Case 1

Preoperative diagnosis: Recurrent Pleural effusion, Stage IV lung cancer

Postoperative diagnosis: Recurrent Pleural effusion, Stage IV lung cancer

Procedure performed: Right video assisted thoracoscopy, lysis of adhesions, talc pleurodesis

Procedure: Patient was brought to the operating room and placed in supine position. IV sedation and general anesthesia were administered per the Anesthesia Department. A double-lumen endotracheal tube was placed per Anesthesia. Position was confirmed by bronchoscopy. The patient was placed in the decubitus position with the right side up. The chest was prepped in the standard fashion with ChloraPrep, sterile towels, sheets and drapes. We had excellent isolation of the lung. However, we had poor exposure because there were a number of fibrous adhesions, a few of which were actually very dense. We immediately evacuated approximately 700 ml of fluid. However, once we entered the chest we encountered a number of loculated areas. We did not break down the adhesions. We gained enough exposure to do a complete talc pleurodesis. After lysing of adhesions, we were confident that we had access to the entire thoracic cavity. Eight grams of talc were introduced into the right thoracic cavity and strategically placed under direct vision. The chest tubes were then placed. The wounds were closed in layers. The patient tolerated the well and was taken to the recovery room in stable condition.

What are the CPT® and ICD-9-CM codes reported?

CPT® code: 32650

ICD-9-CM codes: 511.9, 162.9

RATIONALE: CPT® code: For this case the physician is performing a video assisted surgical thoracoscopy (VATS-examining the inside of the chest cavity through an endoscope by the use of a video camera). In this case, an irritant (such as the talc powder) is instilled inside the space between the pleura (the two layers of tissue lining the lungs) to create inflammation which makes an abnormal connection bringing the two pleura together. This procedure (pleurodesis) obliterates the space (pleural cavity) between the pleura and prevents the re-accumulation of fluid. In the CPT® Index look up Pleurodesis/Endoscopic referring you to 32650.

ICD-9-CM codes: The procedure was performed due to the patient having a recurrent pleural effusion (fluid around the lung). In the alphabetical index look up Effusion/pleura guiding you to code 511.9. Pleural effusion is not a disease but rather a complication of an underlying illness, in this case from lung cancer. In the alphabetical index in the Neoplasm Table, look up Neoplasm/lung/Malignant/Primary (column) guiding you to code 162.9.
Case 2

Preoperative diagnosis: Malignant neoplasm glottis

Postoperative diagnosis: Malignant neoplasm glottis

Procedure:
An incision is made low in the neck. The trachea is identified in the middle and an
opening is created to allow for the new breathing passage; tracheostomy tube is inserted
and secured with sutures. Patient tolerated procedure well and is sent to recovery without
complications.

What are the CPT® and ICD-9-CM codes reported?

CPT® code: 31600

ICD-9-CM code: 161.0

RATIONALE: CPT® code: In the CPT® Index look up Tracheostomy/Planned guiding
you to codes 31600–31601. An emergency tracheostomy is reported when the
procedure is performed for a serious medical condition that arises suddenly and
requires immediate care and treatment. An example of when an emergency trache-
ostomy is performed would be in the Emergency Department in which an unsched-
uled tracheostomy is performed on a patient who can not breathe and will die if
immediate medical attention to facilitate breathing is not performed.

There is no indication in the note that this was an emergency tracheostomy, so a
planned tracheostomy will be reported. Code 31600 will be reported since there is
no age that was documented in the note.

ICD-9-CM code: In the alphabetical index, in the Neoplasm Table, look up Neoplasm/
glottis/Malignant/Primary (column) referring you to code 161.0.
Case 3

Preoperative diagnosis: Pedestrian vs. MVA, left pneumothorax

Postoperative diagnosis: Pedestrian vs. MVA, left pneumothorax

Procedure: Bronchoscopy, Left VATS, wedge resection

Procedure: Patient was brought into the operating room and placed in supine position. IV sedation and general anesthesia was administered per the Anesthesia Department. A single lumen endotracheal tube was placed for bronchoscopy. Due to the nature of the trauma we were interested in ruling out a bronchial tear. The bronchoscope was introduced into the mouth and passed into the throat without difficulty. There was no evidence of sanguineous drainage or bronchial trauma noted to the left mainstem. There were copious amounts of secretions noted and removed without difficulty. The right mainstem was also cannulated and found to be free of any unexpected trauma. The bronchoscopy was terminated at that time.

A double lumen endotracheal tube was placed per anesthesia. Position was confirmed by bronchoscopy. The patient was placed in the decubitus position with the left side up. The chest was prepped in standard fashion with Betadine, sterile towels, sheets and drapes. A small incision is made between two ribs and a standard port placement was utilized to gain access to the thoracic cavity. An endoscope is inserted into the chest cavity. Initially we had excellent exposure with good isolation of the lung. We were able to identify a large bleb at the apex of the left lung that was likely to be the source of the chronic air leak. We removed the apex with thoracoscopic green load for therapeutic correction of the patient’s pneumothorax. The wounds were closed in layers. Chest tubes were placed. The patient tolerated the procedure well and was taken to the recovery room.

What are the CPT® and ICD-9-CM codes reported?

**CPT® codes:** 32666-LT, 31622-51

**ICD-9-CM codes:** 860.0, E814.7

**RATIONALE:** CPT® codes: There are two procedure codes to report for this case since there were two different scopes used in two different sites. The first procedure to report is the surgical thoracoscopy removing a wedge section of the left lung through an endoscope. In the CPT® Index look up Thoracoscopy/Surgical/with Therapeutic Wedge Resection of Lung guiding you to codes 32666 and 32667. Code 32667 is an add-on code for additional resections. Therefore, the correct code for this case is 32666. The second procedure code to report is a diagnostic bronchoscopy, which was performed to examine the bronchus for any trauma in that area. In the CPT® Index look up Bronchoscopy/Exploration guiding you to code 31622. Modifier 51 is appended to code 31622 to indicate an additional procedure was performed at the same surgical session by the same physician.

ICD-9-CM codes: The patient had a pneumothorax (air trapped in the space between the outside of the lung and the inside of the chest wall). Further indication in the operative note states that this was due to trauma. In the ICD-9-CM Index to Diseases look up Pneumothorax/traumatic guiding you to code 860.0. Documentation in the
Pre and Postoperative, headings of the note indicate this was a MVA accident. In the alphabetical index of to External Causes look up Collision/motor vehicle/pedestrian guiding you to code E814, your fourth digit being 7 (pedestrian).

**Case 4**

**Preoperative diagnosis:**
1. Chronic hyperplastic rhinosinusitis
2. Allergies
3. Status post prior polypectomy and sinus surgery

**Postoperative diagnosis:** Same.

**Operative procedure:**
Left sinusotomy (three or more sinuses) to include:
- Nasal and sinus endoscopy
- Endoscopic intranasal polypectomy
- Endoscopic total ethmoidectomy
- Endoscopic sphenoidotomy
- Endoscopic nasal antral windows, middle meatus, and inferior meatus
- Endoscopic removal of left maxillary sinus contents

Right sinusotomy (three or more sinuses) to include:
- Nasal and sinus endoscopy
- **Endoscopic** intranasal polypectomy
- Endoscopic total ethmoidectomy
- Endoscopic sphenoidotomy
- Endoscopic nasal antral windows, middle meatus, and inferior meatus
- Endoscopic removal of right maxillary sinus contents

Specimens sent to pathology:
1. Left ethmoid and sphenoid contents for routine and fungal cultures
2. Right maxillary contents for routine and fungal cultures
3. Left intranasal ethmoid, sphenoid, and maxillary specimens for pathology
4. Right ethmoid, sphenoid, maxillary, and right intranasal contents for pathology

**Findings:** Complete nasal obstruction by polyps with obscuring of all of the normal landmarks. The right middle turbinate was found and preserved. The residual bode of the left middle turbinate was found and preserved. There was thickened hyperplastic mucosa throughout the sinuses with some polyps in the sinuses and the majority of the sinus cavi-
ties were filled with glue-like mucopurulent debris. At the end of the case there were no visible polyps, the airway was clear and the debris had been removed.

**Procedure:** The patient was taken to the operating room, placed in the supine position, and general endotracheal anesthesia adequately obtained. A pharyngeal pack was placed. The nose was infiltrated with xylocaine with epinephrine and cottonoids soaked in 4% cocaine were placed. The procedure was performed in a similar manner on the left and right sides. The cottonoids were removed.

The 30-degree wide-angle sinus telescope with endoscrub and the Stryker Hummer device were used to remove the polyps starting anteriorly and working posteriorly. This led to visualization of the middle turbinates.

The middle meati disease was removed. The area of the uncinate process and infundibulum was shaved away and forceps were used to remove portions of bone particle. Using blunt dissection, the agger nasi cells, ethmoid and sphenoid sinuses were entered and the contents removed with forceps and suction. The inferior turbinates were fractured, a mosquito clamp placed through the lateral nasal wall into the maxillary sinuses through the inferior meatus. That opening was opened with forward and backward biting forceps, sinus endoscopy was performed, and inspissated mucus and debris cleaned out of the sinuses.

In a similar manner the sinuses were opened from the middle meatus and the sinuses cleaned. In the above manner, the ethmoid, sphenoid, and maxillary sinuses were cleaned of debris and inspissated mucus suctioned from the frontal recesses.

The patient was then suctioned free of secretions, adequate hemostasis noted. Gelfilm was soaked, rolled, and placed in the middle meati. Telfa gauze was impregnated with Bacitracin, folded and placed in the nose. Vaseline gauze was placed between the folds of Telfa. The pharyngeal pack was removed. He was suctioned free of secretions, adequate hemostasis noted, and the procedure terminated. He tolerated it well and left the operating room in satisfactory condition.

**What are the CPT® and ICD-9-CM codes to report?**

**CPT® codes:** 31255-50, 31267-50-51, 31288-50-51

**ICD-9-CM codes:** 478.19, 471.8, 471.0

**RATIONALE: CPT® codes:** For this case, the patient is having removal of diseased tissue (including polyps) from three different areas of the sinus cavity through an endoscope. There will be three procedure codes reported for this case. The first code to report is the ethmoidectomy. In the CPT® Index look up Sinus/ Ethmoid/ Excision/ with Nasal/Sinus Endoscopy guiding you to codes 31254–31255. Code 31255 is the correct code to report since the operative note documents anterior and posterior. In the index look up Sinus/Maxillary/Antrostomy guiding you to codes 31256–31267. Antrostomy means making a surgical opening into the nasal cavity. Code 31267 is the correct code to report. In the index look up Sinus/Sphenoid/Incision/with Nasal/ Sinus Endoscopy guiding you to codes 31287–31288. Code 31288 is the correct code to report.
Modifier 50 is appended to all three codes since these areas were performed bilaterally. Modifier 51 will be appended to codes 31267 and 31288 to indicate additional procedure codes were performed at the same surgical session by the same physician.

ICD-9-CM codes: Hyperplastic rhinosinusitis is when one has chronic sinus inflammation, which may include polyp formation in the nose and sinuses. In the alphabetical index look up Hyperplasia/nose guiding you to code 478.19. The “Findings” documented in the operative notes states polyps being in the nose and sinuses. In the index look up Polyps/sinus guiding you to code 471.8. Polyps/nasal/cavity guiding you to code 471.0.
Case 5

Preoperative diagnoses:
1. Sarcoid
2. New onset paratracheal adenopathy

Postoperative diagnoses:
1. Sarcoid
2. New onset paratracheal adenopathy

Procedure performed:
Mediastinotomy

Description of procedure:
The patient was brought into the OR and placed in supine position. IV sedation and general anesthesia was administered by the anesthesia department. The neck was prepped in standard fashion with betadine scrub, sterile towels and drapes. Standard linear incision was made over the trachea. We were able to dissect down to the pretracheal fascia without difficulty. The extensive adenopathy was immediately apparent just below the innominate artery on the right paratracheal side. One exceedingly large lymph node was identified and biopsied extensively. Hemostasis was obtained without difficulty. The region was impregnated with marcaine, lidocaine, epinephrine mixture. The specimen was sent to pathology. The wound was closed in layers. The skin was closed with subcut stitch and covered with Dermabond. The patient tolerated the procedure well and was taken to the recovery room in stable condition.

What are the CPT® and ICD-9-CM codes reported?

CPT® code: 39000

ICD-9-CM codes: 135, 785.6

RATIONALE: CPT® code: For this case a mediastinotomy (an incision into the mediastinum) with a biopsy was performed. In the CPT® Index look up Mediastinotomy/ Cervical Approach referring you to code 39000. The operative note documents that the neck was prepped with an incision made over the trachea. That indicates a cervical approach was performed for the procedure. A thoracic approach is if the physician made an incision across the chest area. Code 39000 is reported for mediastinotomy with the biopsy performed.

ICD-9-CM codes: The first diagnosis to report is sarcoid which is a disease in which granulomas (nodules of inflamed tissue) form in the lymph nodes, lungs, skin and other areas. In this case the nodule was identified on a lymph node in the trachea. In the alphabetical index look up Sarcoid guiding you to code 135. The second diagnosis code is indexed under Adenopathy (lymph gland) guiding you to code 785.6.
Respiratory, Hemic, Lymphatic, Mediastinum, Diaphragm

Case 6

Preoperative diagnosis:
Loculated left pleural effusion, chronic

Postoperative diagnosis:
Loculated left pleural effusion, chronic

Procedure performed:
Attempted, ultrasound guided thoracentesis

Description of procedure:
The patient was prepped and draped in the sitting position. Using ultrasound guidance and 1% lidocaine, the thoracic catheter was introduced into the pleural space where we encountered very thick fibrous type pleura. Catheter was advanced and we were unable to aspirate any fluid. The catheter was removed. Sterile dressings were applied. Chest X-ray will be obtained for followup. Patient tolerated the procedure well.

What are the CPT® and ICD-9-CM codes for this procedure?

CPT® code: 32555-LT
ICD-9-CM code: 511.9

RATIONALE: CPT® code: The physician performed a thoracentesis and attempted to perform an aspiration (removing fluid) from the pleural cavity (between the lungs and the chest wall) by puncturing the chest with a needle to drain the fluid (thoracentesis). In the CPT® Index look up Thoracentesis/with Imaging Guidance which refers you to 32555. This case does not require a modifier to report the inability to aspirate fluid, because the attempt was made and unsuccessful. The surgeon completed all requirements of the code specification. Ultrasound guidance was performed to place the needle in the pleural cavity which is included when reporting 32555.

ICD-9-CM code: Pleural effusion (too much fluid collected in the plural space) was the reason for the surgical procedure. In the alphabetical index look up Effusion/pleura guiding you to code 511.9. Verification in the Tabular List confirms code selection.
Chapter 9
Respiratory, Hemic, Lymphatic, Mediastinum, Diaphragm

Case 7

Preoperative diagnosis:
1. Cardiogenic shock
2. 1 day post op CABG

Postoperative diagnosis:
1. Cardiac Tamponade

Procedure performed:
Chest exploration and evacuation of clot

Description of procedure:
The patient was prepped and draped in the supine position. The sternotomy was re-opened. Tamponade is obvious. A large amount of clot was removed from the heart, which was circumferential. There was diffuse oozing from all surgical sites. An additional suture was placed at both the proximal anastomotic sites and reinforced with xenograft. All clot was evacuated from the left pleural space. Two additional 24 French atrium drains were placed. We place Xeroform gauze over the anterior surface of the heart and then placed in the mediastinum Kerlix gauze which was soaked in Ancef. Then a Vi-drape was placed over with a red rubber catheter for decompression. Patient tolerated procedure well and was transferred to recovery.

What CPT® and ICD-9-CM codes should be used for this procedure?

CPT® code: 35820-78
ICD-9-CM codes: 998.12, 423.3, V45.81

RATIONALE: CPT® code: For this case the patient is returning to the operating room to have a chest exploration for a postoperative hemorrhage one day after a Coronary Artery Bypass Graft (CABG). The previous surgical wound was re-opened in the chest to control the hemorrhaging and remove the clot. In the index look up Chest/Exploration/Blood Vessel guiding you to code 35820. Modifier 78 is appended to the code to indicate an unplanned procedure was performed during the postoperative period that was related to the initial procedure in which the patient had to go back to the operating room.

ICD-9-CM codes: There are three diagnoses codes to report for this case. The first one to report is the clot that was removed from around the heart and lung. This is indexed under Complications/surgical procedures/hematoma guiding you to code 998.12. The second code to report is for the cardiac tamponade (an emergency condition in which fluid accumulates in the pericardial sac (the sac in which the heart is enclosed)). This is indexed under Tamponade heart guiding you to code 423.3. The last code to report is for the post-operative CABG (coronary artery bypass graft). This is indexed under Status (post)/coronary artery bypass or shunt guiding you to code V45.81.
Case 8

Preoperative diagnosis:
1. Mass, right upper lobe

Postoperative diagnosis:
1. Carcinoma, right upper lobe

Procedure performed:
VATS Right superior lobectomy

Description of procedure:
Under general anesthesia, after double-lumen tube intubation, the right lung was collapsed and the right side up is oriented so the patient is in the left lateral decubitus position. We prepped and draped the patient in the usual manner and gave antibiotics. Then two 1 cm incisions were made along the posterior and mid axillary line at the ninth and seventh intercostal spaces. The lung was deflated. A camera was inserted. A longer (6 cm) incision was made along the fourth intercostal space anteriorly. We then freed up some adhesions at the top of the lung, both in the superior area away from the tumor and in the anterior mediastinal area. The tumor seemed to be in the right upper lobe. The dissection was started by ligating the superior pulmonary vein and its branches and the upper lobe was freed up. The small fissure was incomplete and I proceeded with the lobectomy. The pulmonary artery branches were then ligated. The bronchus was ligated as well. The superior branches to the upper lobe was then ligated with Endo GIA. The lobe was freed up and sent to pathology. The wound was then closed in layers. A chest tube was placed to suction and patient was sent to recovery in stable condition. Pathology confirmed carcinoma.

What are the procedure and diagnoses codes for this procedure?

CPT® code: 32663-RT

ICD-9-CM code: 162.3

RATIONALE: CPT® code: For this case the physician is removing the upper lobe from the right lung through an endoscope (video assisted surgical thoracoscopy (VATS)-examining the inside of the chest cavity through an endoscope by the use of a video camera by making an incision between two ribs, and inserting a trocar into the chest cavity). In the index look up Thoracoscopy/Surgical/with Lobectomy guiding you to code 32663. The RT modifier is appended to indicate the right lung the procedure is being performed in.

ICD-9-CM code: You would not code mass of the lung because the report documents pathology confirming carcinoma in the upper lobe of the lung. In the alphabetical index, in the Neoplasm Table, look up Neoplasm/lung/upper lobe/Malignant/Primary (column) guiding you to code 162.3.
Case 9

Preoperative diagnosis:

1. Grade 3 squamous cell carcinoma of penis with inguinal lymphatic metastasis

Postoperative diagnosis

1. Grade 3 squamous cell carcinoma of penis with inguinal lymphatic metastasis

Procedure performed:
Laparoscopic bilateral pelvic lymphadenectomy

Description of procedure:
The patient is placed in supine position with thigh abduction. A 1.5 cm incision was made 2 cm distally of the lower vertex of the femoral triangle. The second incision was made 2 cm proximally and 6 cm medially. Two 10 mm Hasson trocars were inserted in these incisions. The last trocar was placed 2 cm proximally and 6 cm laterally from the first port. Radical endoscopic bilateral pelvic lymphadenectomy was performed. The main landmarks—adductor longus muscle medially, the sartorius muscle laterally and the inguinal ligament superiorly—were well visualized. The retrograde dissection using the harmonic scalpel was started distally near the vertex of the femoral triangle towards the fossa ovalis, where safena vein was identified, clipped, and divided, and towards the femoral artery laterally. After the procedure, one can identify the skeletonized femoral vessels and the empty femoral channel, showing that the lymphatic tissue in this region was completely resected.

The surgical specimen was removed through the first port incision. A suction drain was placed to prevent lymphocele, and were kept until the drainage reached 50 mL or less in 24 h. Patient tolerated procedure well and was transferred to recovery in stable condition.

1. Diagnoses to report if no further positive findings are in the operative note.
2. Indication procedure is being performed through a laproscope.
3. Confirmation the procedure is being performed through a laproscope.
4. Bilateral pelvic lymphadenectomy.

What CPT® and ICD-9-CM codes are reported?

CPT® code: 38571

ICD-9-CM codes: 196.5, 187.4

RATIONALE: CPT® code: For this case the surgeon is performing a surgical laparoscopic removal of lymph nodes on both sides of the pelvis. In the CPT® Index look up Laparoscopy/Lymphadenectomy guiding you to codes 38571–38572. Code 38571 is the correct code since there is documentation of only the pelvic lymph nodes being removed.

ICD-9-CM codes: According to ICD-9-CM guidelines: When a patient is admitted because of a primary neoplasm with metastasis and treatment is directed toward the secondary site only, the secondary neoplasm is designated as the principal diagnosis even though the primary malignancy is still present.

The patient has cancer of the penis (primary site) that has metastasized to the inguinal lymph nodes (secondary site). In this case the secondary site of the cancer will be listed as the first diagnosis since the procedure to remove the lymph nodes in the inguinal (pelvic) area.
In the alphabetic index look up Neoplasm/lymph/inguinal/Malignant/Secondary (column) guiding you to code 196.5; Neoplasm/penis/Malignant/Primary (column) guiding you to code 187.4.

Case 10

Preoperative diagnosis: Carcinoma, right lung and bronchus intermedius

Description of procedure:
Two liters of oxygen was supplied nasally. The right nostril was anesthetized with two applications of 4% lidocaine and two applications of lidocaine jelly. The posterior pharynx was anesthetized with two applications of Cetacaine spray. The Olympus PF fiberoptic bronchoscope was introduced into the patient's right nostril. The posterior pharynx and epiglottis and vocal cords were normal. The trachea and main carina were normal. The entire tracheobronchial tree was then visually examined and the major airways. No abnormalities were noted on the left side. There was, however, extrinsic compression of the posterior segment of the right upper lobe. There also appeared to be submucosal tumor involving the bronchus intermedius between the right upper lobe and right middle lobe. Multiple washings, brushings, and biopsies were taken from the right upper lobe bronchus and bronchus intermedius. The specimens were sent for cytology and routine pathology. The patient tolerated this without any complications.

The CPT® and ICD-9-CM codes to report are:

CPT® codes: 31625-RT, 31623-51-RT

ICD-9-CM code: 162.8

RATIONALE: CPT® codes: For this case two surgical bronchoscopy codes will be reported. The first code reported is for removing samples of bronchial tissue for study. In the index look up Bronchoscopy/Biopsy referring you to 31625–31629, 31632–31633. Code 31625 is the correct code since there is no documentation of going through the bronchial wall (transbronchial) to take the biopsies. The second code is indexed under Bronchoscopy/Brushing/Protected brushing referring you to code 31623. Modifier 51 is appended to this code to indicate an additional procedure code was performed at the same surgical session by the same physician. The RT modifier is appended to indicate the right side of the bronchus.

ICD-9-CM code: The diagnosis is indexed in the alphabetical index, in the Neoplasm Table, under Neoplasm/lung/contiguous sites with bronchus or trachea/Malignant/Primary (column) guiding you to code 162.8