic: Urology Procedures - This 6.5 hour program is designed for all technical, clinical and managerial staff responsible for facility component freestanding ASC coding and billing. The contents include: exercises based on actual outpatient operative reports; and CPT coding guidelines for topics such as: retrograde pyelogram, ureter vs. urethra, urethral dilation, ureteral stent, urethral stent, Burch Procedure, vesicourethropexy/urethropexy, urodynamics, chemotherapy.

I. Clinical Coder: Breast Surgery

Abstract: *In the Integumentary section of the CPT code book, there are numerous codes in range 19000 – 19499 for breast surgery: biopsies, excisions, breast reconstruction, mastectomy, and repairs. All CPT codes for bilateral breast procedures have been deleted, for Medicare hospital outpatient reporting, hospitals must append bilateral procedure modifier –50 to the breast procedure code (as appropriate).*

This chart provides the CPT code descriptions and clinical/coding tips for breast excision and reconstruction procedures. The sources for these tips, indicated where possible, are: the American Medical Association's *CPT Assistant* newsletter, February* or August** 1996, Chicago, IL. (All codes for bilateral breast procedures have been deleted. For Medicare hospital outpatient reporting, hospitals must append the modifier -50 to indicate a patient underwent bilateral breast excision of the same type.) Also, please refer to the accompanying diagrams, which illustrate some of these procedures.

Other Sources:

"Brave New Breast Tests," Beth Howard (originally posted at www.women.com "Prevention" site)- http://www.prevention.com/report/breastcancer/index.html

General Definitions

Advanced Breast Biopsy Instrument (ABBI) - A much larger cannula (than that used in MIBB) is used to remove breast tissue. Although it extracts more tissue than the other techniques, it has more possible complications and tends to leave a significant scar.

Biopsy cut needle - An instrument used for taking a breast biopsy.

Breast augmentation - A surgical procedure that enlarges the breast through implantation of a prosthesis.

Capsular contraction—A tightening of the scar tissue envelope surrounding an implant.

Envelope—The outer lining of an implant, which traps the inner fluids, sealing them in.

Minimally Invasive Breast Biopsy (MIBB) -The breast tissue is suctioned with a strawlike device called a cannula.

Pectoralis Major—A muscle located in the upper chest which provides support for the breasts and is necessary for arm movements.

Saline—A solution which is made up of water and a small amount of salt. Approximately 71 percent of an adult's body consists of this salt water solution.

Seroma-Cath—A wound drainage catheter and suction reservoir that is used to drain seromas that develop after mastectomy.

Silicone—An organic material, derived from sand, which is generally well-tolerated by the body and has the capacity to be formed into various shapes.

Clinical Coder: Breast Surgery - *continued*

CPT Code	Code Description	Clinical/Coding Tips
11970	Replacement of tissue expander with perma nent prosthesis	Code is reported regardless of the anatomical site the prosthesis is placed in (i.e., breast, thigh) and includes the insertion of breast prosthesis (19342).
19000/19001	Puncture aspiration of cyst of breast;/each additional cyst. Per the American Medical Association, assign code 19001 for each additional cyst that is aspirated from the same breast; report code 19000 twice if a puncture aspiration is performed in both the left and right breast	The physician punctures (pierces) the skin and inserts a needle with a syringe attached into the cyst, which by definition is fluid filled. The fluid contained in the cyst is aspirated (withdrawn) via the needle into a syringe. Pressure is applied to the aspiration site to stop any bleeding.

CPT Code	Code Description	Clinical/Coding Tips
19100	Biopsy of breast; percutaneous, needle core, not using imaging guidance (separate procedure)	Report 19100 for stereotactic automated large core biopsy. Depending on the technique used, see also 19101, 88170 for stereotactic breast biopsy. A stereoscopic x-ray device is used to pinpoint a mass within the breast, and an automated gun is then used to extract the tissue with a large needle. During the procedure, the patient lies face down with one breast protruding through an opening in the examining table. Underneath the table, the x-ray machine and needle gun (e.g., Biopsy gun, Bard Biopsy gun) are mounted. After a radiologist locates the suspicious mass, the needle gun setting is adjusted, and the large needle is placed slowly into the breast, stopping close to the mass. The gun is then fired, and a small needle is released to collect tissue for testing. Within five minutes, the procedure is complete and the patient can head home or even back to work. Researchers have found that this new nonsurgical approach to breast cancer testing costs significantly less than surgery and produces results that are as accurate. A single sample is obtained each time the device is fired, so multiple insertions are needed to obtain sufficient breast tissue. Usually, 10 to 20 samples are taken. When multiple tissue samples are removed from one lesion, one biopsy code is reported. If separate multiple lesions are present, then report the biopsy code more than once. If a biopsy is performed in both the left and right breast, report the biopsy code twice.

CPT Code	Code Description	Clinical/Coding Tips
19101	Biopsy of breast; open incisional	This procedure involves cutting into the lesion areas to obtain a specimen in order to confirm a diagnosis. The entire lesion is not removed. Assign 19101 for each biopsy site.

CPT Code	Code Description	Clinical/Coding Tips
19103	Biopsy of breast; percutaneous, automated vacuum assisted or rotating biopsy device, using imaging guidance	**Vacuum-Assisted Needle Biopsy - Mammotome®** This is a minimally invasive technique, image guided procedure (stereotactic or ultrasound) that helps physicians locate breast abnormalities and obtain tissue samples for diagnosis. The doctor inserts a slender probe into the breast to gently suck out questionable tissue, snipping cells off with a tiny rotating blade while the patient lies awake, under only a local anesthetic. The Mammotome® assembles enough cells that calcifications are captured and can be definitively identified. The Mammotome® Breast Biopsy System is different because it is minimally invasive and requires only a 1/4" skin incision. This procedure can be performed in less than one hour under a local anesthetic, minimizing discomfort to the patient. The Mammotome® is capable of sampling a variety of breast abnormalities, such as microcalcifications, asymmetric densities, solid masses or nodules. It can obtain multiple tissue samples with one insertion/incision (other methods require multiple insertions). When the biopsy is completed, the tissue samples are sent to a laboratory for analysis and pathologic results. This procedure requires no sutures, the Mammotome® is a valuable tool that helps physicians accurately diagnose breast cancer in its earliest stages. Under stereotactic or ultrasound (computerized imaging systems) guidance, the Mammotome® probe is positioned in the breast, aligning the center of the aperture of the probe with the center of the lesion (breast abnormality). Upon activation, the vacuum system draws (suctions) tissue into the aperture of the probe. The rotating cutting device is advanced, capturing a sample of tissue that is in the aperture of the probe. The sample is then carried through the probe to the tissue collection area. The physician rotates the thumb wheel, moving the aperture of the probe to the next position. The sequence is repeated until all desired areas have been sampled. The probe is removed, pressure will be

		applied to the biopsy site and an adhesive bandage applied to the skin incision. • **Percutaneous Image-guided Breast Biopsy System using Radiofrequency**: report code 19499, Unlisted procedure, breast. It is not appropriate to use the breast biopsy codes 19100-19103, as these codes are used to identify open incisional biopsy or percutaneous biopsy with needle core, vacuum assisted or rotating, device. Source: May 2002 *CPT Assistant* newsletter, AMA.

CPT Code	Code Description	Clinical/Coding Tips
19120	Excision of cyst, fibroadenoma, or other benign or malignant tumor aberrant breast tissue, duct lesion or nipple or areolar lesion (except 19140), open male or female, one or more lesions	A more extensive procedure than incisional biopsy - excisional breast biopsy - is designed to remove the entire lesion, whether benign or malignant. Assign the code for an excisional breast biopsy if the physician attempts to perform an incisional biopsy on a very small lesion and the pathological review finds that the entire lesion and all of the margins are free of tumor (the entire lesion was in fact removed). In this case, an incisional biopsy resulted in an excisional biopsy of the breast lesion. Report code 19120 for each incised area, when excisions of lesions are performed on different areas of one breast through separate incision sites.* Use modifier –59 to report excisions of benign tumors or cysts of the breast, which require multiple incisions during the same operative session. using code 19120 with modifier –59 to identify the separate incisions. (Source: May 2001 *CPT Assistant* newsletter, AMA).

CPT Code	Code Description	Clinical/Coding Tips
19125	Excision of breast lesion identified by preoperative placement of radiological marker; single lesion.	"Radiological markers" include needle localization wires, intravenous dye, buttons. Assign code 19290 for the placement of a wire if it is the "radiological marker." See code 19126 for each additional lesion excised by "radiological marker." See 19291 for the placement of a wire for each additional lesion.

CPT Code	Code Description	Clinical/Coding Tips
19290/19291	Preoperative placement of needle localization wire, breast; Preoperative placement of needle localization wire, breast; each additional lesion (List separately in addition code for primary procedure)	First, the area to be biopsied is identified by a radiologist during a procedure called "wire localization." A wire is positioned in the abnormal breast tissue to identify the area that will be cut out during the biopsy. Second, the patient is taken to the operating room. With the patient under general anesthesia or local anesthesia with sedation, the surgeon makes a 1- to 3-inch incision in the breast and removes a large section of tissue, typically about the size of a golf ball. The incision in the breast is then closed with sutures and covered by a protective bandage.

CPT Code	Code Description	Clinical/Coding Tips
19318	Reduction mammaplasty	This procedure does not include grafting or reconstruction of the nipple/areolar complex. Report a separate code for the graft (15200) or the reconstruction (19350) in addition to the 19318 for the mammaplasty.* Nipple-areolar preservation and repositioning in *typical* breast reduction surgery is included in the global code 19318, and is not coded separately. Nipple-areolar preservation whether by vascular pedicle or by free grafting is considered part of a reduction mammaplasty. However, in rare instances, when perfusion of the pedicled nipple-areolar complex becomes compromised during surgery, and the nipple-areolar complex must be harvested as a free graft, the pedicle debrided, and the graft reattached to its new site. Here it is appropriate to report 19350 in addition to 19318, as a significant amount of extra time and work are involved in salvaging the nipples and areolae. (Source: *CPT Assistant* newsletter, September 1996, pp.10-11) Assign code 15877 (suction assisted lipectomy for reduction of breast tissue. (Source: *CPT Assistant* newsletter, October 1999, page 10).

CPT Code	Code Description	Clinical/Coding Tips
19340	Immediate insertion of a breast prosthesis following mastopexy, mastectomy or in reconstruction	This procedure is performed at the same operative session as the breast removal or revision procedure
19342	Delayed insertion of a breast prosthesis following mastopexy, mastectomy or in reconstruction	This procedure is performed at a later time, such as after the wound has healed, which can be several months after the original surgery. Report codes 19342 and 14001, or 19342 and 14300 for breast reconstruction using the Ryan technique (an upper abdominal flap is fashioned in addition to prosthesis insertion).**
19355	Correction of inverted nipples	The inverted nipple, unilateral or bilateral, may be caused by repeated inflammations or by breast surgeries, such as mastectomy or reduction mammaplasty, but it is mostly congenital in origin. The inversion presents a functional problem in nursing and also a psychological problem owning to the abnormal appearance. Numerous methods have been reported to correct this condition. They can be classified into two groups; one is to preserve the lactiferous ducts for future nursing, and the other to make correction easier. (See illustration in this Chapter.)

CPT Code	Code Description	Clinical/Coding Tips
19357	Breast reconstruction, immediate or delayed, with tissue expander, including subsequent expansion	See code 11970 for replacement of a tissue expander(s) in the breast with a permanent prosthesis.
19364	Breast reconstruction with free flap	This procedure includes harvesting of the flap, microvascular transfer, closure of the donor site, and inset shaping the flap into a breast
19366	Breast reconstruction with other technique	Report code 19366 for breast reconstruction using a thoracoepigastric flap.

CPT Code	Code Description	Clinical/Coding Tips
19367	Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site;	The transverse rectus abdominis myocutaneous (TRAM) flap uses the woman's own abdominal wall fat with a muscular (and thereby vascular) pedicle. The advantage to the TRAM f lap is that the patient's own tissue is used for the reconstruction, and as a side benefit, an abdominal lipectomy is performed. There is potential for partial or even complete necrosis of the flap as a result of poor vascular supply. The TRAM flap procedure requires fine dissection of the periumbilical perforating arteries to preserve the flap viability. A free flap can also be performed with microvascular reanastomoses to the thoraccodorsal (internal mammary) artery or axillary artery (see code 19368).

CPT Code	Code Description	Clinical/Coding Tips
19368	Breast reconstruction with transverse rectus abdominis myocutaneous flap (TRAM), single pedicle, including closure of donor site; with microvascular anastomosis (supercharging)	The "supercharged" TRAM flap has been presented as a method where the single superiorly based pedicle can be augmented by additional flow by means of the microvascular anastomosis of vessels on the opposite random portion of the flap to recipient vessels in the axillae. The preferred recipient vessels for the supercharged flap as well as the free TRAM flap include the axillary branches and the super capsular artery and its divisions. the internal mammary system also has been utilized successfully. Vein grafts or a turndown of the external jugular vein may be required to establish venous drainage. The success of both the supercharged flap and the TRAM flap is totally dependent on the quality and availability of recipient vessels. The indications for the supercharged TRAM flap have been described for patients in whom a large volume of lower abdominal skin is required but there is a lower abdominal midline scar. It also provides an alternative to the double-pedicle TRAM flap or as a method of salvage for a single-pedicle TRAM flap in trouble.

CPT Code	Code Description	Clinical/Coding Tips
19370	Open periprosthetic capsulotomy, breast	This procedure involves making an incision(s) in the capsule that forms around the implant in order to relieve tightness, hardness, or pain (capsular contracture) by loosing the capsule; the capsule is not removed.
19371	Periprosthetic capsulectomy, breast	This procedure involves making an incision(s) in the capsule that forms around the implant in order to relieve tightness, hardness, or pain (capsular contracture) by loosing the capsule; **the capsule is not removed.** This procedure involves removal of the capsule that has formed around the implant; the breast implant is also removed and may or may not be replaced. It also includes removal of breast implant; it does not include reinsertion of the breast implant or insertion of a new breast implant. Report code 19340 in addition to 19371 for periprosthetic capsulectomy with removal of implant and reinsertion of breast implant or insertion of a new breast implant.** The scar tissue or capsule that normally forms around the breast may tighten and squeeze the implant. This is called capsular contracture. Over several months to years, there may be some hardness or pain. As a result of this, women often experience changes in breast shape. No good data is available on how often this happens. If these conditions are severe, more surgery may be needed to correct or remove the implants. In a case when the breast implant has ruptured and the implant material extends beyond the capsule, markedly infiltrating surrounding tissue, report both the capsulectomy code 19371, and the removal of implant material using code 19330. Otherwise, the capsulectomy code 19371 includes the removal of the old implant material. (Source: November 2001 *CPT Assistant* newsletter, AMA).

CPT Code	Code Description	Clinical/Coding Tips
88170/ 88171	Fine needle aspiration with or without preparation of smears; superficial tissue (e.g., leg, thyroid, breast, prostate)/; deep tissue under radiologic guidance.	Do not report percutaneous needle biopsy code 19100 if a fine needle aspiration (FNA) of the breast is performed. Code 88170 or 88171 should be reported for an FNA. FNA is usually reported by a hospital's pathology and laboratory department on the chargemaster (a computer report listing every item that a hospital charges for by CPT, revenue and internal service code). If FNA is "chargemaster driven," the coding specialist should not report 88170 or 88171, as this will only duplicate the reporting of this procedure.

CPT Code	Code Description	Clinical/Coding Tips
0046T Catheter lavage of a mammary duct(s) for collection of cytology specimen(s), in high risk individuals (GAIL risk scoring or prior personal history of breast cancer), each breast; single duct **0047T** Catheter lavage of a mammary duct(s) for collection of cytology specimen(s), in high risk individuals (GAIL risk scoring or prior personal history of breast cancer), each breast; each additional duct		The mammary ductal system is non-communicating (one ductal structure does not spill over into another ductal structure). The target organ of examination is a specific breast duct. Abnormalities may be localized at the ductal level. With identification of abnormalities in a specific duct, that duct may be the target for more intensive investigation or treatment. Mammary duct lavage is a discrete procedure that involves insertion of a sterile catheter into a breast duct to lavage a breast duct to yield fluid on aspiration for collection of the specimen. In order to accurately localize atypical ductal cells, it is important that a single catheter should never be used to lavage more than one duct, and fluid washings not be pooled across ducts for analysis. The unit of work for the ductal lavage procedure is in each duct. Code 0045T is intended to be reported for the lavage of the initial duct, and code 0046T for the lavage of each additional duct. GAIL risk scoring or a prior personal history of breast cancer are the determining factors for categorization of the patient in the high-risk category for testing. The presence of atypical ductal epithelial cells confers a significantly increased, near-term risk of developing breast cancer and is useful clinical information to assist high-risk women and their physicians make difficult risk/benefit decisions regarding available risk reduction options. Codes 0046T and 0047T differ from code 19030, which is intended to report insertion of a catheter or needle into breast ducts to provide a single injection of contrast agent into the breast duct, whereas ductal lavage involve several cycles of flushing with saline and fluid collection for cytological analysis. Code 19030 is reported in addition to the imaging code for the galactography procedure, in contrast to the ductal lavage procedures 0046T – 0047T, which are performed without an associated imaging procedure. Use these codes for catheter lavage and aspiration of cytology specimens of the mammary ducts for early detection of atypical cells, including cancer cells, within the mammary ducts. [Source**:** *CPT Changes 2004 – An Insider's View*, AMA, Chicago, IL, 2003.]

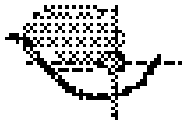
CPT Code	Code Description	Clinical/Coding Tips
0061T	Destruction/reduction of malignant breast tumor including breast carcinoma cells in the margins, microwave phased array thermotherapy, disposable catheter with combined temperature monitoring probe and microwave sensor, externally applied microwave energy, including interstitial placement of sensor.	This procedure involves the interstitial placement of a sensor and externally applied focused microwave phased array thermotherapy for ablation/reduction of a malignant breast tumor (early stage breast cancer and advanced stage breast cancer). The procedure is currently in a multi-site clinical trial. This technology treats breast cancer by destroying/ablating and/or shrinking the primary breast tumor as well as microscopic breast carcinoma cells that may exist in the tumor margins and throughout the breast. An "antenna" that is inserted interstitially which focuses the externally generated microwave energy to a specific target area is utilized, opposed to exposing the entire region to microwave energy. This technology is also utilized to conserve the breast during surgical excision and to reduce the need for second incisions by creating negative margins. [Source**:** *CPT Changes 2004 – An Insider's View*, AMA, Chicago, IL, 2003.]

Mastectomy

Anatomic Drawing

Mastectomy for **gynecomastia (19140)** involves the removal of male breast tissue because of abnormal enlargement (without removing lymph nodes or muscles).

Partial mastectomy/segmental mastectomy (19160) involves the partial removal of the breast tissue, leaving the breast nearly intact (also called **"lumpectomy"**). A wedge of tissue that amounts to approximately one-fourth of the breast (including the overlying skin) is removed.



Partial mastectomy with axillary lymphadenectomy (19162) involves the removal of axillary lymph nodes. The procedure is performed for a malignancy.

Coding Tip: Code 19162 (Mastectomy, partial; with axillary lymphadenectomy) includes removal of the sentinal node along with other axillary lymph nodes. Therefore, it would not be appropriate to report the biopsy of the sentinal node separately, as this is an inclusive part of the main procedure. (Source: *CPT Assistant* newsletter, June 2000, page 11).

Simple complete mastectomy (19180) involves the removal of all breast tissue (without removing lymph nodes or muscle). The axillary lymph nodes are frequently biopsied but not removed.

Subcutaneous mastectomy (19182) involves the removal of breast tissue, leaving the skin of the breast and nipple intact. This type of mastectomy usually requires that a breast implant be inserted.

II. Case Studies

Case Study # **1**. Please assign the CPT code(s)-modifier(s) for this case: _____.

STEREOTACTIC BREAST BIOPSY Performed at UWHC
Current Diagnosis: LEFT BREAST CALCIFICATIONS

REASON FOR EXAM: Evaluate calcifications none given

REPORT: STEREOTACTIC BREAST BIOPSY, the date is 11/12/02, the time is 11:13. Comparison images are from 10/29/02.
INDICATION: Microcalcifications in the upper central aspect of the left breast. Obtain stereotactic core biopsy.
FINDINGS: The risks, benefits, and alternatives to and conduct of the stereotactic core biopsy were discussed with the patient. Informed written consent was obtained. The microcalcifications seen in the left upper central breast were targeted from a superior to inferior approach. The skin of the superior left breast was prepped in a sterile fashion. 1% lidocaine buffered with sodium bicarbonate was used for dermal anesthesia. 1% lidocaine with epinephrine was used for deep anesthesia. A #11 scalpel blade was used to make a small skin nick. The 11 gauge **stereotactic needle was then advanced. Eight core biopsy samples were obtained.** They were sent to Pathology for analysis. **A small radiopaque marking clip was placed in the region of the microcalcifications.** Post-procedure mammogram demonstrated it to be in a good position in the region of the sampled microcalcifications. Hemostasis was achieved with manual compression.
IMPRESSION:
1) Successful stereotactic core biopsy of the microcalcifications in the upper central breast. Pathology results are pending.
2) Round mass identified inferior and medial to the microcalcifications. The clip lies near this mass and this area could have been sampled. If pathology results are positive for DCIS alone there is a significant probability that this abnormality may have been undersampled as the mammogram is suspicious for invasive cancer as well. If management depends on the diagnosis of invasive cancer (i.e. axillary lymph node sampling), further biopsy perhaps guided by ultrasound would be possible.
3) Please see the mammogram report from the same day.
4) Doctor was present during the entire procedure.

ADDENDUM: Pathology results are now available. They demonstrate invasive ductal carcinoma with associated ductal carcinoma in situ. These findings are consistent with the mammographic evaluation. Definitive surgical therapy is necessary. The patient has been set up for a surgical consultation.
BI-RAD Category:
The false negative rate of mammography is approximately 10%. Management of a palpable abnormality must be based upon clinical grounds.

As the teaching physician, I personally examined the radiology study, reviewed the findings with the doctor and arrived at this interpretation.

Case Study # **1** *cont'd*

SURGICAL PATHOLOGY REPORT

**** THIS IS AN ADDENDUM REPORT ****

SOURCE OF TISSUE:
LEFT BREAST TISSUE

GROSS:
The specimen labeled "Left Breast Tissue" consists of greater than twelve, yellow glistening _____ portions of adipose tissue admixed with pink-white fibrous tissue varying from 0.2 - 1.5 cm in maximal dimension. The tissue measures 1.5 x 1.3 x 0.3 cm in aggregate. All tissue is submitted in one cassette.

MICROSCOPIC:
The microscopic findings support the diagnosis given below.

FINAL DIAGNOSIS:
Left breast: Stereotactic Core Needle Biopsy:
Infiltrating ductal carcinoma; poorly differentiated with microcalcifications in areas of tumor necrosis; plus ductal carcinoma in situ (intraductal carcinoma), comedo type with cancerization of lobules with high nuclear grade and areas of luminal necrosis.

1 block

11/13/02
As the staff pathologist, I have personally examined all slides and relevant information about this case and have discussed them with the doctor and arrived at the diagnosis that is recorded in my report.

ADDENDUM REPORT ISSUED 11/15/02 - PLEASE SEE ESTROGEN-PROGESTERONE IMMUNOHISTOCHEMISTRY RESULTS BELOW

ESTROGEN - PROGESTERONE RECEPTOR IMMUNOCHEMISTRY

Hormone Receptor	IS*	Interpretation
Estrogen Receptor	3/12	POSITIVE

Case Study # **2**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

US-FNA of Breast
**********ADDENDED DOCUMENT**********
76942B - ULTRAS-GUIDED BREAST CORE BX - Right
Current Diagnosis: RIGHT BREAST LESION

REASON FOR EXAM: Evaluate lesion films at GHC, will be brought to UC hospital.
none given
REPORT: RIGHT BREAST ULTRASOUND-GUIDED FNA AND CORE BIOPSY
Comparison is outside ultrasound from Health and mammogram from Health.
CLINICAL HISTORY: Evaluate suspicious lesion in right breast. Scanning the lower-inner quadrant of the right breast at the four o'clock position at the site of the mammographic finding and the site where the abnormality was seen on the outside ultrasound , again noted is an irregular hypoechoic shadowing mass which is considered very concerning for malignancy. This measured about 1.4 x 1.2 x 1.5 cm. **The procedure of an ultrasound-guided FNA and ultrasound-guided core biopsy** were explained to the patient and she gave written informed consent for the exam. I explained to her the risks of bleeding, infection and failure to get an adequate sample for diagnosis. We started first with a **fine needle aspiration.** The patient's **right breast was cleansed** in a sterile fashion. One percent lidocaine was used for local anesthesia. Next, a 23 **gauge needle was advanced** into the region of the mass. This mass is extremely firm and was very difficult to perform the FNA. We attempted three more passes, one with a 23 gauge needle and two with a 20 gauge spinal needle. Again, this mass is extremely firm and difficult to pass the needle into it. The **preliminary FNA results were inconclusive.** Therefore, we went ahead with a **core biopsy.** The patient's **breast was reprepped.** One percent lidocaine with epinephrine was used for deeper anesthesia. A small skin nick was made with a #11 blade. Next, the 14 **gauge core biopsy needle was advanced** into the lesion. Again, this lesion was extremely firm and in fact, on a few of the attempted core biopsy passes, the needle would not even fire through this lesion. We **performed approximately five core biopsies** and I believe we got adequate sample. The sample was placed in formalin and taken to Pathology for further evaluation. Manual pressure was held over the biopsy site until adequate hemostasis was achieved. The patient tolerated the procedure well and was given an instruction sheet for post-biopsy care. She was instructed to telephone her physician's office for biopsy results which should be available in 2-5 working days.
IMPRESSION: Technically successful ultrasound-guided FNA and core biopsy of a suspicious lesion in the lower-inner quadrant of the right breast. Pathology results are pending at this time. I'll make an addendum to this report once the pathology results are known.

ADDENDUM: Pathology results are now available and revealed infiltrating ductal carcinoma. The findings are concordant with the imaging findings. The patient will need to get set up with a breast surgeon for further work-up. The findings were called to the doctor on 11/5/02 at 9:25. As the teaching physician, I personally examined the radiologic study, reviewed the findings with the doctor and arrived at this interpretation.

Case Study # **2** *cont'd*

FNA Report

SPECIMEN(S): 1 Fine Needle Aspiration, Right Breast

SPECIMEN ADEQUACY:
UNSATISFACTORY FOR EVALUTION: The specimen was processed and examined, but unsatisfactory for evaluation of cellular abnormality due to: The overall cellularity of the specimen is too low.

FINAL DIAGNOSIS:
CYTOLOGIC EXAMINATION: No Diagnosis

COMMENTS:
This case was reviewed by the pathologist.

ADEQUACY ASSESSMENT:
This aspirate was performed by the radiologist/clinician.
Pass 1-4: Inadequate for assessment. SMS

CLINICAL HISTORY: Right Breast Lesion seen on Mammography and Ultrasound

Case Study # **2** *cont'd*

SURGICAL PATHOLOGY REPORT

**** THIS IS AN ADDENDUM REPORT ****

SOURCE OF TISSUE: RIGHT BREAST MASS

GROSS: The specimen labeled Right Breast Mass" consists of five, rubbery, gray-white, cylindrical portions of tissue varying from 2-9 mm in maximal dimension. All tissue is submitted in one cassette.

MICROSCOPIC: The microscopic findings support the diagnosis given below.

FINAL DIAGNOSIS: Right Breast: Needle Core Biopsy:
Infiltrating ductal carcinoma, moderately differentiated.

1 block

11/04/02
As the staff pathologist, I have personally examined all slides and relevant information about this case and have discussed them with the doctor and arrived at the diagnosis that is recorded in my report.

ESTROGEN - PROGESTERONE RECEPTOR IMMUNOCHEMISTRY

Hormone Receptor	IS*	Interpretation
Estrogen Receptor	12/12	Positive
Progesterone Receptor	0/12	Negative

- Immunoreactive score reporting protocol modified from W. Rentee and Kl. Scine, Path. Res. Pract. 189:862-866, 1993 and available upon request.

Case Study # **3**. Please assign the CPT code(s)-modifier(s) for this case: _____.

OPERATIVE REPORT

PROCEDURE PERFORMED:
1. Anterior left breast mass stereotactic biopsy with specimen radiography and clip placement.
2. Posterior left breast mass stereotactic biopsy with specimen radiography and clip placement.

ANESTHESIA:
5 cc of 1% lidocaine with epinephrine.

PREOPERATIVE DIAGNOSIS:
Two suspicious, nonpalpable left breast masses with one being anterior and one posterior.

POSTOPERATIVE DIAGNOSIS:
Two suspicious, nonpalpable left breast masses with one being anterior and one posterior.

INDICATIONS FOR PROCEDURE:
The patient is a 72-year-old woman who presented with a screening mammogram revealing **two areas of suspicious microcalcifications in the left breast.** The most suspicious was the anterior lesions; however, the posterior lesion was also of concern. The patient was offered stereotactic breast biopsy of both lesions.

INFORMED CONSENT:
I discussed with the patient at length regarding the potential risks and benefits of the procedure, including (but not limited to) infection, bleeding, inability to adequately localize the biopsies of these lesions, persistent pain and the possible need for further surgical intervention, including open biopsy. The patient understood the potential risks and implications of nonsurgical alternatives and wished to proceed.

INTRAOPERATIVE FINDINGS:
1. Both lesions were identified and successfully biopsied.
2. Specimen radiographs of both the anterior and posterior specimens revealed the presence of the suspicious microcalcifications.
3. Metal clips were placed in both biopsy cavities should further intervention be warranted and for further follow-up by mammography.

Case Study # **3** *cont'd*

DESCRIPTION OF PROCEDURE:
The patient was placed in the prone position on the stereotactic breast biopsy machine. The **anterior breast lesion**, which was the most suspicious, was localized first. After adequate localization and **stereotactic isolation** of this lesion, the overlying skin was prepped and with povidone iodine solution was sterilely draped.

After adequate local anesthesia had been administered, a small transverse incision was performed. The stereotactic biopsy needed was advanced to within the lesion, already fired. The needed was difficult to advance into the lesion with it loaded in light of the close proximity to the skin. **Multiple vacuum-assisted biopsy specimens were obtained** from the anterior lesion. The specimen radiograph revealed the presence of the microcalcifications. These were labeled as anterior breast biopsies. **A metal clip was placed in the biopsy cavity** and the biopsy needle was removed. A completion radiograph revealed the presence of the clip in the biopsy cavity.

Subsequently, the **posterior lesion was isolated** in the same exact fashion. Successful biopsies were taken of this area. The biopsy needle in this case, however, was able to be fired. After **adequate tissue was removed with the vacuum-assisted biopsy technique,** inspection with the radiograph revealed the presence of the suspicious microcalcifications within the specimen and **a clip was placed into the biopsy cavity** and a completion radiograph revealed the presence of the clip in the biopsy cavity.

Steri-Strips were then placed over the incisions. The patient tolerated the procedure well.

DISPOSTION:
The patient was discharged home to follow-up with me in one week for review of the pathology reports.

ESTIMATED BLOOD LOSS: Approximately 5 cc.

Case Study # **3** *cont'd*

DEPARTMENT OF PATHOLOGY

AGE/SEX: 72/F

TISSUES

A. BREAST - LEFT BREAST CALCIFICATIONS POSTERIOR
B. BREAST - LEFT BREAST CALCIFICATIONS ANTERIOR

CLINICAL HISTORY
LEFT BREAST CALCIFICATIONS X2

GROSS DESCRIPTION
(A) Received in formalin and labeled left breast calcifications posterior are multiple fragments of cylindrical yellow-red tissue, compatible with tissue from a stereotactic core biopsy of the breast ranging in length from 0.3 to 1.5 cm. The specimen is submitted in one cassette.

(B) Received in formalin and labeled left breast calcifications anterior are multiple cores of yellow-tan tissue ranging in length from 0.5 to 1.5 cm. The specimen is entirely submitted in one cassette.

MICROSCOPIC DESCRIPTION
(A) Sections are of multiple fragments of breast needle biopsy tissue. Extensive calcifications are seen. Most of the specimen consists of adipose, but areas of breast tissue reveal significantly increased density of fibrous connective tissue. A few cystically dilated ducts are seen. There is no evidence of malignancy.

(B) Sections are of multiple cores of breast tissue. In areas, there is significantly increased density of fibrous connective tissue. Many of the ducts are cystically dilated. Few calcifications are seen. There is no evidence of malignancy.

FINAL DIAGNOSIS
(A) Biopsy of left breast, anterior lesion: Fibrocystic condition of breast with calcifications.

(B) Biopsy of left breast, second area of calcifications: Fibrocystic condition of breast with calcifications.

Benign A

Case Study # **4**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

DEPARTMENT OF RADIOLOGY

EXAM: RIGHT BREAST STEREOTACTIC BIOPSY

INDICATIONS: New lesion.

PROCEDURE: Risks and benefits of the procedure are discussed with the patient to include, but not limited to pain, bleeding, infection, and unsuccessful biopsy, and after questions are answered to her and her daughter's satisfaction, written and verbal consent is obtained.

FINDINGS: Patient is placed prone on stereotactic biopsy table and right breast lesion is approached medially. The inferior portion of the right breast is placed in template and stereotactic views confirm the lesion seen on previous mammogram of 2002 and lesion is targeted. Skin site is topically and locally anesthetized and prepped in sterile fashion. Small dermatotomy is performed, and 11 gauge **mammotome device** is inserted with satisfactory position confirmed on pre and post fire images. Sampling is obtained in routine circumferential fashion with satisfactory appearance of the specimen grossly. **Cavity is vacuumed and marking clip placed. Clip placement is also confirmed on stereotactic views.** Site is dressed in sterile fashion. Patient tolerated the procedure well with no immediate complication. After receiving discharge instructions, was instructed that biopsy report will go to her doctors as well as myself, she left the department in the company of her daughter.

Upon receipt of biopsy results, as discussed with her daughter, I will attempt to call the patient and notify her doctors as well, with addendum reported with any additional recommendations at that point.

Case Study # **4** *cont'd*

PATHOLOGY DEPARTMENT

CLINICAL HISTORY:

PRE-OP DIAGNOSIS: Right breast mass.

POST-OP DIAGNOSIS:

OPERATION: Stereotactic right breast biopsy.

SPECIMEN SUBMITTED: 1: RIGHT BREAST MASS

GROSS DESCRIPTION

Patient identification agrees on path sheet and container.

The specimen is submitted in formalin labeled right breast mass and consists of multiple cylindrical yellow, red and gray tissues, ranging in size from .2 x .1 cm. to 3.3 x 0.3 cm. Submitted in toto in three cassettes labeled A through C.

Summary of sections

DIAGNOSIS

RIGHT BREAST MASS (STEREOTACTIC BIOPSIES): **MUCINOUS (COLLOID) CARCINOMA** WITH EXTENSIVE IN-SITU COMPONENT, GRADE 1.

NOTE: The mucinous carcinoma is characterized by clusters of neoplastic cells suspended in lakes of mucin. Ductal carcinoma in-situ accounts for more than 25% of the tumor volume, cribriform and solid types with mucous production and focal calcifications. Grading of the invasive component is based on the Elston Modification of the Bloom-Richardson grade scheme. Tumor tubule formation score 3, number of mitosis score 1, and nuclear pleomorphism score 1. Total score is 5. DCIS nuclear grade is 1. Tumor involves approximately 10 core fragments. One paraffin block is sent for ERA, PRA and DNA ploidy.

Slides are submitted for intradepartmental QA activity.
T-04020, M-84803, TR-100

Case Study # **5**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: BILATERAL BREAST MASS.

POSTOPERATIVE DIAGNOSIS: BILATERAL BREAST MASS.

PROCEDURE PERFORMED: BILATERAL BREAST MASS EXCISION

ANESTHESIA: MONITORED ANESTHESIA CARE, IV LOCAL SEDATION.
IV FLUIDS: 700 CC.
ESTIMATED BLOOD LOSS: MINIMAL.

DESCRIPTION OF PROCEDURE: The patient was brought into the operating room and placed on the operating table in the supine position. Both breasts were then cleaned, prepped and draped in a standard sterile fashion.

Attention was paid to the **left breast first,** where a left upper outer circumareolar incision was carried out after the skin and subcutaneous tissue was infiltrated with 1% Xylocaine. The incision was carried down through the skin and subcutaneous tissue to the fact. Hemostasis was maintained by means of electrocautery. The mass was then palpated and identified. An Allis clamp was used to grasp the mass. Using careful dissection with the means of electrocautery, the mass was carefully excised out, obtaining wide margins circumferentially around the mass. The **mass was then excised.** Hemostasis was maintained by means of electrocautery. The wound was irrigated and cleaned. There was no evidence of any bleeding. After this was done, a Penrose drain was placed into the wound. The skin edges were then re-approximated putting in vertical mattress sutures using 3-0 nylon. After this was done, the wound was covered with sterile gauze and ABD pad.

Attention was next focused **to the right breast.** Gloves were changed. A circumareolar incision was made around the right upper outer quadrant of the breast after the skin was infiltrated with Xylocaine. Electrocautery was used for hemostasis. The mass was then identified and grasped with Allis clamp. Using electrocautery, the **mass was carefully excised** from the wound, making sure to obtain at least a 1- to 2-cm margin circumferentially. Hemostasis was maintained by means of electrocautery. The wound was then irrigated and cleaned. There was no evidence of any bleeding. A Penrose drain was then placed into the wound. Skin edges were re-approximated using 3-0 nylon suture in a vertical mattress fashion. After this was done, the wound was then covered with sterile gauze and ABD pad.

The patient tolerated the procedure well without any complications. The patient was then transferred to the recovery room in stable condition.

Case Study # **6**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

OPERATION: Excision of nonpalpable lesion from the left breast with prior needle localization.

ANESTHESIA: MAC.

PREOPERATIVE DIAGNOSIS: Nonpalpable lesion of the left breast.

POSTOPERATIVE DIAGNOSIS: Awaiting pathology report.

OPERATIVE INDICATIONS: The patient had a previous mastectomy on the right approximately 11 years ago for carcinoma of the right breast. She has now developed microcalcifications on the left side, which are indeterminate and excision is recommended. Fine-needle localization was performed uneventfully.

OPERATIVE PROCEDURE: After satisfactory needle localization, the patient's left breast was prepared and draped in the usual fashion. The area of microcalcification was calculated on the basis of placement of the wire. A curvilinear incision was marked out over this area. This area was infiltrated with 1% lidocaine which had been buffered with sodium bicarbonate. An incision was made in the skin and carried into breast tissue. A **segment of breast tissue containing the wire around the appropriate area was sent to x-ray, where a specimen radiograph revealed the presence of the sought-after lesion. The tissue was then transported to the lab.** A diagnosis was not forthcoming and tissue was prepared for permanent sections. In the meantime, hemostasis was obtained using electrocautery. The operative site was irrigated with normal saline. The skin was then closed with interrupted subcutaneous tissues of 3-0 Vicryl followed by continuous subcuticular stitch of 4-0 Monocryl. Dermabond was applied to the skin. The patient was transported to recovery in satisfactory condition.

Case Study # **6** *cont'd*

PATHOLOGY REPORT

FINAL DIAGNOSIS:
LEFT BREAST, BIOPSY - FIBROCYSTIC CHANGES.
--MICROCALCIFICATIONS.
--NEGATIVE FOR NEOPLASM.

** Report Electronically Signed Out **

SPECIMEN SUBMITTED:
LEFT BREAST MASS

CLINICAL DATA:
LEFT ABNORMAL MAMMOGRAM

GROSS DESCRIPTION:
A. Received fresh is a segment of left breast lesion measuring 5 x 2 x 1 cm. The specimen is oriented by two sutures. A metallic wire is present. Calcification is present surrounding the wire. This area is inked with yellow ink. The rest of the specimen is inked with black ink. The specimen is serially sectioned. Approximately 70% of the specimen is composed of white-tan fibrotic rubbery tissue with the rest 30% of yellow adipose tissue. No gross tumors are present. The specimen is entirely submitted in formalin in #1 - #7.

INTRAOPERATIVE CONSULTATION:
A. CALCIFICATIONS (INKED YELLOW) AROUND WIRE REST BLOCK
NO GROSS TUMOR

(Age/Sex: 54/F)

Case Study # **7**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS:
Bilateral breast masses.

POSTOPERATIVE DIAGNOSIS:
Bilateral breast masses.

OPERATION:
Bilateral breast biopsies left side with needle localization.

ANESTHESIA:
Local sedation.

INDICATIONS:
The patient is a 36-year-old female who presents with the recent development of a right-sided breast pain. On examination, an easily palpable solid mass was noted in the subareolar region at the 12 o'clock position. A mammogram visualized in non-palpable lesion in the upper out aspect of the left breast. Options were discussed and she was in favor of excising both lesions. The procedure itself, the possible complications and the anticipated results were all explained.

DESCRIPTION OF PROCDURE:
With the patient in the supine position, the breasts were prepped bilaterally and the patient was placed under excellent sedation. She had **returned from the x-ray suite where the lesion on the left had been marked with the wire and blue dye.** The left side was approached first. The area was infiltrated with 1% Xylocaine without epinephrine and a curvilinear incision was made. **Dissection was carried down to the tip of the needle** where what appeared to be a **fibroadenoma** was easily palpable. It was **excised completely** and sent to pathology. The **opposite side** was approached first with a curvilinear incision just inside the areola. This **palpable lesion** also appeared to be a fibroadenoma and it was **excised completely.** The specimens were sent separately to pathology. All bleeders were treated with electrocautery. Both sides were closed identically. The subcutaneous tissue was closed using 4-0 Vicryl and the skin was closed using a running 5-0 Monocryl. Steri-Strips were applied. A standard dressing was applied. The patient tolerated the procedure well and was transferred to the recovery room in satisfactory condition.

Case Study # **7** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 36/F

SPECIMEN(S) RECEIVED:
1. LEFT BREAST BIOPSY
2. RIGHT BREAST BIOPSY

GROSS:
1. Specimen is received in formalin and consists of 2.5 x 1.0 x 1.0 cm strip of yellow fibrofatty tissue. A silver colored needle is embedded in the specimen. The margins are inked. Sectioning through the tissue reveals a 1.0 x 1.0 x 1.0 cm well circumscribed lobular pink-white nodule. ESS - 2 cassettes.
2. Specimen is received in formalin and consists of a well-circumscribed pink nodule measuring 1.5 x 1.0 x 1.0 cm in greatest dimension. Cross section reveals a glistening lobular solid pin-tan interior. ESS - 1 cassette.

DIAGNOSIS:
1. Left breast tissue:
   Fibroadenoma
2. Right breast tissue:
   Fibroadenoma

Case Study # **8**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

OPERATION:

ANESTHESIA: Monitored anesthesia care.

PREOPERATIVE DIAGNOSIS: Abnormal right mammogram and left breast mass.

POSTOPERATIVE DIAGNOSIS: Abnormal right mammogram and left breast mass.

OPERATIVE INDICATIONS: This is a 40-year-old woman found to have an area of increased density on her right mammogram in the central portion of the left breast and a mass on the contralateral breast and it was elected to remove these areas at this point.

OPERATIVE PROCEDURE: **After wire placement in the right breast,** both breasts were prepared with Betadine scrub and paint and draped sterilely. **The wire on the right breast** entered in the upper inner quadrant and coursed laterally and deeply. After infiltrating with local anesthetic, one percent lidocaine without Epinephrine, an incision was made at the areolar edge and **dissection was taken around the wire and the wire and surrounding tissue were removed** and a specimen mammogram did reveal that we had removed the area in question. Hemostasis was achieved using the electrocautery and the superficial tissue was closed using interrupted #3-0 Vicryl and the skin was closed using #4-0 subcuticular Vicryl and Steri-Strips were applied over this. **On the left side, the mass was located** between the 2 and 3 o'clock position. After infiltrating with local anesthetic, one percent lidocaine without Epinephrine, an incision was made over the area and **the dissection was taken down to it and it was completely excised and it had the gross appearance of fibroadenoma.** Hemostasis was achieved using electrocautery and the superficial tissue was closed using interrupted #3-0 Vicryl and the skin was closed using #4-0 subcuticular Vicryl and Steri-Strips were applied over this. A fluff dressing was applied over the entire operative site and held in place using a surgical bra. The patient tolerated the procedure well. The patient was taken to the recovery room in stable condition.

Drains: None.

Complications: None.

Estimated Blood Loss: Minimal.

Case Study # **8** *cont'd*

Radiology Report

Impression:

Completion of procedure as described.

Report Test:

Mammographic Needle Localization:

40-year-old female.

Risks, benefits, alternatives are outlined and patient agreed to proceed.

Utilizing stereotactic guidance, a large nodule on the right was localized satisfactorily. Needle was removed and wire deployed. The patient tolerated the procedure well. There were no immediate complications.

Case Study # **9**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: Right breast carcinoma.

POSTOPERATIVE DIAGNOSIS: Same.

OPERATION PERFORMED: Right partial mastectomy, axillary nodal dissection.

ANESTHESIA: General.

COMPLICATIONS: None.

HISTORY: This is a 55-year-old female with an abnormal mammogram and a palpable mass. The abnormal mammography revealed microcalcifications and was followed by stereotactic biopsy and revealed invasive ductal carcinoma. The lesion was small. The patient was counseled and elected to undergo breast conserving surgery. The above noted procedure was performed. No complications were encountered.

PROCEDURE: The patient was identified, and in the supine position was given general anesthesia with endotracheal intubation. She was placed in the supine position and right breast and axillary sites were prepped and draped accordingly. The mass was at the 12 to 10 o'clock area and there was some post stereotactic induration from a hematoma. A semi-linear incision was made over this area, where a **partial mastectomy was performed.** The skin incision was made and skin flaps were developed. The **mass was eventually removed** with removing almost two segments from the 9 o'clock to almost 2 o'clock area. **The resection was then completed down to the pectoralis fascia** and all the blood supply to this area was coagulated. The irrigation was done and hemostasis was complete. When dissection was taking place, at the 8 o'clock position of the mass, there seemed some induration close to the cutting margins. From this area, margin 1 was taken and a deeper margin was labeled as number 2. The pocket was irrigated. Hemostasis was complete. **Closure was done in the usual fashion.** The incision was made along the skin folds. Skin flaps were developed. The anterior axillary and posterior axillary lines were identified, along with the structures accompanying this location and the axillary vein. **The lymphatic bundle, most medial, was labeled as sentinel nodes and was sent to pathology separately. Remaining lymph nodes were removed.** The irritation was done. Jackson-Pratt drain was placed to drain the breast and the axillary sites. Hemostasis was complete and the closure of the skin took place in the normal fashion. The patient was then awakened from anesthesia, and in stable condition, taken to the recovery room for further observation.

Case Study # **9** *cont'd*

SURGICAL PATHOLOGY REPORT

Clinical Information Provided:
Invasive ductal carcinoma and ductal carcinoma-in-situ.

DIAGNOSIS:
A. "Partial Mastectomy":
Infiltrating and in situ ductal type mammary adenocarcinoma.
Scarff-Bloom-Richardson Grade: 1/3.
Tubular pattern score: 2/3.
Nuclear grade score: 2/3.
Mitotic frequency score: 1/3.
Invasive tumor size: Less than 1 mm.
In situ component pattern and extent: The tumor is composed predominantly of ductal carcinoma in situ, solid, cribriform, and focal comedo patterns.
Margins of excision: Tumor does not appear to involve the margins of resection.
Hormone receptor status: Limited invasive tumor is present to perform hormonal receptors. Original biopsy material may be preferable for performance of such.
Lymphatic/vascular invasion: None identified.
Other pathologic Findings: Previous biopsy site changes.

B. "Margin At 8 O'clock #1":
Portion of benign mammary tissue with:
1. Focally florid duct hyperplasia with atypia.
2. Small fibroadenoma.
3. Fibrocystic changes.

No invasive or in situ malignancy is identified.

C. "Margin at 8 O'clock #2": Portion of benign mammary tissue with fibrocystic changes. No in situ or invasive malignancy is identified.

D. "Right Axillary Sentinel Node": One lymph node with reactive changes, no metastatic malignancy is identified either upon H&E staining or by utilizing the cytokeratin immunohistochemical stain.

E. "Right Axillary Node Dissection": Eleven lymph nodes, no metastatic carcinoma is identified. (0/11).

Case Study # **9** *cont'd*

Note:
In Part A, the residual tumor present is adjacent to the large blood-filled cavity consistent with recent biopsy. The residual tumor present is comprised predominantly of ductal carcinoma in situ and measures 1.0 cm in aggregate dimension. The infiltrating part of the tumor is extremely focal and minimal, accounting for less than 1% of the tumor and measuring less than 1 mm. The amount of invasive tumor is so little that the performance of estrogen and progesterone receptor markers would be limited. This probably should be done on the original material (if it has not already been done). If the original material is also limited and estrogen and progesterone receptors are desired upon this material, then they can be performed upon request.
Specimens Received: Gross Description

A. Received in formalin and labeled - "Partial mastectomy" is an irregular fragment of yellow-red tissue measuring 8.6 x 7.3 x 3.5 cm. There are two sutures present marking the superior (12 o'clock) and anterior positions. The margins of excision are inked in black and the specimen is serially sectioned revealing a well-delineated area of clotted blood consistent with prior biopsy site which measures 1.5 x 1.4 x 1.0 cm. No definite tumor is identified. Firm tissue adjacent to the biopsy site is noted abutting on the posterior and inferior (6 o'clock) margin. No definite tumor is grossly identified. All other margins of excision appear free of any lesions suspicious for malignancy. The remainder of the tissue which comprises the specimen appears to be composed of soft yellow tissue. Representative sections including the entire biopsy area and adjacent tissue are submitted in ten cassettes labeled 6977, A1-10.

B. Received in formalin and labeled - "Margin at 8 o'clock" is one irregular fragment of somewhat firm to rubbery gray-white tissue measuring 2.0 x 1.5 x 0.6 cm. The specimen is inked in black and entire submitted in a single cassette labeled 6977-B.

C. Received in formalin and labeled - "Margin at 8 o'clock #2" is one irregular fragment of rubbery, yellow-red tissue with a firm gray white area focally. The specimen measures 2.0 x 2.0 x 0.7 cm. The margins of excision are inked in black and the specimen is entirely submitted in a single cassette labeled 6977-C.

D. Received in formalin and labeled - "Right axillary sentinel node" is one irregular fragment of lobulated soft yellow tissue measuring 2.7 x 2.5 x 0.5 cm. No structures grossly suggestive of a lymph node are identified. No blue dye is noted either. The entire specimen is submitted in a single cassette labeled 6977-D.

E. Received in formalin and labeled - "Axilla (right) node dissection" is an aggregate of lobulated yellow-red tissue measuring 9.9 x 6.2 x 1.5 cm. Within the aggregate, a number of structures grossly compatible with lymph nodes are identified ranging between 0.2 and 3.4 cm in greatest dimension. Representative sections including all the apparent lymph nodes are submitted in five cassettes labeled 6977, E1-5, sections 4 and 5 representing the largest node dissected.

Case Study # **10**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS
1. Carcinoma, right breast.
2. Atypical hyperplasia in mammographic abnormality, left breast.

POSTOPERATIVE DIAGNOSIS
1. Carcinoma, right breast.
2. Atypical hyperplasia in mammographic abnormality, left breast.

OPERATION
1. Partial mastectomy, right breast, plus sentinel node protocol and injection.
2. Partial mastectomy, left breast, wire guided.

ANESTHESIA
Laryngeal mask airway, lidocaine, propofol, Versed, Fentanyl, deslurane, nitrous oxide and oxygen.

ESTIMATED BLOOD LOSS
100 cc.

BYPRODUCTS USED
None.

PROCEDURE/FINDINGS
The patient was brought to the operating room and placed in the supine position on the operating table, this after **injection had occurred in the nuclear medicine department of the right breast and a wire had been placed into the left breast stereotactically by the radiology department.** Following attainment of an adequate level of balanced LMA delivered anesthetic, both breasts and axillae were prepped with DuraPrep, which was allowed to fully dry, and sterile towels were applied in the usual fashion.

Prior to the operation, the activity in the axilla was mapped on the axillary skin, and **injection of the right breast** with roughly 4 cc of **Lymphazurin blue dye was accompanied** into the subdermal and subcutaneous tissue around the palpable tumor. Following the prepping with DuraPrep and allowing this to dry, the C-Trak probe was sleeved with a sterile plastic sleeve, and this was used to guide dissection of the right axilla.

Case Study # **10** *cont'd*

An **incision was made in the right axilla** over the area of activity, and **three nodes were removed**, each hemoclipped at its tributaries with medium Hemoclips. After the procedure was accompanied, each node was counted, and the axillary bed was counted, as well as the primary tumor bed and the background over the liver. The subcutaneous tissue was reapproximated with interrupted 3-0 plain catgut suture with a running subcuticular 3-0 nylon used to approximate the skin.

Attention was then focused on the palpable tumor in the upper aspect of the right breast, which had been previously localized using the ultrasound probe. It appeared to be slightly more lateral than was anticipated on physical examination. **An incision was made over this area, and careful dissection of the subcutaneous fatty tissue was taken around the margin of the tumor down to the chest wall and the pectoralis fascia removed from the chest wall.** At this point, three Hemoclips were left approximately where the tumor had been located, this over the pectoralis major muscle. Electrocautery was used for hemostasis. The wound was irrigated with saline solution, which was aspirated, and closed in the subdermal tissue with interrupted 3-0 plain catgut and running subcuticular 3-0 nylon used to approximate the skin. This area was covered.

Attention was then focused on the **left breast and previously placed guidewire.** An incision was made down through the entry point of the guidewire and the guidewire freed from the skin. This area was then grasped with the Allis forceps **and dissected deep into the breast tissue and down nearly to the chest wall.** Electrocautery was used for hemostasis. This tissue was then excised and sent for radiographic evaluation. The doctor reported that the calcifications were retrieved along with the clip, and calcifications were no closer than 5 mm to any margin.

A second portion of tissue, inferior to the biopsy of the left breast, was removed as well, because this tissue appeared to be firm and hard. Electrocautery was used for hemostasis. This tissue was sent for permanent pathology. Interrupted 3-0 plain catgut was used to approximate the subdermal tissues, and running subcuticular 3-0 nylon was used to approximate the skin. Xeroform gauze was applied with sterile dressings taped in place with paper tape.

The anesthetic was discontinued, and the patient was brought to the recovery room in satisfactory condition without operative or anesthetic complications.

Case Study # **10** *cont'd*

RADIOLOGY REPORT

Re: .BCMAMMO/MG MAMMO GUIDED NDL PLC 76096
.BCMAMMO/MG SPECIMEN RADIOLOGPHY 76098

LEFT BREAST NEEDLE LOCALIZATION, MAY 29, 2002:

THE PATIENT PRESENTS WITH BIOPSY PROVEN ATYPICAL DUCTAL HYPERPLASIA IN THE LEFT BREAST REPRESENTED BY SOME CLUSTERED MICROCALCIFICATIONS. AFTER OBTAINING INFORMED CONSENT, PATIENT IS PLACED IN THE DIGITAL MAMMOGRAPHIC UNIT WITH A GRID IN PLACE. OVERLYING SKIN WAS PREPPED AND ANESTHETIZED AND A 5-CM LONG HOOK WIRE NEEDLE LOCALIZATION DEVICE WAS PASSED INTO THE BREAST TO APPROXIMATE THE MAMMOTOME BIOPSY CLIP WAS PASSED INTO THE BREAST TO APPROXIMATE THE MAMMOTOME BIOPSY CLIP LEFT AFTER THE BIOPSY. THE WIRE WAS DISCHARGED, SATISFACTORY WIRE POSITIONING WAS VERIFIED RADIOLOGRAPHICALLY AND THE WIRE WAS THEN TAPED IN PLACE AND THE PATIENT WAS SENT TO THE OPERATING ROOM ALONG WITH COPIES OF HER FILMS.

IMPRESSION: STATUS POST UNCOMPLICATED NEEDLE LOCALIZATION OF MICROCALCIFICATIONS IN THE LEFT BREAST REPRESENTING ATYPICAL DUCTAL HYPERPLASIA.

THANK YOU FOR SENDING THIS PATIENT TO OUR CENTER.

*** REPORT SIGNATURE ON FILE ***

*** Addendum:
ADDENDUM: .BCMAMMO/SPECIMEN

TISSUE SUBMITTED FROM THE OPERATING ROOM WAS RADIOGRAPHED USING DIGITAL TECHNIQUE AND SHOWS THAT THE CLIP MARKING THE PRIOR BIOPSY SITE HAS BEEN RETRIEVED ALONG WITH THE LOCALIZATION WIRE AND SOME SCATTERED CALCIFICATIONS REMAINING IN THE BREASTS. FINDINGS WERE TELEPHONED TO THE DOCTOR IN THE OPERATING ROOM ON TODAY'S DATE.

Case Study # **10** *cont'd*

PATHOLOGY REPORT

Age/Sex: 62/F

PREOPERATIVE DIAGNOSIS

CARCINOMA RIGHT BREAST, ABNORMAL MAMMOGRAM LEFT BREAST

OPERATION PERFORMED

PROCEDURE: LEFT 0-31 NEEDLE LOCALIZATION BREAST EXCISION, 025 SENTINE

TISSUE REMOVED

A. 1ST SENTINEL NODE
B. 2ND SENTINEL NODE
C. 3RD SENTINEL NODE
D. RT BREAST MASS
E. RT BREAST INFERIOR WALL
F. LT BREAST BX
G. LT BREAST TISSUE

GROSS DESCRIPTION

PART A RECEIVED LABELED 1ST SENTINEL NODE HOT AND BLUE. THE SPECIMEN CONSISTS OF A TAN NODULE MEASURING 5 MM IN MAXIMUM DIMENSION. BECAUSE OF THE SMALL SIZE OF THE SPECIMEN NO TISSUE IS TAKEN FOR RESEARCH PROTOCOL. THE SPECIMEN IS BISECTED AND ALL BLOCKED.

PART B RECEIVED LABELED SENTINEL NODE #2, XVIVO HOT AND BLUE. THE SPECIMEN CONSISTS OF A BEAN SHAPED LYMPH NODE MEASURING 1.5 X 1 X 0.9 CM. SECTIONING REVEALS LIGHT BLUE COLORATION TO THE LYMPH NODE. A REPRESENTATIVE SECTION THROUGH THE CENTER OF THE NODE IS SUBMITTED FOR RESEARCH PROTOCOL. THE REMAINING NODAL TISSUE IS THEN ALL BLOCKED FOR HISTOLOGY.

PART C RECEIVED LABELED SENTINEL NODE #3, HOT AND BLUE. THE SPECIMEN CONSISTS OF AN APPARENT LYMPH NODE MEASURING 2.5 X 2 X 1.5 CM. CUT SECTIONING REVEALS A RIM OF TAN NODAL TISSUE WITH A FATTY CENTER. A SECTION THROUGH THE CENTER OF THE SPECIMEN IS REMOVED FOR RESEARCH PROTOCOL. THE REMAINING TISSUE IS THEN BLOCKED FOR HISTOLOGY.

Case Study # **10** *cont'd*

PART D RECEIVED LABELED RIGHT BREAST MASS, SHORT SUTURE MEDIAL MIDDLE SUPERIOR, LONG SUTURE LATERAL. THE SPECIMEN CONSISTS OF A LUMP OF YELLOW FATTY APPEARING TISSUE MEASURING 8 X 7 X 3 CM. THE LONG SUTURE IS ON A LOBULE OF FAT THAT HAS BEEN DISLODGED FROM THE SPECIMEN. WITH THE REMAINING SUTURE ASSUMED TO BE THE MEDIUM LENGTH SUTURE LOCATED AT THE MEDIAL MARGIN AND THE SHORT SUTURE LOCATED AT THE SUPERIOR MARGIN, THERE IS BLUE DYE PARTIALLY OBSCURING THE SURFACE OF THE SUPERFICIAL AND MEDIAL EDGES OF THE SPECIMEN. WITH THE SPECIMEN ORIENTED AS DESCRIBED, BLACK INK IS APPLIED TO THE SUPERFICIAL MARGIN, YELLOW INK TO THE DEEP MARGIN, BLUE INK TO THE MEDIAL AND INFERIOR MARGINS AND GREEN INK TO THE LATERAL AND SUPERIOR MARGINS. YELLOW INK IS APPLIED TO THE DEEP MARGIN. AFTER INKING
THE SPECIMEN, THE SPECIMEN IS SECTIONED INTO FOUR QUADRANTS. A TUMOR MASS IS VISIBLE IN THE CENTRAL PORTION OF THE SPECIMEN. THE TUMOR MEASURES 2.5 X 2 X 1.5 CM. MULTIPLE REPRESENTATIVE SECTIONS ARE BLOCKED AS FOLLOWS: D1 SUPERIOR SUPERFICIAL HALF OF SPECIMEN, D2 DEEP SUPERIOR PORTION OF SPECIMEN, D3 SUPERIOR MEDIAL MARGIN, D4 MEDIAL MARGIN, D5 INFERIOR MEDIAL MARGIN, D6 SUPERFICIAL INFERIOR, D7 INFERIOR MARGIN, AND D8 MEDIAL MARGIN. SECTIONS D9-D10 ARE THROUGH THE TUMOR WITHOUT MARGINS.

PART E RECEIVED LABELED RIGHT MASS INFERIOR WALL. THE SPECIMEN CONSISTS OF A FRAGMENT OF WHITE FIBROUS APPEARING TISSUE MEASURING 3 X 3 X 1.5 CM. AFTER MARKING THE SURFACE OF THE SPECIMEN WITH BLACK INK, THE SPECIMEN IS SECTIONED AND ENTIRELY SUBMITTED IN E1-E2.

PART F RECEIVED LABELED LEFT BREAST BIOPSY. THE SPECIMEN CONSISTS OF A NEEDLE LOCALIZATION BREAST BIOPSY MEASURING 6 X 5 X 2.5 CM. THE SPECIMEN RADIOGRAPH SHOWS A SMALL METALIC CLIP AND SOME MICROCALCIFICATIONS ADJACENT TO THE NEEDLE LOCALIZATION WIRE. THE LUMP OF FAT IS NOT ORIENTED. BLACK INK IS APPLIED TO ALL MARGINS BEFORE SECTIONING. AFTER INKING THE SURFACE OF THE SPECIMEN, THE SPECIMEN IS BREAD-LOAF SECTIONED. SECTIONING REVEALS WHITE FIBROUS APPEARING TISSUE WITH A GROSSLY IDENTIFIABLE HEMATOMA THAT APPEARS TO BE PRESENT AT A PREVIOUS NEEDLE BIOPSY SITE. THE HEMATOMA MEASURES 1 CM IN DIAMETER. THE TISSUE SURROUNDING THE HEMATOMA IS ENTIRELY SUBMITTED IN F1-F3. MULTIPLE ADDITIONAL REPRESENTATIVE SECTIONS ARE SUBMITTED IN F4-F10 TO INCLUDE THE MAJORITY OF THE WHITE FIBROUS STROMAL TISSUE. THERE ARE NO ADDITIONAL GROSSLY SUSPICIOUS MASSES SEEN.

Case Study # **10** *cont'd*

PART G RECEIVED LABELED INFERIOR TO TUMOR, LEFT BREAST. THE SPECIMEN CONSISTS OF A FRAGMENT OF HEMORRHAGIC APPEARING FIBROFATTY TISSUE MEASURING 3.5 X 3 X 1.5 CM. BLACK INK IS APPLIED TO THE MARGINS PRIOR TO SECTIONING. CUT SECTIONING REVEALS YELLOW FATTY APPEARING BREAST TISSUE WITH AREAS OF HEMORRHAGE. ALL BLOCKED IN G1-G4.

PATH PROCEDURES

PROCEDURES: PATH DLG/3, PATH DCMP, IMMUNOPEROXIDAS/4, ABX X6, BBX X6, CBX X6/2, D1 BLK, D10 BLK, D2 BLK, D3 BLK, D4 BLK, D5 BLK, D6 BLK, D7 BLK, D8 BLK, D9 BLK, E1 BLK, E2 BLK, E3 BLK, F1 BLK, F10 BLK, F2 BLK, F3 BLK, F4 BLK, F5 BLK, F6 BLK, F7 BLK, F8 BLK, F9 BLK, G1 BLK, G2 BLK, G3 BLK, G4 BLK

FINAL DIAGNOSIS

PARTS A-C RIGHT AXILLA, SENTINEL LYMPH NODE BIOPSIES 1-3: LYMPH NODES (3), NEGATIVE FOR TUMOR, WHICH IS CONFIRMED BY NEGATIVE STAINING FOR CYTOKERATIN.

PART D RIGHT BREAST, LUMPECTOMY:

1. POORLY DIFFERENTIATED INTRADUCTAL AND INFILTRATING DUCT CARCINOMA OF THE BREAST, NUCLEAR GRADE II-III, WITH HIGH MITOTIC INDEX, WITH AN EXTENSIVE INTRADUCTAL COMPONENT OF APPROXIMATELY 50% OF CRIBRIFORM AND COMEDOCARCINOMA TYPE WITH INTRADUCTAL NECROSIS.

2. THE GROSS TUMOR MEASURED 2.5 CM IN GREATEST DIMENSION WITH EXTENSION OF NEOPLASM TO 4 MM OF THE SUPERIOR MEDIAL MARGIN AND 5 MM OF THE SUPERFICIAL MARGIN. ALL OTHER MARGINS APPEAR FREE OF NEOPLASM BY A DISTANCE OF 1.0 CM OR GREATER.

3. INTRADUCTAL PAPILLARY CARCINOMA, WHICH IS PRESENT ADJACENT TO THE INVASIVE NEOPLASM. THE INTRADUCTAL PAPILLARY CARCINOMA MEASURES APPROXIMATELY 8 MM IN GREATEST DIMENSION.

4. PROLIFERATIVE FIBROCYSTIC DISEASE.

PART E RIGHT BREAST, INFERIOR MARGIN RE-EXCISION. PROLIFERATIVE FIBROCYSTIC DISEASE. NEGATIVE FOR TUMOR WITH ALL MARGINS OF EXCISION BEING FREE OF NEOPLASM. MICROCALCIFICATIONS ARE PRESENT.

Case Study # **10** *cont'd*

PART F LEFT BREAST, NEEDLE LOCALIZATION BIOPSY: MARKED PROLIFERATIVE FIBROCYSTIC DISEASE WITH DUCT HYPERPLASIA, NONTYPICAL AND FOCALLY MILDLY ATYPICAL, WITH INTRADUCTAL PAPILLOMATOSIS, SCERLOSING ADENOSIS, APOCRINE METAPLASIA WITH CYST FORMATION, AND ORGANIZING HEMATOMA AT PREVIOUS NEEDLE CORE BIOPSY SITE. FOCI OF HYALINIZED FIBROADENOMA AND FIBROADENOSIS.

PART G LEFT BREAST, INFERIOR BIOPSY RE-EXCISION: MARKED PROLIFERATIVE FIBROCYSTIC DISEASE WITH FIBROSIS, SCLEROSING ADENOSIS, AND EXTENSIVE DUCT HYPERPLASIA, NONATYPICAL, AND INTRADUCTAL PAPILLOMA FORMATION ALONG WITH CHANGES CONSISTENT WITH PREVIOUS BIOPSY SITE WITH ORGANIZING HEMATOMA WITH SURROUNDING REACTIVE FIBROSIS, FAT NECROSIS, AND HEMOSIDERIN DESPOSITION.

Case Study # **11**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: CARCINOMA OF THE LEFT BREAST, LEFT UPPER OUTER QUADRANT.

POSTOPERATIVE DIAGNOSIS: CARCINOMA OF THE LEFT BREAST, LEFT UPPER OUTER QUADRANT.

PROCEDURE PERFORMED: PARTIAL MASECTOMY WITH AXILLARY DISSECTION.

IV FLUIDS: 750 CC OF CRYSTALLOID.
ESTIMATED BLOOD LOSS: MINIMAL.
ANESTHESIA: GENERAL.
DRAINS: TWO 10-MM JACKSON-PRATT DRAINS.

DESCRIPTION OF PROCEDURE: The patient was taken to the operating room and placed supine on the operating table. The left breast was examined and in the left upper out quadrant biopsy site was noted. The examination of the axilla revealed no palpable nodes. The left breast axilla and left upper extremity were prepped and draped in a standard surgical fashion. Once adequate general endotracheal anesthesia was established, a diagonal elliptical incision was made extending in the left upper outer quadrant to include the biopsy site. Once this was completed, the incision was carried down through skin and cautery was kept outside the biopsy cavity. **The cavity was excised to the deep pectoral fascia with approximately 1-cm border of benign-appearing breast tissue attached**. Once the cavity and surrounding tissue was removed, the attention was **then turned to performing the axillary dissection.** The dissection was taken from the apex at the axillary vein. The lateral thoracic nerve and vessels were identified, as well as the main trunk of the intercostal brachial nerve, and were spared. **Blunt and gentle sharp dissection clear the pectoral node group, and the thoracodorsal neurovascular bundle was identified and spared.** Once the specimen was passed off the operative field, meticulous hemostasis was obtained following irrigation and two 10-mm Jackson-Pratt drains were placed in the wound and out inferior to the lower skin flap. Hemostasis was obtained, and the defect was approximated with 2-0 chromic suture and the skin was approximated with 4-0 interrupted nylon vertical mattress. A sterile dressing was applied. Sponge, needle and instrument counts were correct at the end of the case. The patient was extubated and transported to the PACU in stable condition.

Specimen included partial mastectomy breast tissue as well as axillary contents.

Case Study # **11** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 76/F

DIAGNOSIS
Wide excision of left breast tissue:
Fat necrosis.
Scarring.
Stromal fibrosis.
No residual neoplasma.

Lymph nodes (9): Metastatic carcinoma to 2 of 9 axillary nodes.

Doctor concurs with the diagnosis.

Tissue
Breast Tissue and Axillary Content: Short Sutures is Medial; Long Suture is Inferior

Clinical Summary
Carcinoma, Left Breast, TNM
Left Axillary Node Dissection; Wide Excision (Partial Mastectomy) IUOQ, Left Breast

Gross Description
The specimen is received fresh, labeled "left breast tissue and axillary contents", and consists of a wide excision, partial mastectomy specimen composed of upper and lower outer quadrants of the left breast. The specimen measures 15 x 14.5 x 4 cm in greatest dimension. There is an ellipitical piece of skin attached measuring 9.8 x 4 x 0.3 cm in greatest dimensions. There are two previous biopsy scars measuring 1.5 and 1 cm in greatest dimensions. The specimen is composed of adipose tissue admixed with some fibrous tissue with focal areas of hemorrhage. There is an area of relatively increased firmness immediately beneath the skin. The specimen is inked and upon serial sectioning, it consists of yellow adipose tissue admixed with pearly white fibrous tissue. There is an area of increased firmness measuring 1.5 x 1 x 1 cm in greatest dimension and it is adjacent to the previous biopsy site which measures 2.7 x 2 x 1.5 cm in greatest dimensions and it is filled with blood secretions. Two sutures are attached; short suture medial and long suture inferior. Multiple areas of relatively increased firmness is appreciated on palpation of the axillary contents which are probably lymph nodes. Representative sections are submitted as follows:

Cassette A-1 - Medial margin
A-2 - Inferior margin
A-3 to A-7 - Random section
A-8 to A-10 - Lymph nodes

Case Study # **12**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: MICROMASTIA.

POSTOPERATIVE DIAGNOSIS: MICROMASTIA.

OPERATION:

ANESTHESIA: MAC.

COMPLICATION:

INDICATION FOR PROCEDURE: This is a 38-year-old female who had her second child 15 months ago. She has complaints of micromastia. The preoperative diagnosis is normal with the exception of atrophic breasts. The preoperative mammogram findings are negative for any evidence of malignancy.

PROCEDURE: The patient was seen in the preoperative holding area, where she was marked in the upright supine position. She was taken to the operating room where she was placed in the akimbo position. She was prepped and draped in the standard sterile fashion. Bilateral intercostal nerve blocks were used using my solution A and solution B for augmentation mammoplasty.

Upon completion of this the **predetermined periareolar incision was marked again.** This was made on the medial, inferior and lateral quadrant of the nipple areolar complex. A #15 blade scalpel was used to make the skin incision. It was carried down through the subcutaneous tissue and a small subcutaneous film was undermined medially. **Upon completion of this the subcutaneous tissue was dissected down to the level of the pectoralis major muscle.** The pectoralis major muscle was identified and it was then divided in the direction of its fibers. The intercostal spaces were identified, and using both Bovie cauterization and blunt dissection a subpectoral space was dissected. Care was taken to dissect the space in the subcutaneous plane and not in the submuscular plane in the inframammary portion of the implant just above the inframammary fold. Care was taken to dissect the pocket superiorly using the ureteral sound. **Upon completion of this the pocket was copiously irrigated** with bacitracin solution, followed by saline solution.

The entire procedure was then repeated on the left side.

Case Study # **12** *cont'd*

The patient has been noted preoperatively on photographs and on physical examination that the left inframammary fold was higher than the right inframammary fold and the left nipple position was also a bit higher, as well as the left nipple pointed in a more lateral or outward direction. The patient also had a slightly more elevated rib cage, or more coning of the thoracic portion of the chest on the left superior portion than on the right. These were all taken into account when placing the implants. The entire procedure was repeated and a **subcutaneous pocket was dissected and a subcutaneous pocket was dissected inferiorly taking care to lower the inframammary fold on the left side.** The patient tolerated this procedure without difficulty.

A sizer was placed in the left pocket and it was seen that the inframammary fold was lowered to the position that was desired. This sizer was inflated with saline and it was determined that the patient would have an approximately 260 cc implant on this left side. Upon completion of the wound was copiously irrigated and then using a mentor saline filled spectrum mammary prosthesis style number 1635, all gloves were changed, and the powerless glove technique was used. This implant was submerged in saline and checked for any leaks or any problems. Care was taken to deflate the implant. Prior to doing all this interrupted 3-0 Vicryl sutures were placed in the muscular region. All sharps were cut off and removed before the implant was even handled using the powerless glove technique. **The implant was then submerged in saline, inspected for leaks, and placed in the subpectoral pocket.** It was inflated to a total of 270 cc. All sutures were then closed and the subcutaneous pocket was closed with interrupted 3-0 Vicryl.

Upon completion of this the attention was directed to the right side and the patient had the style 1635 implant placed and filled to 260 cc. This implant was also inspected for leaks and was found to be intact. The patient was also sat in the upright position and symmetry was checked. It was determined that the right side however should be a slight bit more to allow adequate symmetry between the breast and a total of 270 cc were injected. This muscle also had previously had sutures of 3-0 Vicryl placed in the pectoralis major muscle. These were then tied into place.

The incisions were then closed with interrupted 5-0 Vicryl, 5-0 nylon pullout suture, and a running 6-0 nylon cutaneous suture. Steri-Strips were placed. The patient was placed in a bra.

It was noted that at the end of the case that the sponge counts were inaccurate. The drapes and floor were checked for the sponge. The missing sponge was not found, thus a x-ray was taken and the x-ray confirmed that there was no sponge retained in either subpectoral pocket or anywhere on the patient.

Upon completion of this the patient was returned to the recovery room in stable condition. All needle counts were accurate at the end of the case.

Case Study # **13**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: MICROMASTIA.

POSTOPERATIVE DIAGNOSIS: MICROMASTIA.

PROCEDURE PERFORMED: BILATERAL AUGMENTATION MAMMOPLASTY.

ANESTHESIA: GENERAL.

DESCRIPTION OF PROCEDURE: With the patient erect, the breasts were marked for augmentation. The patient was then placed supine. General anesthesia was induced and maintained by endotracheal intubation. The patient was then prepped with Betadine soap and solution and draped with sterile towels and sheets. Transaxillary incisions were made and dissection proceeded to the pectoralis major muscle. A sub-glandular supra-pectoral dissection was done, and hemostasis was obtained with the Bovie current. Dissection was medially to the border of the sternum, superiorly to the clavicle and laterally to the anterior axillary line. Inferiorly, the dissection proceeded to below the inframammary fold. Following this, breast sizers were placed and inflated to 500 cc and then the pockets were checked for symmetry. Following this, **Mentor post-op adjustable saline implants were placed** in the sub-glandular pocket and inflated to 380 cc **on the left** and 420 cc **on the right.** Remote filling ports were then attached and placed in a subcutaneous location and incisions were closed with 3-0 Vicryl and 4-0 Monocryl. The patient was dressed with Mycitracin and 4 x 4 and Tegaderm and then wrapped circumferentially with ABD, two Kerlixes and a six-inch Ace. The procedure was terminated. The patient was awakened and taken to the recovery room in satisfactory condition.

Case Study #**14**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: DEFLATED LEFT BREAST IMPLANT

POSTOPERATIVE DIAGNOSIS: DEFLATED LEFT BREAST IMPLANT

PROCEDURE PERFORMED: REMOVAL OF DEFLATED LEFT BREAST IMPLANT

ANESTHESIA: GENERAL.

DESCRIPTION OF PROCEDURE: With the patient under suitable levels of general anesthesia, the left chest was prepped with Betadine soap and solution was draped with sterile towels and sheets. Following this the previous incision was opened and the pocked was entered and the **implant was removed.** The pocket was then irrigated with antibiotic solution. A 10 mm Jackson-Pratt drain was placed and brought out through a stab incision and secured to the skin with 3-0 silk. Following this, the incision was closed with 3-0 Vicryl and 3-0 Monocryl and the patient was then cleansed and a sterile dressing was placed and the procedure was terminated. The patient was awakened and taken to the recovery room in satisfactory condition.

Case Study # **14** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 42/F

DIAGNOSIS

Left Breast Implant: Plastic foreign body (gross only)
T-04030 M-30400

TISSUE

Left Breast Implant

CLINICAL SUMMARY

Deflated Left Breast Implant.
Pertinent Symptoms - Pain left breast
Previous Operations - Mastectomy Left Breast 03/01

Removal of Left Breast Implant

Gross Description

The specimen is received in one container labeled with the patient's name and medical record number.

The specimen is received fresh in a container, labeled "left breast implant", and consists of a synthetic breast implant comprising of a rubber bag filled with transparent fluid. This rubber bag measures 13 cm. in diameter. A plastic tubing is attached to the rubber bag measuring 15 cm. in length and 0.1 cm. in diameter. Also a circular attachment is connected to the rubber tubing measuring 3 cm in diameter. The specimen is for gross only.

Case Study # **15**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

OPERATION: Removal of bilateral silicone breast implants and replacement with saline implants.

ANESTHESIA: General.

PREOPERATIVE DIAGNOSIS: Rupture silicone implant on the right side; suspected rupture on the left side.

POSTOPERATIVE DIAGNOSIS: Rupture silicone implant on the right side, suspected rupture on the left side.

OPERATIVE INDICATIONS: The patient is a 51-year-old female who had undergone **previous bilateral breast augmentation a number of years ago,** had subsequent capsule contractures and bilateral gel implant ruptures and needed replacement. She did well for a number of years and suffered an accident while at work; a box fell on her right side. Along the upper medial aspect, she developed a rather large hard lump that on radiologic examination revealed it to be a probable ruptured implant with silicone granuloma. The recommendations were made for removal of those implants and replacement prosthesis. The procedure was explained to the patient including its limitations, complications, risks and alternatives, and she decided to proceed.

OPERATIVE PROCEDURE: Under adequate general endotracheal anesthesia with the patient in the supine position, the chest was prepped and draped in the usual manner. The previous inframammary incisions were opened to the level of the capsule and careful blunt and sharp **dissection on the right side isolated the implant** from its submammary position and was **found to be ruptured** along the right medial aspect where she had suffered her injury. There was extravasated silicone mixed with fibrosis and breast tissue and the **entire mass was removed** and sent to pathology for examination. The pocket was copiously irrigated with saline with 5% Betadine.

Attention was turned to the **left side** where a similar procedure was carried out, and on this side, the **implant** was found to have a sticky surface to it, but **not associated with envelope rupture.** The specimen was sent to pathology for examination. The pocket was also irrigated and using sizers, approximately 400 cc implant was determined to be the correct size, and a saline prosthesis, **Mentor style 1600, was selected bilaterally, infused to 40 cc of saline and placed in the same pocket.** The incisions were then closed with interrupted 3-0 Monocryl and a subcuticular 3-0 Monocryl. The patient tolerated the entire procedure well and left the operating room in satisfactory condition.

Case Study #**16**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE NOTE

PREOPERATIVE DIAGNOSIS: Acquired breast deformity secondary to burn.
POSTOPERATIVE DIAGNOSIS: Same.
OPERATION: Breast reconstruction using 160 cc normal saline textured Siltex prostheses.
ANESTHESIA: General endotracheal.

INDICATIONS: This is a 33-year-old female who was **involved in a burn as a young child with resultant bilateral breast deformity including near absence of breast development.** This was secondary to scar contracture.

PROCEDURE: Under general endotracheal anesthesia, the patient was prepped and draped in the usual sterile fashion. Prior to surgery, the site of the inframammary creases was marked out using an evident inframammary crease on the right and then transposing this to the same level on the left side.

The sites of the inframammary creases were injected with 1% lidocaine with epinephrine. A 4 cm. incision was made along the inframammary crease, centered lateral to the nipple line. This incision was taken down to the rib. **Bilaterally, the pectoralis major muscle was elevated down to the new site of the inframammary crease and up to the clavicle.** Minimal bleeders were controlled with electrocautery. The cavity was copiously irrigated with saline and betadine.

Sizing implants were placed and it was decided that 160 cc implants would be the largest size implant that this patient could tolerate, given the significant nature of her breast scar contracture.

The sizing implants were removed. The **Siltex saline implants** were then evacuated of air and filled to 50 cc of normal saline. With the port in place, the **prostheses were then placed into the pocket which had been created and they were centered.** They were then filled to a total of 160 cc. The port was then removed. The implant was then centered.

Prior to placing the implants, interrupted #3-0 Vicryl sutures were placed through the muscle and were not yet tied; they were tied after the placement of the prostheses. Next, interrupted #5-0 PDS sutures were placed and the skin was closed with running nylon. Dressing was placed. At the time of this dictation, the patient was on the operating room table, awaiting extubation.

COMPLICATIONS: None.

Case Study #**17**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

OPERATION: **Exchange of bilateral breast expanders with permanent implants,** McGhan style 163, right 530 cubic centimeters with 500 cubic centimeter fill, left 530 cubic centimeters with 500 cubic centimeter fill.

ANESTHESIA: General endotracheal.

PREOPERATIVE DIAGNOSIS: Infiltrating ductal breast carcinoma status post medial reconstruction utilizing bilateral breast expanders.

POSTOPERATIVE DIAGNOSIS: Infiltrating ductal breast carcinoma status post medial reconstruction utilizing bilateral breast expanders.

OPERATIVE INDICATIONS: This patient is a middle aged white female with a history of lobular carcinoma bilaterally. The patient **underwent bilateral mastectomies for removal of infiltrating lobular carcinoma.** The patient underwent immediate reconstruction utilizing some mascular implant. The patient tolerated the procedure well **and is now for implant exchange.**

OPERATIVE PROCEDURE: The patient was placed under general endotracheal anesthesia in the supine position after which time, the anterior chest wall and bilateral shoulders were prepared and draped in a sterile fashion. **The areas of the previous scars were then outlined** with methylene blue at approximately five centimeters. It was then infiltrated with half percent Lidocaine and 1:200,000 Epinephrine. After an adequate time for vasoconstriction, approximately ten minutes, it was incised with a #15 blade Bard-Parker down into the subcutaneous tissue. Using electrocautery set on cutting, this was carried down through the pectoralis fascia and pectoralis muscle. **The implant expanders were then identified. They were removed** blunt dissection. The wound was profusely irritated with Bacitracin and saline. All bleeding was controlled with electrocautery.

Bilateral 530 cubic centimeter McGhan rough textured implants were then placed equally bilaterally as the inframammary fold lines were felt to be equal. Once they were filled to their adequate fill, the wound was then closed utilizing interrupted muscular #4-0 Vicryl. The skin was closed with interrupted subcutaneous #5-0 Vicryl followed by a running cuticular #5-0 Prolene. The patient tolerated the procedure well. The patient was taken to the recovery room in stable condition.

ESTIMATED BLOOD LOSS: Minimal.
REPLACEMENT: Dextrose 5% lactated Ringer's solution.
CONDITION: Stable.

Case Study # **18**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

Age: 53

OPERATION: Stage of left breast construction with placement of tissue expander.

ANESTHESIA:

PREOPERATIVE DIAGNOSIS: Left breast cancer.

POSTOPERATIVE DIAGNOSIS: Left breast cancer.

OPERATIVE PROCEDURE: The patient was taken to the operating room and placed on the operating table in the supine position. The patient was prepped and draped in the usual fashion.

Approximately six centimeters of the lateral aspect of the mastectomy scar was incised and carried down to the pectoralis major muscle with sharp dissection. The **pocket was** then developed beneath the pectoralis muscle medially and superiorly. Inferiorly, the dissection was in the subcutaneous plane to the limits of the preoperative markings. Following that, the wound was irrigated and hemostasis was obtained with electrocautery.

A textured McGhan tissue expander with a capacity of 600 cubic centimeters was **then placed in the pocket.** A 100 cubic centimeters of saline was added to the implant. **A suction drain was placed** and brought out through a separate stab wound.

The incision was **closed in layer** with 4-0 Vicryl for the **muscle closure,** 4-0 and 5-0 for the **subcutaneous tissue and skin. Steri-Strips** were applied.

The patient was transferred to the recovery room in stable condition.

ESTIMATED BLOOD LOSS: Approximately 50 cubic centimeters.

Case Study # **19**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS:

POSTOPERATIVE DIAGNOSIS:

OPERATION: Simple mastectomy.

ANESTHESIA: General.

COUNTS: All sponge and instrument counts were correct at the end of the case.

INDICATIONS: The patient is a 59-year-old female with **multiple ductal carcinoma in situ of the right breast.** She was counseled preoperatively for simple mastectomy to include the risks and complications of the procedure.

PROCEDURE/FINDINGS: The patient was brought into the operating room and prepped and draped in the usual sterile fashion with the right arm extended. An elliptical incision was made surrounding her nipple areolar complex. Dissection was carried down to the level of the breast capsule. Superior and inferior skin flaps were then raised with a thickness of approximately 0.5 cm. Superior skin flaps were carried to the level of the clavicle and inferior skin flaps were raised to the level of the rectus sheath. Medially this dissection was carried in the same level to the costochondral margin and laterally to the level of the latissimus dorsi muscle. After circumferential skin flaps were raised, **the breast was incised circumferentially down to the level of the pectoralis fascia and to the tissues of the anterior abdominal wall and lateral chest wall.**
The breast was then lifted from the underlying musculature using electrocautery. It was lifted from the superior aspect down inferiorly with inclusion of the underlying fascia. The specimen was then appropriately oriented and passed off the field as surgical specimen. The wound was irrigated with normal saline. The case at this point was turned over to the surgeon who completed the reconstruction.

Case Study # **20**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE PROCEDURE

PREOPERATIVE DIAGNOSIS
Status post bilateral mastectomies.

POSTOPERATIVE DIAGNOSIS
Status post bilateral mastectomies.

OPERATION
1. Delayed reconstruction **left breast** using tissue expander (Mentor style #354-6215).
2. Immediate first-stage reconstruction **right breast** using tissue expander (Mentor style #354-6215).

ANESTHESIA
General endotracheal anesthesia.

ESTIMATED BLOOD LOSS
200 cc.

IV FLUIDS
Crystalloid.

COMPLICATIONS
None.

DRAINS
JP times two.

OPERATIVE INDICATIONS
The patient is a 59-year-old female with a past medical history significant for left breast cancer for which she underwent mastectomy in the past as well as **right breast cancer for which she is to undergo mastectomy today. The patient is to undergo bilateral reconstruction of the breasts using tissue expanders.** After discussing the risks and benefits of the procedure the patient elects to proceed.

PROCEDURE/FINDINGS
After obtaining informed consent the patient was taken to the operating room and placed on the table in the supine position. The areas of bilateral breasts and chest was prepped and draped in the usual sterile fashion. A mastectomy was performed on the right side and is dictated in a separate note.

Case Study # **20** *cont'd*

Concomitantly reconstruction of the **left breast** was undertaken. The previous mastectomy incision was opened and the lateral edge pectoralis major muscle was identified. This was elevated free from the underlying structures. The inferior portion of the skin and subcutaneous tissue was likewise freed from the superficial surface of the pectoralis major muscle. The origin of pectoralis major muscle along the sixth rib and from 1 to 2 cm along the lateral sternal border was divided. Any bleeding which was encountered was controlled using electrocautery. Next the **Mentor style #354-6215 implant was placed in the created pocket.** Sutures of 2-0 PDS were placed through the inferior mastectomy flap through the inferior edge of the pectoralis muscle and back out through the skin in order to keep the muscle from retracting cephalad. Two such sutures were placed on the left. **The expander was then placed beneath the muscle and 250 cc of saline was instilled into the expander.** The incision was closed using interrupted inverted sutures of 3-0 Monocryl to approximate the deep tissue and the dermis and a running subcuticular suture of 4-0 Monocryl to approximate the skin edge.

At this point attention was turned to the **opposite side**. The procedure was repeated, creating a pocket beneath the pectoralis major muscle. A **Mentor style #354-6215 implant was placed and into the 350 cc of saline was instilled.** A Jackson-Pratt drain was placed and the wound closed using interrupted inverted sutures of 3-0 PDS to approximate the deep layer and a running subcuticular suture of 4-0 Monocryl to approximate the skin edge. In a likewise fashion, the site of previous lumpectomy was closed using interrupted inverted sutures of 3-0 Vicryl, 3-0 Monocryl and a running subcuticular stitch of 4-0 Monocryl.

Dressings were placed consisting of Tegaderm over the areas of incision. The sutures which had been placed through the inferior edge of the muscle were then drawn tight and secured to the skin using Tegaderm in order to keep the muscle from retracting cephalad. The patient tolerated the procedure well. She was extubated and transported to the recovery room in stable condition after being placed in a support bra.

Case Study # **20** *cont'd*

PATHOLOGY REPORT

Age/Sex: 59/F

PREOPERATIVE DIAGNOSIS: Right Breast Carcinoma.

OPERATION PERFORMED: Right simple mastectomy, bilateral breast reconstruction expander.

TISSUE REMOVED: A. Right breast sent for permanent, black suture at 1200 biopsy site, 440 grams

GROSS DESCRIPTION

RECEIVED LABELED RIGHT BREAST TISSUE, STITCH AT 12 O'CLOCK. THE SPECIMEN CONSISTS OF A SIMPLE MASTECTOMY SPECIMEN MEASURING 19 X 15.5 X 4.5 CM IN GREATEST DIMENSIONS. THE SPECIMEN HAS BEEN ORIENTED BY THE SURGEON AS PREVOIUSLY DESCRIBED. CENTRALLY LOCATED APPROXIMATELY 1 CM FROM THE INFERIOR MARGIN OF THE SPECIMEN IS A PINK-TAN ELLIPSE OF SKIN MEASURING 6.5 X 3.3 CM. CENTRALLY LOCATED ON THE SKIN SURGACE IS AN INVERTED FREELY MOVABLE NIPPLE MEASURING 0.7 CM IN DIAMETER. ALSO SUBMITTED WITH THE SPECIMEN ARE FOUR FRAGMENTS OF YELLOW AND PINK-TAN LOBULATED ADIPOSE TISSUE MEASURING 9 X 8 X 2 CM IN AGGREGATE. THE CENTRAL AREA OF THE SUPERIOR MARGIN OF THE SPECIMEN IS IRREGULAR AND SEVERELY DISRUPTED BY A DARK RED, ROUGHENED AND INDURATED, MODERATELY HEMORRHAGIC CAVITY OPEN TO THE MARGIN, GROSSLY CONSISTENT WITH PREVIOUS BIOPSY CAVITY. THE CAVITY MEASURES APPROXIMATELY 6.5 X 4 X 2.5 CM. A SEPARATE PINK-TAN ELLIPSE OF SKIN MEASURING 4.7 X 0.7 CM. CENTRALLY LOCATED ON
THE SKIN ELLIPSE IS A LINEAR WELL HEALED SCAR MEASURING 3.7 X 0.1 CM. ONE ASPECT OF EACH OF THE SEPARATE BREAST TISSUE FRAGMENTS AND THE SKIN ELLIPSE IS DARK RED, MILDLY ROUGHENED AND INDURATED, MODERATELY HEMORRHAGIC FIBROADIPOSE TISSUE, GROSSLY CONSISTENT WITH A PORTION OF BIOPSY CAVITY WALL. THE FRAGMENTS AND ELLIPSE ARE GROSSLY CONSISTENT WITH THE DISRUPTED AREA AT THE SUPERIOR MARGIN. A REPRESENTATIVE SECTION THROUGH THE NIPPLE AND SECTIONS THROUGH THE SEPARATE SKIN ELLIPSE ARE SUBMITTED TOGETHER IN A1. THE DEEP MARGIN OF THE SPECIMEN CONSISTS OF SEVERELY DISRUPTED HEMORRHAGIC AN DINDURATED FIBROADIPOSE TISSUE CORRESPONDING TO THE PREVIOUSLY NOTED BIOPSY CAVITY. THE REMAINDER OF THE DEEP MARGIN OF THE SPECIMEN IS YELLOW AND PINK-TAN LOBULATED FIBROADIPOSE TISSUE, WHICH APPEARS GROSSLY INTACT.

Case Study # **20** *cont'd*

BLACK INK IS APPLIED TO THE DEEP MARGIN OF THE SPECIMEN AND THE GROSS DEEP MARGINS OF THE SEPARATE ADIPOSE TISSUE FRAGMENTS. THE SEPARATE BREAST TISSUE FRAGMENTS ARE SERIALLY SECTIONED PERPENDICULAR TO THE CAVITY WALL TO REVEAL MODERATELY HEMORRHAGIC DARK RED AND DARK TAN INDURATED ADIPOSE TISSUE SURROUNDING THE CAVITY. REPRESENTATIVE SECTIONS THROUGH THE SEPARATE BREAST TISSUE FRAGMENTS ARE SUBMITTED IN A2-A4. REPRESENTATIVE SECTIONS FROM THE MARGINS OF THE BIOPSY CAVITY ON THE MASTECTOMY SPECIMEN ARE SUBMITTED AS FOLLOWS: DEEP MARGIN FROM MEDIAL TO LATERAL IN A5-A6 SUPERFICIAL MARGIN IN A7, MEDIAL MARGIN IN A8, LATERAL MARGIN IN A9, AND INFERIOR MARGIN IN A10. THE REMAINDER OF THE SPECIMEN IS SERIALLY SECTIONED FROM MEDIAL TO LATERAL IN A BREAD-LOAF FASHION TO REVEAL YELLOW AND PINK-TAN LOBULATED ADIPSE TISSUE INTERLACED WITH THIN WHITE FIBROUS BANDS AND A SMALL AMOUNT OF WHITE AND PINK-TAN THIN BREAST STROMA. REPRESENTATIVE SECTIONS FROM THE REMAINDER OF THE SPECIMEN, INCLUDING DEEP MARGIN ARE SUBMITTED AS FOLLOWS: UPPER INNER QUADRANT A11, LOWER INNER QUADRANT A12, UPPER OUTER QUADRANT A13, LOWER OUTER QUADRANT A14.

PATH PROCEDURES

PROCEDURES: PATH DCMP, A1 BLK, A10 BLK, A11 BLK, A12 BLK, A13 BLK, A14 BLK, A2 BLK, A3 BLK, A4 BLK, A5 BLK, A6 BLK, A7 BLK, A8 BLK, A9 BLK.

Case Study # **20** *cont'd*

FINAL DIAGNOSIS

RIGHT BREAST, SIMPLE MASTECTOMY.

1. FOCI OF RESIDUAL DUCTAL CARCINOMA IN SITU, SOLID AND CRIBRIFORM TYPES, NUCLEAR GRADE II-III, WITH MODERATE MITOTIC INDEX, WITH ONE FOCUS BEING IDENTIFIED AT THE INFERIOR EDGE OF THE PREVIOUS BIOPSY SITE (SLIDE A10) ALONG WITH AN ADDITIONAL FOCUS BEING IDENTIFIED IN THE RANDOM SECTION FROM THE UPPER OUTER QUADRANT (SLIDE A13). INVASIVE NEOPLASM IS NOT PRESENT.

2. THE FOCI OF RESIDUAL DCIS MEASURE APPROXIMATELY 1.0 AND 0.5 CM IN GREATEST DIMENSION.

3. THE NIPPLE SKIN AND DEEP MARGIN OF EXCISION ARE FREE OF NEOPLASM. HEALING SKIN INCISION SITE WITH FIBROSIS AND SUTURE GRANULOMA.

4. PREVIOUS BIOPSY CAVITY WITH DISRUPTION OF THE EDGES AND SURROUNDING DENSE REACTIVE FIBROSIS, ACTUE AND CHRONIC INFLAMMATION WITH FOREIGN BODY GIANT CELL REACTION.

5. FIBROCYSTIC DISEASE WITH FIBROSIS, SCLEROSING ADENOSIS, APOCRINE METAPLASIA, AND MULTIFOCAL ATYPICAL LOBULAR HYPERPLASIA IDENTIFIED IN MULTIPLE TISSUE SAMPLES.

Case Study # **20** *cont'd*

PREOPERATIVE DIAGNOSIS

RIGHT BREAST CARCINOMA

OPERATION PERFORMED

PROCEDURE: RIGHT SIMPLE MASTECTOMY, BILATERAL-BREAST RECONSTRUCTION EXPANDER

TISSUE REMOVED

A. RIGHT BREAST SENT FOR PERMANENT, BLACK SUTURE AT 1200 BIOPSY SITE, 440 GRAMS

GROSS DESCRIPTION

RECEIVED LABELED RIGHT BREAST TISSUE, STITCH AT 12 O'CLOCK. THE SPECIMEN CONSISTS OF A SIMPLE MASTECTOMY SPECIMEN MEASURING 19 X 15.5 X 4.5 CM IN GREATEST DIMENSIONS. THE SPECIMEN HAS BEEN ORIENTED BY THE SURGEON AS PREVIOUSLY DESCRIBED. CENTRALLY LOCATED APPROXIMATELY 1 CM FROM THE INFERIOR MARGIN OF THE SPECIMEN IS A PINK-TAN ELLIPSE OF SKIN MEASURING 6.5 X 3.3 CM. CENTRALLY LOCATED ON THE SKIN SURFACE IS AN INVERTED FREELY MOVABLE NIPPLE MEASURING 0.7 IN DIAMETER. ALSO SUBMITTED WITH THE SPECIMEN ARE FOUR FRAGMENTS OF YELLOW AND PINK-TAN LOBULATED ADIPOSE TISSUE MEASURING 9 X 8 X 2 CM IN AGGREGATE. THE CENTRAL AREA OF THE SUPERIOR MARGIN OF THE SPECIMEN IS IRREGULAR AND SEVERELY DISRUPTED BY A DARK RED, ROUGHTENED AND INDURATED, MODERTELY HEMORRHAGIC CAVITY OPEN TO THE MARGIN, GROSSLY CONSISTENT WITH PREVIOUS BIOPSY CAVITY. THE CAVITY MEASURES APPROXIMATELY 6.5 X 4 X 2.5 CM. A SEPARATE PINK-TAN ELLIPSE OF SKIN MEASURING 4.7 X 0.7 CM CENTRALLY LOCATED ON THE SKIN ELLIPSE IS A LINEAR WELL HEALED SCAR MEASURING 3.7 X 0.1 CM. ONE ASPECT OF EACH OF THE SEPARATE BREAST TISSUE FRAGMENTS AND THE SKIN ELLIPSE IS DARK RED, MIDLY ROUGHENED AND INDURATED, MODERATELY HEMORRHAGIC FIBROADIPOSE TISSUE, GROSSLY CONSISTENT WITH A PORTION OF BIOPSY CAVITY WALL. THE FRAGMENTS AND ELLIPSE ARE GROSSLY CONSISTENT WITH THE DISRUPTED AREA AT THE SUPERIOR MARGIN. A REPRESENTATIVE SECTION THROUGH THE NIPPLE AND SECTIONS THROUGH THE SEPARATE SKIN ELLIPSE ARE SUBMITTED TOGETHER IN A1. THE DEEP MARGIN OF THE SPECIMEN CONSISTS OF SEVERELY DISRUPTED HEMORRHAGIC AND INDURATED FIBROADIPOSE TISSUE CORRESPONDING TO THE PREVIOUSLY NOTED BIOPSY CAVITY. FIBROADIPOSE TISSUE CORRESPONSIND TO THE

Case Study # **20** *cont'd*

PREVIOUSLY NOTED BIOPSY CAVITY. THE REMAINDER OF THE DEEP MARGIN OF THE SPECIMEN IS YELLOW AND PINK-TAN LOBULATED FIBROADIPOSE TISSUE, WHICH APPEARS GROSSLY INTACT. BLACK INK IS APPLIED TO THE DEEP MARGIN OF THE SPECIMEN AND THE GROSS DEEP MARGINS OF THE SEPARATE ADIPOSE TISSUE FRAGMENTS. THE SEPARATE BREAST TISSUE FRAGMENTS ARE SERIALLY SECTIONED PERPENDICULAR TO THE CAVITY WALL TO REVEAL MODERATELY HEMORRHAGIC DARK RED AND DARK TAN INDURATED ADIPOSE TISSUE SURROUNDING THE CAVITY. REPRESENTATIVE SECTIONS THROUGH THE SEPARATE BREAST TISSUE FRAGMENTS ARE SUBMITTED IN A2-A4. REPRESENTATIVE SECTIONS FROM THE MARGINS OF THE BIOPSY CAVITY ON THE MASTECTOMY SPECIMEN ARE SUBMITTED AS FOLLOWS: DEEP MARGIN FROM MEDIAL TO LATERAL IN A5-A6, SUPERFICIAL MARGIN IN A7, MEDIAL MARGIN IN A8, LATERAL MARGIN IN A9, AND INFERIOR MARGIN IN A10. THE REMAINDER OF THE SPECIMEN IS SERIALLY SECTIONED FROM MEDIAL TO LATERAL IN A BREAD-LOAF FASHION TO REVEAL YELLOW AND PINK-TAN LOBULATED ADIPOSE TISSUE INTERLACED WITH THIN WHITE FIBROUS BANDS AND A SMALL AMOUNT OF WHITE AND PINK-TAN THIN BREAST STROMA. REPRESENTATIVE SECTIONS FROM THE REMAINDER OF THE SPECIMEN, INCLUDING DEEP MARGIN ARE SUBMITTED AS FOLLOWS: UPPER INNER QUADRANT A11, LOWER INNER QUADRANT A12, UPPER OUTER QUADRANT A13, LOWER OUTER QUADRANT A14.

PATH PROCEDURES

PROCEDURES: PATH DCMP, A1 BLK, A10 BLK, A11 BLK, A12 BLK, A13 BLK, A14 BLK, A2 BLK, A3 BLK, A4 BLK, A5 BLK, A6 BLK, A7 BLK, A8 BLK, A9 BLK

Case Study # **20** *cont'd*

FINAL DIAGNOSIS

RIGHT BREAST, SIMPLE MASTECTOMY:

1. FOCI OF RESIDUAL DUCTAL CARCINOMA IN SITU, SOLID AND CRIBRIFORM TYPES, NUCLEAR GRADE II-III, WITH MODERATE MITOTIC INDEX, WITH ONE FOCUS BEING IDENTIFIED AT THE INFERIOR EDGE OF THE PREVIOUS BIOPSY SITE (SLIDE A10) ALONG WITH AN ADDITIONAL FOCUS BEING IDENTIFIED IN THE RANDOM SECTION FROM THE UPPER OUTER QUADRANT (SLIDE A13). INVASIVE NEOPLASM IS NOT PRESENT.

2. THE FOCI OF RESIDUAL DCIS MEASURE APPROXIMATELY 1.0 AND 0.5 CM IN GREATEST DIMENSION.

3. THE NIPPLE SKIN AND DEEP MARGIN OF EXCISION ARE FREE OF NEOPLASM. HEALING SKIN INCISION SITE WITH FIBROSIS AND SUTURE GRANULOMA.

4. PREVIOUS BIOPSY CAVITY WITH DISRUPTION OF THE EDGES AND SURROUNDING DENSE REACTIVE FIBROSIS, ACUTE AND CHRONIC INFLAMMATION WITH FOREIGN BODY GIANT CELL REACTION.

5. FIRBROCYSTIC DISEASE WITH FIBROSIS, SCLEROSING ADENOSIS, APROCRINE METAPLASIA, AND MULTIFOCAL ATYPICAL LOBULAR HYPERPLASIA IDENTIFIED IN MULTIPLE TISSUE SAMPLES.

Case Study # **21**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

OPERATION: Placement of bilateral breast prosthesis.

ANESTHESIA: General endotracheal.

PREOPERATIVE DIAGNOSIS: Status post bilateral mastectomies and status post bilateral placement of breast expanders.

POSTOPERATIVE DIAGNOSIS: Status post bilateral mastectomies and status post bilateral placement of breast expanders.

OPERATIVE INDICATIONS: This is a 52-year-old white female status post bilateral mastectomies for breast carcinoma with radiation to the right breast in the past.

OPERATIVE PROCEDURE: The patient was brought to the operating room and was placed supine on the operating table and given general anesthesia with endotracheal intubation. The chest was prepared and draped in the routine sterile fashion. **Bilateral incisions were made** using the #15 blade scalpel **along the previous mastectomy incisions.** The patient has had previous expanders placed in bilateral breast regions for expansion prior to implants. **The expanders were removed and sizer silicone implants were placed.** It was noted that **due to contracture of the capsule secondary to the expander** that capsulotomy would be necessary prior to putting in the implants. Therefore, **curvilinear capsulotomy incisions were made** in the breast pocket using Bovie cutting cautery. **Mostly on the right side, these were curvilinear in nature and radial on the left side.** Once this was completed and hemostasis was obtained with irrigation of both breast pockets, **saline implants of the McGhan type style #363 were placed bilaterally.** The left implant was filled to 290 cubic centimeters of normal saline and the right implant was filled to 325 cubic centimeters. The patient was sat up on the operating look for breast symmetry. The ports were then removed and the **incisions were closed** using interrupted #4-0 Vicryl sutures to close the subcutaneous space. These were buried deep dermal stitches. Also, after this was completed, **two nevi were removed from the anterior chest wall using punch biopsies and then these were closed using Vicryl and Prolene sutures. Both nevi were removed completely and sent to pathology.** The patient was then extubated and taken to the recovery room in stable condition after placement of sterile dressings and a surgical bra.

COMPLICATIONS: None.

Case Study # **22**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

OPERATION: Removal of tissue expander and capsulectomy.

ANESTHESIA:

PREOPERATIVE DIAGNOSIS: Left breast carcinoma, status post modified radical mastectomy and placement of a submuscular expander.

POSTOPERATIVE DIAGNOSIS: Left breast carcinoma, status post modified radical mastectomy and placement of a submuscular expander.

OPERATIVE INDICATIONS: This patient is an elderly female, with history of left breast carcinoma. The patient underwent modified radical mastectomy, followed by a submuscular tissue expansion. The patient has subsequent infection after removal of the tissue with inflammation of the left breast. Therefore, **the patient is for removal of the tissue expander with capsulectomy.**

OPERATIVE PROCEDURE: The patient was placed under general endotracheal anesthesia in the supine position, after which time the anterior chest and upper neck were prepared and draped in a sterile fashion. **The previous left lateral scar of the mastectomy was then incised** with a #15 blade. It was then carried down through, and through the muscle using electrocautery. **The tissue expander was then identified, along with some serous fluid.** The serous fluid was then cultured for both aerobic and anaerobic organisms.

The wound was copiously irrigated with normal saline, followed by Bacitracin-saline solution.

The **capsulectomy was performed** with the thickening of the scar around the implant with electrocautery. All bleeding was controlled with electrocautery. After this was performed, a drain was then placed laterally using a Jackson-Pratt 10 millimeter drain. This was sutured to the surrounding skin through a separate stab incision utilizing #4-0 Prolene. The skin incision line was then closed utilizing interrupted #3-0 Vicryl in the vascular portion, followed by #4-0 Vicryl subcutaneously and cuticular #5-0 subcuticular Vicryl. The patient tolerated the procedure well, and was sent to the Recovery Room in stable condition.

Drains: Jackson-Pratt drain.
Cultures: Aerobic and anaerobic.

Case Study # **23**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: MACROMASTIA.

POSTOPERATIVE DIAGNOSIS: MACROMASTIA.

PROCEDURE PERFORMED: BILATERAL REDUCTION MAMMOPLASTY.

ANESTHESIA: GENERAL.

DESCRIPTION OF PROCEDURE: With the patient erect, a Weiss pattern was drawn on the breast with a new nipple height set at 23 cm from the clavicle, the distance from the inframammary fold. The patient was then placed supine. General appearance was induced and maintained by endotracheal intubation. Following this the Weiss pattern was scored with an #18-gauge needle and the pedicle width was set of 8 cm. The patient's breasts were then infiltrated with _% Xylocaine containing 1:200,000 epinephrine in all areas except the pedicle. The patient was then prepped with Betadine soap and solution and draped with sterile towels and sheets. The areolar was circumscribed at 42 mm and then the pedicles were deepithelialized. **Mediolateral and superior wedges of breast tissue were removed from each breast** and hemostasis was obtained with a Bovie current. **From the left breast, a total of 1772 grams were removed and from the right breast 1856 grams.** The breasts were then irrigated and closed over 10-mm Jackson-Pratt drain, which were brought out laterally through the incision and secured to the skin with 3-0 nylon. The closure was with 3-0 Vicryl and 3-0 Monocryl and the nipples were inset with 4-0 Vicryl and 4-0 Monocryl. The patient was then cleansed and dressed with Mycitracin, Xeroform, ABD, and wrapped circumferentially with 2 Kerlixes and a 6-inch Ace.

The procedure was terminated. The patient was awakened and taken to the recovery room in satisfactory condition.

Case Study # **23** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 25/F

SP TYPE: SURGICAL P

DIAGNOSES

Breast tissue (bilateral reduction): Marked fatty infiltrate and focal stromal fibroin.
T-04000 M-55280

TISSUE

Tissue Right Breast; Tissue, Left Breast

CLINICAL SUMMARY

Macromastia

Bilateral Reduction Mammoplasty

GROSS DESCRIPTION

The specimen is received in two parts.

A) The specimen is labeled "tissue right breast". The specimen is received in formalin and consists of multiple irregular yellow lobulated breast tissue with attached brown skin. There is also a fragment of skin with no tissue attached. The specimen measures 32 x 22.5 x 4.5 cm. in greatest dimensions and weighs approximately 1618.3 grams. There are no masses or lesions appreciated. There is no aerola or nipple attached. The specimen is breadloafed revealing glistening yellow lobulated adipose tissue with intermixed bans of pink-white fibrous tissue. Representative sections are submitted in Cassettes A-1 thru A-5.

B) The specimen is labeled "tissue left breast". It is received in fomalin and consists of multiple irregular yellow lobulated breast fragments with attached brown skin. There is also a portion of detached brown skin. Entire specimen measures 40 x 20 x 4.5 cm. in greatest dimensions and weighs 1397.6 grams approximately. The aerola and nipple are not attached. There are no gross lesions seen or palpated. The specimen is breadloafed. The cut surfaces are yellow glistening lobulated with bands of pink/white fibrous tissue. Representative sections are submitted is Cassettes B-1 thru B-5.

Case Study # **24**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: RIGHT BREAST CANCER

POSTOPERATIVE DIAGNOSIS: RIGHT BREAST CANCER

PROCEDURE PERFORMED: NIPPLE-AREOLAR RECONSTRUCTION, RIGHT BREAST

ANESTHESIA: GENERAL ENDOTRACHEAL

ESTIMATED BLOOD LOSS: MINIMAL

COMPLICATIONS: NONE

INDICATIONS: NONE

INDICATIONS: This patient is a 28-year-old female with a history of breast cancer status post mastectomy and breast reconstruction using implant. The patient presents for second-stage nipple-areolar reconstruction.

DESCRIPTION OF PROCEDURE: The patient was brought into the operating room and placed supine on the operating room table. After induction of general endotracheal anesthesia the right breast was prepped and draped in sterile fashion. A modified state pattern was drawn on the **right breast,** and the **flaps were raised and elevated.** The **nipple was reconstructed.** The **donor site was grafted using a full-thickness skin graft from her original mastectomy scar.**

Bolster dressings were then placed over the nipple. The patient tolerated the procedure well, and was transported to the recovery room after extubation.

Case Study # **25**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: BILATERAL NIPPLE ATROPHY.

POSTOPERATIVE DIAGNOSIS: BILATERAL NIPPLE ATROPHY.

OPERATION: BILATERAL NIPPLE RECONSTRUCTION.

ANESTHESIA: MO NITORED ANESTHETIC CARE WITH LOCAL TISSUE INFILTRATION.

DRAINS: NONE.
COMPLICATIONS: NONE.

INDICATIONS FOR PROCEDURE: This patient is a 38-year-old woman with a **previous history of breast cancer, who has undergone bilateral breast reconstruction with tissue expander implants and has had a previous nipple areolar complex reconstruction that has subsequently developed complete atrophy bilaterally.**

DESCRIPTION OF PROCEDURE: The patient was brought to the operating room and placed supine on the operating table. After establishing intravenous anesthesia 1% lidocaine with 1:100,000 epinephrine was used to infiltrate the skin and subcutaneous tissues around **both nipple areolar complexes. A total of 3 cc on the right and 3.5 cc on the left was used.** After approximately five minutes had elapsed allowing for the hemostatic effect of epinephrine a #15 blade was used to incise the skin and subcutaneous tissues along the skin markings that had outline C-V flap. **The C-V flaps were elevated simultaneously, dividing skin and subcutaneous tissues, and elevating the flaps** with the capsule identified and undisturbed by the dissection. With this completed the flaps were compared, noted to be of the same size, and the wings of the C-V flap were transposed and sutured with interrupted 5-0 PDS suture in the deep dermis. 5-0 chromic suture completed the skin closure.

Simultaneously 10 cc of 1/8% lidocaine with 1:600,000 epinephrine was used to infiltrate the periumbilical tissues and approximately **3 cc of adipose tissue was harvested** with a suction assisted lipectomy cannula. **This fat was then strained and used to expand the C-V flaps with 0.5 cc of fat transferred to each nipple reconstruction.**

Benzoin and Steri-Strips were placed laterally. A dressing consisting of Xeroform and the finger pad bases of 3 cc syringes. Bulk dressing and brassier were placed and the patient was transferred to the postanesthesia care unit in stable condition. The attending physician was scrubbed and present throughout the procedure.

Case Study # **26**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: INVERTED LEFT NIPPLE

POSTOPERATIVE DIAGNOSIS: INVERTED LEFT NIPPLE

PROCEDURE PERFORMED: CORRECTION OF INVERTED LEFT NIPPLE

ANESTHESIA: GENERAL

DESCRIPTION OF PROCEDURE: With the patient supine upon the table the chest was prepped with Betadine soap and solution and draped with sterile towels and sheets. Following this the breast, nipple and areolar were infiltrated with 0.25% Marcaine containing 1 amp of epinephrine and the epinephrine was allowed to take effect. **The nipple** was then transversely **incised** from 9 o'clock to 3 o'clock and this was carried down through the nipple to the breast tissue. **Lateral flaps were developed** by undermining and the breast tissue was then approximated. The **nipple tissue was then approximated** again with 4-0 Vicryl and this **served to evert the nipple.** Following this, the skin was then approximated with 5-0 plain catgut. The patient was then cleansed, dressed with Mycitracin, Xeroform and 4 x 4's and the procedure was terminated. The patient was awakened and taken to the recovery room in satisfactory condition.

Case Study # **27**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: **BREAST CARCINOMA.**

POSTOPERATIVE DIAGNOSIS: **BREAST CARCINOMA.**

OPERATION: **SECOND-STAGE BREAST RECONSTRUCTION.**

ANESTHESIA: IV GENERAL WITH LMA.

COMPLICATIONS: NONE.

ESIMATED BLOOD LOSS: MINIMAL.

DRAINS: NONE.

INDICATIONS: This is a 51-year-old white female status post mastectomy of the left breast. **She had reconstruction with an immediate placement of a tissue expander followed by placement of a saline implant and right reduction mammoplasty. She is now here for her second-stage revision of the left breast. The left breast has increased ptosis in comparison to the right, thus it was opted to remove excess skin from the lateral aspect of the breast and to elevate and fill in a medial-superior defect.**

PROCEDURE: The patient was taken to the operating room and underwent the smooth induction of general anesthesia and placement of an LMA mask. She was prepped and draped in the standard sterile fashion. The patient was placed in the akimbo position. The breast has previously been marked in the preoperative holding area.

A 15 blade scalpel was used to **excise the skin and breast tissue laterally.** This was undermined deeply and **excessive muscle fat was taken out** to actually tighten the muscle and move the implant to a more medial position. In a small portion of the muscular wall interrupted 3-0 Vicryl was used to tighten the pectoralis muscle and serratus muscle laterally as well as to tighten the subcutaneous tissues. After completion of this, the more **medial aspect of the scar** was approached. This **area was incised** and de-epithelialized and the **de-epithelialized area was buried superiorly to fill in a hollow defect** in the more medial superior portion of the breast. This was all closed with interrupted 3-0 Vicryl, 5-0 Vicryl and a 4-0 Maxon pullout suture. The patient tolerated this without difficulty. No drains were placed. Antibiotics were given in the operating room. The patient was taken to the recovery room in stable condition.

Case Study # **27** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 52/F

Specimen(s) Received
A. Left breast tissue

Final Diagnosis
LEFT BREAST TISSUE, showing patchy stromal fibrosis.

Skin shows a few perivascular lymphocytic aggregates. No evidence of malignancy.

Clinical History
2nd stage breast reconstruction

Gross Description
The specimen is labeled "left breast tissue".

The specimen is submitted in formalin and consists of multiple fragments of lightly pigmented skin and fatty subcutaneous tissue measuring 8.0 x 5.0 x 2.5 cm in loose aggregate and weighing 68.0 grams. The skin fragments show portions of a healed scar. Sections through the fatty tissue fragments reveal generally fibrofatty cut surfaces with no discrete, distinct lesions grossly identified.
Multiple sections/seven cassettes
Representative sections are submitted.

Case Study # **28**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: RIGHT BREAST CANCER.

POSTOPERATIVE DIAGNOSIS: RIGHT BREAST CANCER.

PROCEDURE PERFORMED: REVISION OF RIGHT RECONSTRUCTIVE BREAST, RIGHT NIPPLE RECONSTRUCTION AND REVISION OF LEFT BREAST SCAR WITH KENALOG 40 INJECTION.

ANESTHESIA: GENERAL.

DESCRIPTION OF PROCEDURE: With the patient under suitable level of general anesthesia the breasts were prepped with Hibiclens and draped with sterile towels and sheets. Following this the area of **scar hypertrophy on the left breast laterally was excised** and the wound margins were infiltrated with 0.1 cc of Kenalog 40. The incision was then closed with 5-0 Vicryl and an intradermal 3-0 Prolene. Following this attention was directed to the **right reconstructive breast where the position for the new nipple was determined and a flap was outlined and elevated. It was sewn** into place with 4-0 Vicryl. Following this **the medial aspect of the TRAM flap was opened up and the area of fat necrosis was excised** and sent for pathological evaluation. Hemostasis was obtained with Bovie current. Following this a 10 mm Jackson-Pratt drain was placed and brought out laterally through the incision. The wound was irrigated and closed with 3-0 Vicryl and 3-0 Monocryl. The drain was secured to the skin with 3-0 nylon and placed into bulb suction. Next, the breasts were cleansed and dressed with Mycitracin, Xeroform and 4 x 4 with a protective dressing around the reconstructed nipple. The left side was dressed with 4 x 4 and the dressings were taped securely. The procedure was terminated. The patient was awakened and taken to the recovery room in satisfactory condition.

Case Study # **28** *cont'd*

SURGICAL PATHOLOGY REPORT

Age/Sex: 52/F

Diagnoses:

Right breast: Fat necrosis with calcification.
T-04020 M-54110 M-55400

Tissue:

Right Breast Fat Necrosis - History of Right Breast Cancer

Clinical Summary

S/P Right Breast Reconstruction, Breast Asymmetry

Revision of Right Reconstructed Breast & Nipple; Revision of Left Breast Scar

Gross Description

The specimen is received fresh in a container with the patient's name and medical record number.

It is labeled "right breast fat necrosis", and consists of multiple fragments of adipose tissue with areas of hemorrhage measuring 4.5 x 3.5 x 2 cm. in aggregate. It appears firm in consistency. Representative sections are submitted in Cassettes A-1 & A-2.

Case Study # **29**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: 1) Acquired deformity right breast.
2) Recent history of right breast cancer.

POSTOPERATIVE DIAGNOSIS: Same.

NAME OF OPERATION: 1) Right breast reconstruction/revision (adjacent tissue transfer of right breast) with superior repositioning of medial breast area. 2) Excision of redundant tissue of right lateral chest wall. 3) Nipple areolar reconstruction with full-thickness skin graft.

ANESTHESIA: General endotracheal.

COMPLICATIONS: None.

BRIEF HISTORY: This is a 63-year-old white female with the history of undergoing a TRA and breast reconstruction who now presents for operative revision and nipple areolar reconstruction. I discussed with her the proposed procedure options, incisions as well as possible complications including infection, bleeding, the need for further surgery, excess scarring, no improvement, asymmetry and loss of skin. She understands and wishes to proceed.

FINDINGS AND TECHNIQUE: With the patient placed supine on the operating room table after obtaining adequate general endotracheal anesthesia, the patient's entire chest wall was prepped and draped in an appropriate sterile fashion to the superior medial pole whereupon the entire superior incision, which measured 18 cm, was incised and the **scar was removed.** Superiorly the flap was elevated and the **previous inferior and laterally placed breast mound was superior medially repositioned.** This was tacked to the chest wall from medial to lateral with simple interrupted 3-0 Vicryl sutures. A drain was placed and brought out in the right axilla. Subsequently, the **adjacent tissue was advanced over the skin paddle and a 4 x 20 cm area was excised so as to allow for redraping of the breast.** This was subsequently closed in an adjacent tissue transfer fashion with 4-0 and 5-0 Vicryl deep, 5-0 to close the skin and 4-0 PDS. Further closure of the skin edges was performed with 5-0 nylon simple interrupted mattress fashion. Next, the **redundant tissue of the right lateral upper chest wall was excised** and this was closed with 4-0 and 5-0 Vicryl deep, and closed the skin with 4-0 PDS. Further closure of the skin edges was performed with 5-0 nylon in a simple interrupted mattress fashion.

Case Study # **29** *cont'd*

The **full-thickness skin graft, which was harvested from the right axilla, was defatted** down to a mid-dermal level, and the patient was brought to a sitting position and a **modified skate**
flap nipple reconstruction was performed with 5 mm of projection. This was de-epithelialized and coned onto itself with 5-0 Vicryl. Next, the **full-thickness skin graft** which had been defatted to the dermal level **was sutured into place over the nipple** areolar complex circle which measured 40 mm. This was subsequently sutured in place with 5-0 chromic**.** A compressive cotton tie over bolster dressing was applied with running 4-0 nylon. No intraoperative complications were noted. She was extubated in the operating room and taken to the recovery room with vital signs stable.

Case Study # **30**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

0PERATIVE REPORT

PREOPERATIVE DIAGNOSIS
1. Right breast cancer, status post a mastectomy with first-stage reconstruction.
2. Left breast macromastia and severe ptosis.
3. Status post placement of a left chest Perma-Cath with need for removal of Perma-Cath.

POSTOPERATIVE DIAGNOSIS
1. Right breast cancer, status post a mastectomy with first-stage reconstruction.
2. Left breast macromastia and severe ptosis.
3. Status post placement of a left chest Perma-Cath with need for removal of Perma-Cath.

OPERATION
1. Right second-stage breast reconstruction with implant exchange (silicone implant placed and exchanged for an expander implant removal).
2. Revision of right reconstructed breast with abdominal advancement flap reconstruction of inframammary fold.
3. Left reduction mammaplasty.
4. Removal of left chest Perma-Cath.

ANESTHESIA
General endotracheal anesthesia.

ESTIMATED BLOOD LOSS
250 cc.

SPECIMENS
We resected 102 grams of left breast tissue during the reduction, and right breast tissue was also sent for histologic evaluation during the scar revision on the right. The third specimen was the removed port, but that was not sent for histology.

INDICATIONS
The patient is over a year **status post a right breast reconstruction after a mastectomy for cancer.** In the intervening years, she has undergone expansion and chemotherapy as well as radiation. We discussed the prior surgery, the need for removing the expander implant, and placing a permanent prosthesis as well as revising the right breast to improve the shape. We also discussed that in order to improve the chances of getting best symmetry, a contralateral breast reduction was indicated.

Case Study # **30** *cont'd*

In addition, she has a Perma-Cath which was placed for chemotherapy. She would like to have it removed, and this was cleared with her doctor prior to surgery. I discussed with her the incisions for all of the procedures as well as the possible complications including, but not limited to, wound infection, hematoma formation, implant infection, implant rupture, implant extrusion, abnormal scarring, residual asymmetries and contour irregularities, implant malposition (especially in light of the fact that she has had radiation to the reconstructed breast), capsular contracture, pain and the possible need for revisional surgeries for any or all of the above. She consented to the procedure after this discussion.

PROCEDURE/FINDINGS
The patient was marked in the standing position preoperatively. The Wyse pattern reduction mammaplasty incisions were marked on the skin the day before surgery. I discussed with her that the goal of surgery would be to give her a more natural nipple position, closer to a more usual position. We also marked the proposed incision lines for the right breast revision.

The patient was brought to the operating room and placed comfortably in the supine position the morning of surgery. She had been administered preoperative antibiotics. The patient was interfaced with the appropriate monitors and prepped and draped sterilely from the chin out to the shoulders and down to the lower abdomen. Tumescent solution of approximately 200 cc was instilled along the incision lines in the **left breast** and into both lateral aspects of the breasts. The initial dissection was to excise the Perma-Cath. I ellipsed out the previously widened incision sharply and carried the dissection with electrocautery down to the catheter. **I then resected the entire port and the surrounding capsule** using electrocautery and sharp dissection. The **catheter was freed** from the surrounding tissues **and gently removed.** Direct pressure was held on that site for 15 minutes. There was no evidence of residual bleeding. Hemostasis was made complete throughout the procedure with electrocautery. **The wound was then closed** by approximating the deep tissues to themselves using interrupted #3-0 Vicryl sutures. The skin was closed with a series of #3-0 Vicryl interrupted sutures with #4-0 Vicryl sutures buried in the dermis. The outer skin was closed with a running #5-0 nylon suture. The wound was cleansed and dressed with Betadine ointment and Xeroform. **Attention was turned to the left breast** where the reduction was undertaken. The new nipple areolar complex size was marked on the skin using a cookie cutter at 45 mm diameter, centered on the native nipple. The pedicle was measured at 8 cm in width. The pedicle was de-epithelialized as was the remainder of the breast including the keyhole pattern tissue. The **superior, medial and lateral flaps were developed** in continuity down to the chest wall, keeping the flaps approximately 1 cm thick at the tip and tapering to about 3 cm thick at the chest wall. In the lateral portion of the resection, **skin, subcutaneous tissue and breast were resected down to the chest wall and out towards the axilla.** Hemostasis was made complete throughout the procedure with electrocautery.

Case Study # **30** *cont'd*

The nipple was then sutured in place after the flaps were tacked into position using buried #2-0 Vicryl sutures. **The skin had a nice elevation and with a slight reduction to the lateral aspect of the breast.** The wound was then closed further with a series of buried #3-0 and #4-0 Vicryl sutures buried in the dermis. The inframammary fold and vertical incisions were closed with running #5-0 nylon sutures. The nipple was closed with buried #4-0 Vicryl sutures in the dermis and a running #6-0 nylon suture around the nipple areolar complex skin. This wound was ultimately dressed with Betadine ointment and Xeroform as well. Attention was then turned to the **right breast.** Dissection was carried down through an inframammary fold incision which had been marked even with the contralateral side preoperatively in the standing position. Dissection was carefully carried down through the skin and subcutaneous tissues to the level of the underlying muscle and capsule, which was then entered. **The expander implant was removed and was found to be intact. A capsulectomy was performed** of the entire inferior portion of the capsule. The capsule was scored along its anterior surface in four places to loosen it up and to gain length for the upper flap. Hemostasis was made complete with electrocautery through the procedure. **A capsulotomy was performed** along the entire medial , superior, and lateral aspects of the capsule as well. The incision was carried out towards the axilla. An ellipse of tissue was resected in the lateral aspect of the breast in order to **resect extra and redundant skin and fatty tissue.** In order to recreate the inframmary fold along the inframammary fold, the flap was elevated off of the abdominal wall musculature and advanced cephalad. The ellipse that was advanced, approximately 3 cm in width, was de-epithelialized and tacked in the dermis at the lower aspect and was tacked to the periosteum of the ribs using buried #2-0 Vicryl sutures. This gave a **nice recreation of the inframmary fold.** The expander was brought down to 700 cc. The patient was placed in the sitting position, and the wound was partially closed. This had a nice symmetry between that and the contralateral side but was thought to be slightly larger than the left side. Therefore, a **McGhan style 153, 630-cc gel implant**, silicone gel fill implant was brought onto the field. This was bathed in saline. **The implant was placed into the pocket,** oriented anatomically. The breast was then closed with a series of buried #3-0 Vicryl sutures in order to repair the de-epithelialized tissue to what was the anterior portion of the capsule along the inframmary fold. The remainder of the wound was closed more superficially in the dermis with buried #3-0 and #4-0 Vicryl sutures. A round #10 French Jackson-Pratt drain was placed into the pocket and was brought out through a small stab incision laterally. That was ultimately trimmed and connected to grenade suction. It was sutured in place with #3-0 nylon. The skin along the inframammary fold was then closed with a running #5-0 nylon suture. The wound was cleansed and dressed with Betadine ointment and Xeroform, as well as a fluffy gauze. The patient was then awakened from anesthesia, having tolerated the procedure well. the sponge, needle and instrument counts were correct at the end of the procedure. The patient was extubated and transferred to the transport stretcher. She then was placed into a surgical bra. She was transported uneventfully to the recovery room. The sponge, needle and instrument counts were correct at the end of the procedure. There were no complications. The patient was stable and transported to the recovery room in good condition.

Case Study # **31**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

Operation: Bilateral implant excision with capsulectomy.

Anesthesia: General endotracheal.

Preoperative Diagnosis: Status post bilateral mastectomies with implant reconstruction.

Postoperative Diagnosis: Status post bilateral mastectomies with implant reconstruction.

Operative Indications: The patient is a 51-year-old female status post bilateral mastectomies in 1991, who had an expander placement and subsequent implant placement for reconstruction and the patient has decided the implants now bother her. They are silicone implants and they have had no problems with capsule contracture, but the **patient has decided that she wants them removed.**

Operative Procedure: The patient was taken to the operating room and was placed under general anesthesia with endotracheal tube. Her chest was prepared and draped. A four centimeter incision was made bilaterally along the original scar line. The incision was carried out down to and through the pectoralis muscle. The breast implant capsule was then found. This was opened. On the right side, there was a fair amount of clear, thick fluid. Cultures were taken of this. There was no fluid found on the left. **The implants were then removed intact. There were no ruptures of either one. The capsules were then excised using electrocautery. On both sides, the scar was then revised and excised.** The wounds were then irrigated. The pectoralis muscle was closed with a running suture of #4-0 Vicryl. A 7 millimeter Blake drain was placed in the space prior to closure. The skin was closed with interrupted dermal sutures of #4-0 Vicryl and Steri-Strips applied for dressing. The patient tolerated the procedure well. The patient was taken to the recovery room in stable condition.

Complications: None.

Case Study # **32**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

OPERATION: Bilateral open total capsulectomies, removal of mammary implants, insertion of subpectoral mammary implants using Mentor saline style 1600 round saline implants.

ANESTHESIA: General endotracheal anesthesia.

PREOPERATIVE DIAGNOSIS: Bilateral Baker Grade IV capsular contractures.

POSTOPERATIVE DIAGNOSIS: Bilateral Baker Grade IV capsular contractures.

OPERATIVE INDICATIONS: This 31-year-old patient presented with painful, distorted Baker Grade IV capsular contractures of the right and left breasts. She presented for **open capsulectomies and implant exchange.** The plan was to remove the glandular implants, and place the implants in a new environment in a subpectoral pocket.

OPERATIVE PROCEDURE: The patient was prepared and draped in the usual sterile fashion, after marking the patient in the sitting position prior to entering the Operating Room. The breast deformity was described above.

A periareolar incision was made through the old scar on the right and left sides sequentially and respectively. The incision was then dissected down to the inferior pole of the breast, and **the implant capsule was incised on the right and left sides** respectively. **Both implants were removed** and were grossly **intact** without evidence of rupture or implant failure. The implants were sent to the pathology department for photography and gross identification. Both implants were 225 cc gel saline McGann smooth walled variety.

The right and left subglandular capsules were then totally excised and sent to pathology for permanent examination. Hemostasis was obtained in the subglandular pockets on the right and left sides, and a subpectoral dissection was then carried out along the lateral border of the pectoralis major muscle on the right and left sides respectively. The muscle was then incised to subcutaneous tissue from the medial border of the pectoralis at 3 and 9 o'clock on the right and left side respectively, and this dissection was taken to 6 o'clock on the right and left sides respectively. Dissection was taken down completely through the muscle to the subcutaneous tissue bilaterally.

Case Study # **32** *cont'd*

The pocket was then bluntly dissected laterally to the extent of preoperative markings. The patient was then sized in a sitting position, and it was decided to use a 275 cc saline implant on the right side, and a 225 cc implant on the left side. Saline filled mammary prostheses of the Mentor 1600 round smooth walled variety were used. **On the right side, a size 175 cc 1600 round implant was used** and it was filled to 275 cc according to manufacturer's recommendations.

The saline implant on the left side was likewise a 1600 round smooth walled Mentor implant. This was inflated to 250 cc according to the manufacturer's recommendations. Please note that overfilling by 25 cc is allowed and recommended by Mentor HS.

The patient was then placed in the sitting position and checked for symmetry. The symmetry and shape were excellent.

The patient was then placed back in the supine position, and the wound was closed in three layers. The patient tolerated the procedure well, and left the Operating Room with sterile dressings.

Case Study # **33**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

OPERATION: Revision of right breast augmentation.

ANESTHESIA: General endotracheal anesthesia.

PREOPERATIVE DIAGNOSIS: Status post breast augmentation with breast asymmetry.

POSTOPERATIVE DIAGNOSIS: Status post breast augmentation with breast asymmetry.

OPERATIVE INDICATIONS: This 40-year-old patient had undergone a breast augmentation three weeks ago. At the current time, **she had some mild asymmetry with the implants** slightly higher on the right and slightly more medially placed.

OPERATIVE PROCEDURE: The patient was prepped and draped in the usual sterile fashion after satisfactory induction with general endotracheal anesthesia. The periareolar incision was then made and this was taken down to the inferior aspect of the areola and the lateral border of the pectoralis major muscle identified. An incision was made through the pectoralis major muscle entering the capsule. The previously placed implant was removed. The capsule was enlarged inferiorly and laterally **incising the capsule and performing a capsulotomy.** Medially, a capsulotomy was also performed.

Hemostasis was gained. The wound was copiously irrigated with saline solution and a 250 cc style 1600 Mentor HS smooth walled saline **implant was placed in the pocket in a deflated position,** inflated to 250 cc according to manufacturer's recommendations and the valve was closed. The patient was placed in a sitting position and assessed for symmetry which was excellent and she left the operating room in good condition after the incisions were closed and sterile dressings were applied.

COMPLICATIONS: None.

Case Study # **34**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

Preoperative Diagnosis: Bilateral paraprosthetic, capsular contractures.

Postoperative Diagnosis: Bilateral paraprosthetic, capsular contractures.

Procedure: Bilateral subtotal, periprosthetic capsulotomy and capsulectomy, and exchange of indwelling saline implants for 300 cc, gel implants.

Anesthesia: General inhalation.

INDICATIONS: This 47-year-old patient has met with me on two occasions preoperatively, in consideration of revision of her breasts, **status post bilateral subcutaneous mastectomies** and multiple subsequent implant surgeries. At the present time, she has anatomical shaped, saline implants. She is dissatisfied, because of the apparent rippling and high-riding position of the implants. She consents to undergo removal of these implants, modification of the paraprosthetic implant pocket, and placement of permanent gel implants to provide a smoother texture and a smoother contour, on account of her very thin, soft tissue envelope. She understands the steps of the operation, the expected postoperative course and aftercare, as well as the possible complications, including, but not limited to, bleeding and hematoma, infection, visible or hypertrophic scar, wound dehiscence, asymmetry, numbness, overcorrection, undercorrection, implant leak or failure, reformation of praraprosthetic capsule, and disappointment with her final result, and consents to proceed.

PROCEDURE: In the standing position, preoperatively, she was marked out according to standard landmarks, centric around the bone landmarks of her chest and the intact nipple-areolar complexes. The overall thrust of the operation was to develop the implant pockets in a caudal direction, as much as 3 cm.

She was transported to the operating room, general anesthesia induced, and the chest wall prepped and draped in a sterile fashion. Beginning on the **right side,** the old, inframammary incision was opened, and the remarkable findings were an intact costal margin and sternal origin of the pectoralis major muscle, which undoubtedly led to the upward migration of the implants to their present site. The **periprosthetic capsule was opened, the implants retrieved,** and the costal and sternal origins of the pectoralis major were divided at the chest wall level. **Periprosthetic capsulectomy was carried out over the lower pole of the breast skin and fat,** with great care to provide for maximum expansion of this portion of the skin envelope. **Capsulotomy was extended** around to the 10 o'clock and 2 o'clock positions of the implant pocket to allow maximum expansion of this envelope, without restraint of the preexisting capsule.

Case Study # **34** *cont'd*

A series of sizers were placed in the implant pocket, and it was established that a 300 cc implant would best produce the preexisting breast projection that she wanted to preserve.

A 300 cc, Siltex, textured surface, gel-filled implant was soaked in Betadine and **placed in the implant pocket.** Attention was turned to the **left breast,** where similar opening, dissection of the implant pocket, removal of the implant, and detachment of the pectoralis from its costal and sternal origins were carried out. A similar **paraprosthetic capsulotomy and capsulectomy were also carried out on the left side.** After the pockets were carefully assessed for symmetry, another **300 cc, Siltex, gel-filled implant was placed in the left pocket.** In the near vertical sitting position, implant position and pocket symmetry were again carefully reassessed and found to be quite satisfactory, with a nice aesthetic look and nice restoration of soft texture.

Both incisions were then closed with multiple layers of interrupted 4-0 Vicryl and running 4-0 Prolene, subcuticular pull-out suture. Steri-Strips and a dry dressing were applied. 15 cc of .25% Marcaine with Adrenalin were instilled into each pocket for postoperative analgesia. She was awakened and extubated in satisfactory condition. Needle and sponge counts were correct. There were no complications.

FINAL DIAGNOSIS: Bilateral paraprosthetic, capsular contractures.

Case Study # **35**. Please assign the CPT code(s) - modifier(s)
for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS:
Pain right breast secondary to capsules and calcification

POSTOPERATIVE DIAGNOSIS:
Same.

OPERATION: Removal of implants and placement with saline implants with open capsulotomy bilaterally and removal of calcium right breast.

FINDINGS: The patient is a 62-year-old female who has ever-increasing pain in the right breast. X-rays and mammograms show calcification anterior to the implant. She enters for exploration, capsulotomy, removal of calcium, and replacement with saline McGhan implants.

DESCRIPTION OF PROCEDURE: Following routine anesthesia and preparation with the arms abducted, the inframmary incision areas were injected with xylocaine containing epinephrine. Incisions were made using cutting current and dissection proceeded down to the implant. **The implant which was intact was removed** and placed in saline. Circumferentially the capsule area was injected with xylocaine containing epinephrine and using a combination of scissor dissection and cutting current, an **open capsulotomy circumferentially was performed.** It was possible to palpate **an area approximately 3-4 cm in diameter** over the anterior breast which was **riddled with ectopic calcium. This was excised** and sent as a separate specimen. The wound was irrigated with Neosporin powder-saline solution and the **opposite site was approached** and again an **open capsulotomy was performed.** There was **no ectopic calcium palpable** in this breast. Following this then, the McGhan implants were inflated from 240 to 270 cc which was slight overfill for the 240 cc **McGhan implants**. They were **each individually inserted** and a layered closure obtained bilaterally with #5-0 Vicryl both in the fascia subcutaneously and #5-0 nylon subcuticular in the skin. Upon completion of both sides which appeared to be quite symmetrical, the **lesion on the left posterior neck was prepped cauterized, planed and recauterized.** Dressings were applied and the operation terminated. The patient left the operating room in good condition.

Case Study # **35** *cont'd*

PATHOLOGY REPORT

PREOPERATIVE DIAGNOSIS: Breast pain. Lesion on neck.

POSTOPERATIVE DIAGNOSIS:

SPECIMEN: A. Right breast implant with ectopic calcification.
B. Left breast implant.
C. Lesion left posterior neck.

GROSS DESCRIPTION: A. Received in one container is a saline implant which measures 12 cm in diameter and as much as 2.5 cm thick. The structure weighs 208 grams. No portion is embedded. Also submitted is a pale plaque-like area measuring 2.9 x 2.4 x 0.3 cm in greatest dimensions. The specimen appears to have some calcification present in the central region. A section is taken and the specimen will be submitted after decalcification.

B. Received is a breast implant measuring 13.6 cm in diameter and 3 cm high. The aggregate of material weighs 310 grams. No portion is embedded.

C. Received in formalin is a grey somewhat membranous piece of tissue measuring 0.5 x 0.2 x 0.1 cm in greatest dimensions. The entire specimen is imbedded.

MICROSCOPIC DESCRIPTION: A. The fragment of hyalinized tissue shows only a small amount of accompanying fat. Focal calcification can be appreciated.

C. The fragment of material shows marked artificial distortion of keratinized squamous epithelium with a few circular aggregates partially entrapped.

DIAGNOSIS: A. Hyalinized connective tissue showing focal calcification.
Accompanying fragments of fat.
Right breast implant.
B. Left breast tumor.
C. Distorted squamous epithelium showing features consistent with seborrheic keratosis.

Case Study # **36**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS:
1. BILATERAL BREAST CANCER
2. BILATERAL BREAST DEFORMITIES
3. STATUS POST BILATERAL BREAST RECONSTRUCTION WITH IMPLANTS

POSTOPERATIVE DIAGNOSIS:
1. BILATERAL BREAST CANCER
2. BILATERAL BREAST DEFORMITIES
3. STATUS POST BILATERAL BREAST RECONSTRUCTION WITH IMPLANTS

PROCEDURE PERFORMED:
1. BILATERAL REMOVAL OF BREAST IMPLANTS
2. BILATERAL REPLACEMENT WITH SALINE BREAST IMPLANTS
3. BILATERAL CAPSULECTOMY

ANESTHESIA: GENERAL

DESCRIPTION OF PROCEDURE: The patient was taken to the operating room in a stable condition and was transferred to the operating table. Following the adequate induction of general anesthesia, the breasts were prepped and draped in the usual sterile manner. The patient had been given intravenous antibiotics preoperatively. **Both breasts had undergone mastectomies and breast reconstruction utilizing a gel implant on the right and a saline implant on the left.**

The patient eventually developed bilateral capsular contractions and bilateral breast deformities. Therefore, she underwent the **removal** of both breast implants. The **right implant had ruptured** (the silicone gel implant) and the **left implant had also ruptured** (the saline implant).

Bilateral capsulectomies were performed and extensively with hemostasis obtained with the use of the Bovie cautery. **The patient then had saline implants inserted into both breasts.** The implants were Mentor implants.

Both implants were filled to the maximum capacity with saline. Each implant was filled with 520 cc of saline. The pocket was infiltrated with Kenalog, 40 mg/cc with 5 cc placed in the right pocket and 5 cc in the left pocket.

Case Study # **36** *cont'd*

The wound was then closed in layers. The muscle layer was closed with 3-0 Vicryl sutures, the deep closure was done with 3-0 Vicryl sutures and the skin was closed with 4-0 Monocryl running subcuticular sutures. The breasts were found to be symmetrical and the deformities were obliterated and corrected by the procedure. The capsulectomies corrected the hardness of the breasts.

The patient had the incision dressed with antibiotic ointment, Vaseline gauze and secured with Kerlix and tape. She tolerated the procedure well and was transferred to the recovery room in a stable condition.

Case Study # **37**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

PREOPERATIVE DIAGNOSIS: Hematoma, right breast.

POSTOPERATIVE DIAGNOSIS: Seroma, right breast.

OPERATION: Drainage of seroma, right breast. Bilateral open capsulotomies with exchange of implants.

PROCEDURE/FINDINGS: The patient underwent endotracheal anesthesia and then had her chest prepped and draped in the usual sterile manner. Then 0.25% Marcaine with 1:200,000 Epinephrine was used to locally infiltrate the proposed skin incision through her original scar. Additionally, the proposed new inframammary crease was marked out approximately 2 cm lower than her existing crease. The **right breast** was explored first by the skin incision being made with a 15 blade and then the **incision deepened** through the subcutaneous tissues and muscle using the electrocautery unit. The capsule of the implant was opened and a clear serous fluid of an undetermined but significant volume was found. Despite the clear appearance, in light of this atypical finding, aerobic and anaerobic cultures were obtained. The **seroma was completely drained and the implant removed. The implant was intact** as far as the silicon gel central portion was concerned. There was no apparent fluid remaining in the outer lumen. Examination of the pocket revealed no rents or tears within the capsule itself. There was no obvious reason for this seroma. Obviously a question arises as to the exact duration of this finding. In any event, as it was the patient's wish to proceed with reaugmentation with a larger size, the capsule was opened in a standard capsulotomy fashion with the electrocautery unit. It was opened from approximately the 2 o'clock to 10 o'clock position along the inferior and medial and lateral borders. The **pocket was then further opened** with blunt dissection to **accommodate the larger implant** at the lower position. Bleeding was controlled with the electrocautery unit, as needed. The pocket was packed with an Epinephrine impregnated lap sponge. After several minutes, the packs were removed and the pocket again examined. Residual oozing was controlled using the electrocautery unit. A **325 C Mentor implant** was then selected and **placed within the pocket.** It was filled to its stated 325 cc volume with sterile normal saline and then additionally inflated to its maximal capacity of 375 cc with an additional 50 cc of normal saline. This created a nice-shaped breast in a much more appropriate position. Our attention was then turned to the **opposite breast** where a similar procedure was done. Again, the **implant was found intact;** however there was **no fluid** apparent in the outer lumen. Documentation of this fact is found on the nursing record as well as the anesthesia record. The implants were given to the patient after sterilization, at the patient's request.

Case Study # **37** *cont'd*

Again, a **similar capsulotomy was performed on this side** and bleeding controlled. Again a 325 C **Mentor implant was selected,** infiltrated and given an additional 50 cc of normal saline to bring its volume to 375 cc. Symmetry between the two breasts was then checked for and minor alterations made in the pockets as needed. Again, both pockets were checked for bleeding. With none found, wound closure proceeded using interrupted 3-0 and 4-0 Vicryl sutures initially on the muscle layer and then on the deep subcutaneous and deep dermal layers. A running 4-0 PDS suture was then utilized to complete the skin closure. There was 500 mg of Ancef instilled into each pocket prior to wound closure. Steri-Strips were applied over the wounds. The patient was extubated and taken to the recovery room in stable condition. Estimated blood loss during the procedure was minimal. All counts were corrected.

Case Study # **38**. Please assign the CPT code(s) - modifier(s) for this case: _____.

OPERATIVE REPORT

Preoperative diagnosis: Chronic right mastodynia, severe right breast encapsulization, scarring right latissimus dorsi myocutaneous flap with adherence to ribcage.

Postoperative diagnosis: Same.

Operation(s): Removal of old right breast implant, total right breast capsulectomy, right breast reconstruction using 450 cc. Mento siltex gel implant, division and insetting of right latissimus dorsi myocutaneous flap, right nipple reconstruction and 9 cm scar revision.

Description of Operation: This is a 65-year-old female who eight years ago had a modified radical mastectomy and six years ago had a latissimus dorsi flap breast reconstruction. She states that almost from the onset of her breast reconstruction she had pain in her right axilla extending around to the breast implant. However, over the last year the right breast had become severely capsuled and she now has almost constant pain over the breast with radiation into the axilla. On elevation of her arm for any activity such as driving creates pain.

After an adequate level of general anesthesia was reached, the patient's chest wall was prepped and draped in the usual sterile manner. Prior to being anesthetized the patient was placed in the upright position and the nipple reconstruction using a V-C flap reconstruction was outlined to match the left nipple. Also, the area of chronic pain extending from the posterior axillary line around to the edge of the breast implant was outlined. Next, a Methylene Blue pen was used to elliptically outline the **widened 9 cm. scar on the chest wall. This was then sharply excised** and the cutting unit of the cautery was used to incise the fatty tissue along with the lower edge of the myocutaneous flap and the **implant was removed. The implant had several small ruptures.** The implant was removed and then **it took a considerable amount of time to remove all the old material** and our gloves were changed and Kocher clamps were placed on the thickened capsule using sharp and blunt dissection **a total capsulectomy was carried out.** Careful hemostasis was carried out with the use of electrocautery. **The pocket was then enlarged,** irrigated and again careful hemostasis carried out with an electrocautery. The **latissmus dorsi flap** had been tightly adhered to the ribcage high in the axilla and this **was dissected out and completely freed in its entirety** from the posterior axillary line running over the chest wall. Again, careful hemostasis was carried out.

Case Study # **38** *cont'd*

A **Mento siltex 450 cc gel implant was then placed** on top of the pectoralis major muscle and the wound was then closed with two layers of subcutaneous 2-0 Dexon two and the skin reapproximated with running subcuticular 3-0 Prolene.

Next, the **V-C flaps were then incised and full thickness dissection was carried beneath the flaps and the new nipple site.** Careful hemostasis was carried out with the use of electrocautery. The **V flaps were then swung inferiorly and then sutured into place** using multiple interrupted sutures of 4-0 plain catgut and the open wounds where the V flaps were taken were closed with multiple subcutaneous sutures of 3-0 Dexon two and the remaining skin closed with interrupted and running sutures of 4-0 plain catgut. All wounds were then Steri-stripped and dressed with Xeroform, 4 x 4's, ABD's, and the patient placed in a fishnet dressing.

The patient tolerated the procedure well and was returned to the Recovery room in good condition.

III. Answer Key

Case Study #1

19102-LT
19295-LT

Case Study #2

19102-RT
10022-59

Case Study #3

19103-LT
19103-LT-59
19295-LT
19295-LT-59

Case Study #4

19103-RT
19295-RT

Case Study #5

19120-50

Case Study #6

19125-LT
19290-LT

Case Study #7

19120-RT
19125-LT
19290-LT

Case Study #8

19290-RT
19125-RT
19120-LT

Case Study #9

19160-RT
38525

Case Study #10

19160-50
19290-LT
38525

Case Study #11

19162-LT

Case Study #12

19325-50

Case Study #13

19325-50

Case Study #14

19328-LT

Case Study #15

19330-RT
19328-LT
19325-50

Case Study #16

19340-50

Case Study #17

11970-50

Case Study #18

19357-LT

Case Study #19

19180-RT

Case Study #20

19357-50
19180-RT

Case Study #21

19371-50
11970-50
11400
11400-59

Case Study #22

19371-LT

Case Study #23

19318-50

Case Study #24

19350-RT
15200

Case Study #25

19350-50

Case Study #26

19355-LT

Case Study #27

19380-LT

Case Study #28

19120-LT
19380-RT
19350-RT

Case Study #29

19380-RT
15839-RT
19350-RT
15200

Case Study #30

19318-LT
19380-RT
11970-RT
36590

Case Study #31

19371-50

Case Study #32

19371-50
19325-50

Case Study #33

19370-RT
19325-RT

Case Study #34

19340-50
19371-50

Case Study #35

19370-50
19340-50
19328-50
17000

Case Study #36

19371-50
19340-50

Case Study #37

10140
19370-50
19328-50
19325-50

Case Study #38

19380-RT
19350-RT
19371-RT
19340-RT