

Endocrine and Nervous System

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Case 1

Preoperative diagnosis: Right thyroid follicular lesion.

Postoperative diagnosis: Right thyroid follicular lesion.

Operative procedure: Right thyroid lobectomy.

Findings: A <u>large thyroid mass in the inferior aspect of the right thyroid</u>. The right recurrent laryngeal nerve was identified intact and there were bilateral movements of vocal cords post procedure.

Description of operative procedure:

The patient was identified as and taken to the operating room. She was placed in a supine reverse Trendelenburg position on the operating table. Once adequate sedation was given the patient was intubated. The neck was the prepped and draped in a standard surgical fashion. Using a #15 blade, a linear incision was made approximately two centimeters above the sternal notch. This incision was carried through subcutaneous tissues and through the platysma until the anterior jugular veins were identified. Superior and inferior flaps were then created using electrocautery. A midline incision was then made separating the strap muscles. Once the thyroid was encountered, the right thyroid lobe was dissected free from the surrounding tissues. Using the harmonic scalpel, the superior, medial and inferior vessels were divided. Using the harmonic scalpel, the isthmus was then divided free from the left thyroid lobe. The recurrent laryngeal nerve on the right side was identified and not touched during the case. The left thyroid lobe was explored revealing a single nodule. The right thyroid was then completely removed from the trachea and the surrounding tissues. It was marked and then sent off the table as a specimen. The cavity was then irrigated with saline and hemostasis was achieved using electrocautery. The fascia and the strap muscles were then approximated using 3-0 Vicryl suture and a drain was placed into the cavity exiting the left aspect of the incision. The platysma was then reapproximated using 3-0 Vicryl suture. The skin was then reapproximated using 4-0 Monocryl suture in 8, running subcuticular closure and covered with Dermabond. By the end of the procedure, the sponge, needle and instrument counts were correct. The patient was extubated observing bilateral movement of the vocal cords.

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

CPT[®] code: 60220

ICD-9-CM code: 241.0

 Diagnosis to report if no further positive findings are found in the note.
Findings used for diagnosis.
Isthmus was removed with the right thyroid lobe.
Right thyroid lobectomy. RATIONALE: CPT[®] code: In the CPT[®] Index, look under lobectomy/thyroid/total and you are directed to 60220–60225. The code selection depends on whether a contralateral subtotal lobectomy was performed. In this case, a contralateral subtotal lobectomy is not performed making 60220 the correct code. The code description states with or without isthmusectomy.

ICD-9-CM code: In the thyroid, a mass is considered a nodule. Look in the ICD-9-CM Index to Diseases under nodule(s)/thyroid. You are directed to 241.0. Verification of 241.0 in the Tabular List shows it is the correct code for a thyroid nodule.

Preoperative diagnosis: Papillary thyroid cancer.

Postoperative diagnosis: Papillary thyroid cancer.

Operative procedure: Near total thyroidectomy.

Anesthesia: General endotracheal.

Findings: Nodular right thyroid with parathyroids visualized.

Estimated blood loss: Approximately 100 cc.

Description of operative procedure:

The patient was identified and taken to the operating room. She was placed in the supine position on the operating table. Once adequate sedation was given, the patient was intubated. A towel was placed behind the patient's shoulder blades and the neck slightly extended. The neck was prepped and draped in the standard surgical fashion. Using a #15 blade, the patient's old incision was excised. The incision was carried down through subcutaneous tissue. The superior and inferior flaps were created and using electrocautery, a midline incision was made. Once the strap muscles were identified, using blunt dissection, a plane was developed in between the strap muscle, and the right thyroid. The right thyroid appeared nodular. Using blunt dissection and electrocautery, the right thyroid lobe was freed from surrounding tissues and removed. Using the harmonic 2. scalpel, two-thirds of the left thyroid lobe was removed sparing the parathyroids and staying clear from the recurrent laryngeal nerve. Once this was completed, hemostasis 3. was achieved using electrocautery and Surgicel. Due to some bleeding around the parathyroid gland, Gelfoam and thrombin were placed over this area and the bleeding had subsided. A round JP drain was then placed around the remaining thyroid tissue. The strap muscles were reapproximated using interrupted 3-0 Vicryl suture. The platysma was reapproximated using interrupted 3-0 Vicryl suture and the skin was reapproximated using 4-0 Monocryl suture in an interrupted fashion and covered with Dermabond. By the end of the procedure, the sponge, needle and instrument counts were correct. The patient was then transferred to the recovery room in stable condition.

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

CPT[®] code: 60225

ICD-9-CM code: 193

 Diagnosis to report if no further positive findings are found in the note.
Right thyroid lobe removed.
Two-thirds of the thyroid is removed.



RATIONALE:

CPT[®] code: Look in the CPT[®] Index for Thyroid gland/Excision/for malignancy. You have an option between a limited neck dissection and a radical neck dissection. A radical neck dissection includes removal of all of the lymph nodes on one side of the neck. A limited neck dissection includes removal of a limited number of lymph nodes. There is no mention of lymph node removal. Thyroidectomy/partial directs you to codes 60210–60225. The right lobe was removed with part of the left lobe. This is best described with code 60225 for a total thyroid lobectomy, unilateral (right); with contralateral subtotal lobectomy (left), including isthusectomy.

ICD-9-CM code: The patient has papillary thyroid cancer. Look in the Neoplasm Table for thyroid, thyroid gland and you are directed to 193. Verification of 193 in the Tabular List confirms this is the correct code.

Operative report

Preoperative diagnosis: Papillary carcinoma of the thyroid

Postoperative diagnosis:

Papillary carcinoma of the left thyroid Lymph nodes exhibiting metastasis

Procedure: 85% thyroidectomy (subtotal)

Indications:

The patient is a 43-year-old white female patient who was referred with a history of having been diagnosed in the fall of 2006 with a papillary carcinoma of the thyroid. Thyroidectomy was recommended to her; however due to the fact that she had no insurance, it became quite obvious that she was going to have a difficult time being cared for in another state where she was at the time. She returned to this area and came to the office. We completed her workup including PET scanning, sestamibi scan for metastatic disease, etc. I recommended to her that we proceed with a subtotal thyroidectomy, i.e. 85% resection of the thyroid; however if we could isolate any parathyroids and preserve them, then we would to a total thyroidectomy. She appears to understand and is amenable to this and is willing to proceed.

Procedure:

The patient was placed on the operating room table in the supine position, neck slightly hyperextended and the table tilted in reverse Trendelenburg. The neck and anterior chest were prepped and draped in the usual sterile fashion. The incision was to be made two fingerbreadths above the sternal notch. Actually there was a fold in her skin at this level and we simply followed this natural fold from the anterior border of the left sternocleido-mastoid around to the anterior border on the right. This was deepened down through the subcutaneous tissue through the platysma muscle and then flaps were created both superior and inferior to the incision, inferiorly to the sternal notch and superiorly well over and above the thyroid cartilage. At this point, it was quite apparent that the left lobe of the thyroid was rock hard, entirely a different feel from that of the right lobe.

We began on the left side with mobilization of the interior pole. Vessels were serially clamped, cut, ligated, on the thyroid side. Sutures were placed for traction at the point of clamping, staying inside these vessels. The vessels were closed with a suture ligature of 3-0 Silk. As the thyroid was mobilized, the recurrent laryngeal nerve was identified and avoided throughout the course of the dissection. There was a small lymph node attached to the side of the gland which frankly appeared to be metastatic disease. This was obviously included with the specimen. We also removed several enlarged lymph nodes. The inferior pole was entirely mobilized, and then the middle thyroid vessels were dealt with as well, staying well away from the recurrent laryngeal nerve. Then the superior pole vessels were likewise clamped, cut, and ligated. This allowed us to divide the isthmus on the right lobe side of the midline and then removed the left lobe without difficulty. There was one small bleeding vessel on or immediately adjacent to the recurrent laryngeal nerve, therefore a Surgicel packing was applied to this area and bleeding controlled.



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Biopsy negative for parathyroid cancer. Part of the right lobe removed.

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Then dissection began on the right side where we encountered a lesion toward the trachea which was half the size of a vellow pencil eraser and could have passed for a parathyroid. Biopsies of this were taken; however they returned simply fatty tissues. We mobilized the 8. right lobe of the thyroid and left approximately 10% of the right lobe of the thyroid intact at the superior end of the right thyroid lobe. When the portion of the lobe was amputated, we controlled the bleeding from the raw edge of the thyroid with multiple suture ligatures of 3-0 silk. Once hemostasis was secure, the procedure was terminated.

Hemostasis was secure throughout the wound. A 10 mm Jackson-Pratt drain was placed through a separate stab wound and left to lay in the midline or slightly to the left of the midline in the thyroid cavity. Strap muscles were closed in the midline with multiple interrupted figure-of-eight sutures of 2-0 Vicryl. The platysma muscle was closed with 2-0 Vicryl and the skin closed with a continuous running subcuticular closure of 3-0 Monocryl. Dermabond was applied to the wound, drain secured with a 0 silk and a small gauze dressing.

Prior to leaving the operating room the patient was extubated and with the help of the anesthesia personnel, the "glide scope" was inserted into the hypopharynx and the larynx and vocal cords visualized, showing symmetric movement of the cords. This was confirmed by multiple observers. The procedure was terminated. The patient tolerated the procedure well and she was taken to the recovery area in stable condition. Estimated blood loss was 80cc. Sponge and needle counts were correct times two.

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

CPT[®] code: 60252

ICD-9-CM code: 193

RATIONALE: CPT[®] code: Look in the CPT[®] Index for Thyroid gland/Excision/for malignancy. You have an option between a limited neck dissection and a radical neck dissection. A radical neck dissection includes removal of all of the lymph nodes on one side of the neck. A limited neck dissection includes removal of a limited number of lymph nodes. This procedure included a limited number of lymph nodes making 60252 the correct code.

ICD-9-CM code: The patient has papillary thyroid cancer. Look in the Neoplasm Table for thyroid, thyroid gland and you are directed to 193. Verification of 193 in the Tabular List confirms this is the correct code. If the lymph nodes appearing metastatic are confirmed by pathology before coding, it would be coded as a secondary CA in addition to the thyroid CA.

Preoperative diagnosis: Post-hemorrhagic hydrocephalus.

Postoperative diagnosis: Post-hemorrhagic hydrocephalus.

Operation: 1. Insertion of left frontal ventriculoperitoneal shunt. 2. Removal of right frontal external ventricular drain.

Primary surgeon and Assistant Surgeon used.

Anesthesia: General endotracheal.

Operative indication: Patient is an 8-year-old boy who suffered a significant head trauma with intraventricular hemorrhage. He previously had an external ventricular drain

_placed. <u>He failed clamp trial</u>. <u>Plan was made for permanent shunt implantation</u>. <u>The</u> risks and benefits of surgery were discussed in detail with the patient and family. Risks include bleeding, infection, stroke, paralysis, seizure, coma, and death. All questions were answered in detail. I believe the patient and family understand the risks and benefits of surgery and wish to proceed.

Operative account: Patient was brought in the operating room and placed under general endotracheal anesthesia. His head was turned to the right, and a shoulder roll was placed. He was then clipped, prepped, and draped in the usual sterile fashion. Using the micropoint electrocautery, a half-moon incision was carried out over the patient's left coronal suture at the mid-pupillary line. The galea was divided and the scalp flap retracted. A 2nd incision was created above and behind the pinna of the ear.

Attention was turned to the abdomen where a 2 cm incision was carried out just to the left and superior to the umbilicus. Using the micropoint electrocautery, subcutaneous dissection was carried down to the superficial rectus fascia. The fascia was secured with hemostats, elevated, and opened sharply in a vertical fashion. This allowed dissection of the underlying muscular fibers. We secured then the deep rectus fascia with hemostats, elevated this, and opened this sharply. The underlying peritoneum was visible. This was secured and opened, allowing passage easily of a #4 Penfield into the peritoneal cavity.

A subcutaneous tunneler was then used to bring a Medtronic BioGlide catheter from the abdominal to the retroauricular incisions. This was then brought to the anterior incision. It was secured to the distal end of the Medtronic Delta valve, performance level 1, with 3-0 silk tie. The Midas perforator was then used to create a burr hole. The brain needle was then placed to the dura and electrocautery applied, creating a small durotomy, through which the brain needle was advanced. This was advanced into the ventricle with excellent return of cerebrospinal fluid under elevated pressure. We observed slightly stiff ependymal walls at the time of passage.

The brain needles were removed and a new Medtronic BioGlide ventricular catheter advanced down this track with excellent return of cerebrospinal fluid. This catheter was trimmed and secured to the proximal end of the valve with 3-0 silk suture. Spontaneous flow of cerebrospinal fluid was observed at the distal end of the peritoneal catheter prior to placement within the peritoneum. All wounds were then thoroughly irrigated with



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vancomycin-containing saline, and 1 mL of vancomycin-containing saline was injected into the bulb of the shunt.

At the 2 cranial incisions, the galea was reapproximated with inverted 3-0 Vicryl suture. Skin edges were approximated with a running 5-0 Monocryl stitch. At the abdominal incision, the peritoneum and deep rectus fascia were closed with a 3-0 Vicryl pursestring. Superficial rectus fascia was closed with interrupted 3-0 Vicryl suture. Subcutaneous tissue was reapproximated with interrupted and inverted 3-0 Vicryl suture. Skin edges were reapproximated with a running 5-0 Monocryl stitch. That wound was washed and dried, and a sterile dressing was applied. At the cranial wound, the patient's hair was shampooed and bacitracin ointment applied to the wounds. The patient was awakened, extubated, and taken to the recovery room in stable condition.

What are the CPT[®] and ICD-9-CM codes reported for the primary surgeon?

CPT[®] code: 62223-58

ICD-9-CM code: 331.4

RATIONALE: CPT[®] code: In the CPT[®] Index, look for Shunt/Brain/Creation and you are directed to 62180–62223. Creation of a ventricular shunt is reported from the code range 62220–62223. Catheters were run from the peritoneal cavity to the ventricle, creating a ventriculo-peritoneal shunt which is reported with 62223. Modifier 58 should be used to indicate it is a related, more extensive procedure.

ICD-9-CM code: The diagnosis is post-hemorrhagic hydrocephalus. In the ICD-9-CM Index to Diseases, look for hydrocephalus. There is no subterm for post-hemor-rhagic. You are directed to 331.4. In the Tabular List, 331.4 is used to report obstructive hydrocephalus.

Preoperative diagnosis: Acute epidural hematoma

Postoperative diagnosis: As above

Anesthetic agent: General Endotracheal

Operation: Left craniotomy for evacuation of epidural hematoma (emergent)

Indications: The patient presented with a history of a motor vehicle accident. He 3. presented to the emergency room neurologically intact but while there became gradually less responsive and required intubation. An urgent CT scan revealed a large epidural hematoma and the patient was taken emergently to the operating room for evacuation.

Procedure/techniques/description of findings/condition of patient: The patient was brought to the operating room and after induction of adequate general anesthesia, prepped and draped in the usual sterile fashion for a left frontotemporal parietal craniotomy. A curvilinear incision was made beginning just anterior to the left ear curving posteriorly than upward and anteriorly to and at the hair line just off the midline. The resulting musculocutaneous flap was then reflected anteriorly. Multiple burr holes were then placed and connected using the high-speed drill to create a large free bone flap. This was removed from the immediate operative field. Directly beneath the bone flap was a large well-formed clots which delivered itself from the epidural space. A bleeding point was found in the region of the middle meningeal artery. This was carefully and thoroughly coagulated using bipolar correlation. A small opening was then made in the dura to ensure that there was not an underlying blood clot. There was not. This opening was primarily closed using 4-0 Nurolon. Additional meticulous hemostasis was then obtained. The bone flap was then replaced and held in place using multiple K LS fixation devices. Skin was then reapproximated using 2-0 Vicryl for the subcutaneous tissues and 5-0 Monocryl for the skin. The patient was then awakened from anesthesia at which time his vital signs were stable and he was neurologically improved from preoperatively.

Estimated blood loss: 100 cc

Specimens: None

Labs ordered: None

Diagnostic procedures ordered: None

Complications: None

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

CPT[®] code: 61312

ICD-9-CM codes: 852.41, E819.9

<u>1.</u>	 <mark>1.</mark> 	Postoperative diagnosis is indicated as same as pre- operative diagnosis.
2.	2. 	The location of the hematoma will assist in CPT [*] code selection.
3. 4.	<mark>3.</mark> 	The patient is in the acute phase of treatment for injuries caused by the MVA requiring an E code.
	4. 	Indicating loss of consciousness.
5.	<mark>5.</mark> 	Procedure performed. Knowing this is a parietal craniotomy will assist in code selection.
6.	6.	Burr holes created but are included in the primary procedure.

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RATIONALE: CPT[®] code: Look in the CPT[®] Index for Hematoma/Brain/Evacuation and you are directed to code range 61312–61315. First, the code selection is narrowed by knowing if the craniotomy is supratentorial or infratentorial. The tentorium lies in between the occipital lobes and the cerebellum. Supratentorial is above the tentorium and infratentorial is below the tentorium. This is a parietal craniotomy indicating it is supratentorial (or above the tentorium). Then the code selection is based on where the hemotoma is located. In this case, it is epidural making 61312 the correct code.

ICD-9-CM codes: In the ICD-9-CM Index to Diseases, look for Hematoma/brain (traumatic—indicated by MVA)/extradural or epidural and you are guided to 852.4. The fifth digit identifies if there is a loss of consciousness and for how long. The patient became less responsive, but there is no statement of loss of consciousness. With no loss of consciousness, a fifth digit of 1 is used.

The patient was brought in after a motor vehicle accident, requiring an E code. In the Index to External Causes, look for Accident/motor vehicle and the default code is E819. A fourth digit is required to indicate the role of the injured person. In this case, it is unspecified. E819.9 is the correct code.

Preoperative diagnoses: 1. Low back pain. 2. Degenerative lumbar disc.

Postoperative diagnoses: 1. Low back pain. 2. Degenerative lumbar disc.

Procedure performed: 1. Bilateral facet joint injection of steroid at the L4–L5 and L5–S1 with fluoroscopic guidance.

Description of procedure: The patient was transferred to the operative suite and placed in the prone position with a pillow under the abdomen. A smooth IV sedation was given with midazolam and fentanyl. The patient's back was prepped with Betadine in a sterile fashion, and we used lidocaine, 1% plain as a local anesthetic at the injection site. With the use of <u>fluoroscopy assistance</u>, first to the right and then to the left 20-degree, the scotty-dog view was identified, and we were able to place the spinal 22-gauge needle first to the <u>right L4–L5</u>, then right L5–S1, then to the left L4–L5, and then to left L5–S1. We used a lateral X-ray to assess the proper placement of the needle. We proceeded to inject a mixture of 4 mL of 0.25% Marcaine plain plus 80 mg of methylprednisolone and divided between the four joints. The needles were removed. The patient's back was cleaned, and a Band-Aid was applied. The patient was transferred to the recovery area with no apparent procedural complications.

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

CPT[®] codes: 64493-50, 64494-50

ICD-9-CM Code: 722.52

RATIONALE: CPT[®] Codes: In the CPT[®] Index, look for Injection/Paravertebral facet joint/nerve/image guidance and you are directed to code range 64490–64495. The code selection is dependent on the location of the injection and how many levels are injected. Code range 64493–64495 are for the lumbar or sacral. 64493 is reported for the first level (L4–L5). 64494 is reported for the second level (L5–S1). Modifier 50 is appended since both levels were bilateral. Flouroscopy is included and therefore, not reported separately.

ICD-9-CM Codes: The diagnoses listed are low back pain and degenerative lumbar disc. Low back pain is a symptom of degenerative lumbar disc and would not be coded separately. Look in the ICD-9-CM Index to Diseases for degeneration/disc disease and you are directed to see Degeneration/intervertebral disc. Under this subterm, you have a selection of the location. In this case, it is lumbar so you are directed to 722.52. Verification in the Tabular List confirms the code selection.



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Case 7

Operation performed: Right-sided hemicraniectomy with duraplasty.

Complications: None.

Anesthesia: General endotracheal.

Estimated blood loss: Approximately 400 mL

Indications: is a 56-year-old male with significant past medical history who came in this evening with an <u>ischemic infarct</u> to his right <u>MCA</u> territory which <u>converted</u> to hemorrhagic transformation. The significant shift was following commands on the right side and hemiplegic on the left side. After a thorough discussion with the family, we explained to them that this would be a life saving procedure and we could not ensure that there would be any further neurological improvement from the state that he was in. They understood these risks and wanted to proceed ahead.

Operation performed: After informed consent was obtained, the patient was taken to the operating room and induced under general endotracheal anesthesia without incident. TEE monitor was placed due to the patients significant cardiac history; at this point, a roll was placed underneath the right shoulder and the head was placed in a horseshoe reverse question mark incision was taken through midline. This area was sterilely prepped and draped in usual fashion. A#1O blade was used to make an incision sharply. Raney clips were applied to the skin edges. The temporalis fascia and muscle was then resected with the cutaneous flap anteriorly. This was done until the keyhole could be identified. The musculocutaneous flap was then retracted with towel hooks, rubber bands and Allis clamps. The perforator was then used to make several burr holes approximately 6 and a footplate was then put on to perform the

- 4. <u>hemicraniectomy</u>. We ensured that we were off midline to ensure that we did not get into the sagittal sinus or any draining veins associated with this. Once the bone was removed, hemostasis was obtained and the dura was opened in the C-shaped fashion. and a large piece of Durepair was placed underneath this. There was a small subdural which was also evacuated and a large piece of Durepair was then used to create a
- 5. <u>duraplasty</u>. This was stitched in several points with 4.0 nylon. Hemovac was then tunneled through as well.

At this point the galea and the temporalis fascia was then reapproximated with 0 Vicryl interrupted fashion, overlying galea was reapproximated 0 Vicryl interrupted fashion. The overlying skin was closed with staples and the Hemovac drain was secured with 2-0 nylon. At the end of the case all counts of the needles and sponges were correct.

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

CPT[®] code: 61322

ICD-9-CM code: 431



5. Duraplasty performed.

RATIONALE: CPT[®] code: The surgeon is performing a decompressive craniectomy with duraplasty. Burr holes are placed to perform the decompressive craniectomy. A dural opening is made to remove the clot. Then, a reconstructive operation on the dura mater (duraplasty) is performed using the Durepair for closure. This procedure is indexed under Craniectomy/Decompression. Code 61322 is the correct code choice.

ICD-9-CM code: The diagnosis is ischemic infarct to the middle cerebral artery territory. However, this converted to a hemorrhage. Look in the ICD-9-CM Index to Diseases for Hemorrhage/artery/brain and you are directed to 431. Verification of code 431 in the Tabular List confirms it is for an intracerebral hemorrhage.



Preoperative diagnosis: Dorsal column stimulator battery expiration.Postoperative diagnosis: Dorsal column stimulator battery expiration.

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2. Device malfunction is the reason for the surgery.

Battery.

3. The old battery is taken out and replaced with a new battery.

4. The same leads are used.

Procedure performed: Replacement of dorsal column stimulator generator.

Attending: MD

Anesthesia: Monitored anesthetic coverage with local.

Estimated blood loss: Less than 5 mL

Specimens: None.

Drains: None.

Complications: None.

Implants: Medtronics prime advanced nonreconstructable generator.

Indications: This woman has a dorsal column stimulator in place and has benefited from the therapy. Her current device began malfunctioning approximately a month prior to

this procedure and she has gradually noticed declining effectiveness. The device was interrogated approximately a week prior to this procedure and no telemetry was obtainable, indicating a failure of the battery. On this basis, revision of the device was offered and accepted.

Procedure in brief: After extensive preoperative counseling, informed consent was obtained. The patient was brought to the operating room, positioned on the table in the left lateral decubitus position. Sedation was induced and a dose of antibiotics was administered IV. A wide area of the right lateral flank region surrounding her existing scar was prepped and draped in standard fashion and infiltrated with 0.5% Marcaine with 1:200,000 epinephrine. The skin was incised. The pouch housing the existing battery

- 3. was entered. The battery was explanted, a new prime advanced generator was prepared. The leads were disconnected from the old generator and connected to the new generator
- <u>in the same orientation</u>. An impedance test was performed, which yielded acceptable results. The generator was implanted and secured to the fascia using 0 Ethibond suture. The wound was irrigated copiously and closed in layers using interrupted 0 and 3-0 Vicryl sutures followed by Mastisol and Steri-Strips to reapproximate the skin. Sterile dressing was applied. The patient was aroused from sedation and taken to recovery area in good condition. All final needle arid sponge counts were correct. There were no apparent complications.

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

CPT[®] code: 63685

ICD-9-CM code: 996.2

RATIONALE: CPT[®] code: A dorsal column stimulator is a spinal cord stimulator. Look in the CPT[®] Index for Replacement/Neurostimulator/Pulse generator/Receiver/Spinal and you are directed to code 63685, which is the correct code. The removal of the original pulse generator is included and should not be reported separately.

ICD-9-CM code: The battery needs to be replaced on a stimulator. Look in the ICD-9-CM Index to Diseases for Complication/mechanical/device NEC/nervous system and you are directed to 996.2. Verification of the code in the Tabular List confirms it is used for complications of dorsal column stimulators.



Preoperative diagnosis: Spinal stenosis at L4–L5

Postoperative diagnosis: Spinal stenosis at L4–L5

Operation performed: Right L4–L5 laminotomy, foraminotomy, decompression, bilateral decompression of the lateral recess

Operative anesthesia: General endotracheal tube anesthesia.

Estimated blood loss: Minimal.

Operative complications: None apparent.

Operative findings: Tight stenosis at L4–L5 from ligament hypertrophy and facet arthropathy.

Operative indications:

The patient is a 51-year-old gentleman. He has had ongoing lower extremity pain with <u>numbness and tingling on the right hand side more so than the left side</u>. He has had paresthesias. He has had progressive loss of strength. He has had very little back pain, however. The patient is brought to the operating room for operative decompression with an MRI scan that shows tight spinal stenosis at L4–L5, having failed conservative measures to date.

Description of procedure:

The patient was given 1 gm of Kefzol preoperatively. He was taken to the operating room where he underwent general endotracheal tube anesthesia without complications. All appropriate anesthetic monitors and lines were placed. He was placed prone onto a Wilson frame which was padded in the usual fashion. All pressure points were checked and padded appropriately. The patient's back was then outlined with a marking pen through the L4–L5 level in a vertical direction. He was then prepped using Prevail solution and allowed to dry. He was draped using sterile technique. Marcaine 0.25% with 1:200,000 units of epinephrine was instilled in the proposed incision for a total of 10 cc of injection. Using a #10 blade scalpel, a vertical midline incision was made. The soft tissues were dissected down to the thoraco-lumbar fascia using Bovie coagulation. The fascia was incised on the right hand side and the paraspinal muscles were stripped off the lamina and spinous processes of L4 and L5 on the right. A self-retaining Taylor retractor was placed into the wound and intraoperative fluo-

- 3. <u>roscopy</u> revealed the L4–L5 level. The soft tissue in the interlaminar space was then resected with a rongeur. The ligamentum flavum was resected with Kerrison punches and cervical curets. The laminotomy was performed on the superior aspect of L5 and the undersurface of
- 4. L4. The laminotomy was taken out to the medial edge of the pedicle. A foraminotomy was
- 5. performed with a #3 Kerrison punch for the exiting right L5 nerve root. The lateral recess
- was now decompressed. The disc was inspected and found not to be ruptured. We then decompressed the patient's left side by slightly depressing the thecal sac with cottonoids and under-cutting the interspinous ligament with Kerrison punches so that the right lateral
- 7. recess was also decompressed from overgrowth of the ligamentum flavum. The wound was copiously irrigated using warm bacitracin solution. Depo-Medrol 40 mg in 1 cc was placed epidurally. A piece of Gelfoam was placed over the laminotomy defect to try to preserve



6. Decompression.

7. Decompression of the left and right sides.

the epidural space, and the wound was ready for closure. During all areas of closure, bacitracin irrigation was used in copious amounts. The fascia was closed with #0 Vicryl in an interrupted fashion. The subcutaneous tissue was closed with #30 Vicryl in an interrupted fashion. The skin was closed with #40 Vicryl in an interrupted fashion to the subcuticular space. Steri-Strips were placed on the wound. A sterile dressing was placed. The patient was taken to the recovery room in stable condition with sponge and needle counts correct times three.

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

CPT[®] code: 63030-50 or 63030-RT, 63030-LT

ICD-9-CM code: 724.03

RATIONALE: CPT[®] code: The main procedure performed is the laminotomy between L4–L5. A laminotomy is partial removal of the lamina, also referred to as a hemilaminectomy. In the CPT[®] Index, look for Hemilaminectomy and you are directed to codes 63020–63044. The code selection is based on the location. This was performed on the lumbar spine making 63030 the correct code choice. This code also includes the decompression and the foraminotomy. The decompression was performed on both sides, so a modifier 50 is indicated or modifiers RT and LT.

ICD-9-CM code: For spinal stenosis, look in the ICD-9-CM Index to Diseases for Stenosis/spinal/lumbar/with neurogenic claudication (numbness, tingling, and pain) and you are directed to 724.03. Verification in the Tabular List confirms the code selection.



proceed with surgery.

Preoperative diagnosis: Left L5 radiculopathy; left L5-S1 neural foraminal narrowing.

 Postoperative diagnosis used for coding.
Indicates a re-exploration.
Laminotomy.
Use of surgical microscope.
Decompression.
Surgical microscope again.
Confirmation of foraminotomy.
2.

Postoperative diagnosis: Left L5 radiculopathy; left L5–S1 neural foraminal narrowing.
Procedure performed: Left L5–S1 foraminotomy; microsurgical technique.
Anesthesia: General endotracheal.
Estimated blood loss: 25 mL.
Specimens: None.
Drains: None.
Complications: None.
Indications: This woman has a history of left lower extremity L5 radicular pain. She has had previous surgery in the lumbar region for a herniated disk. Her preoperative exam was remarkable for subjective complaints in an L5 pattern on the left. Her MRI scan showed high-grade neural foraminal narrowing on the left due to facet arthropathy. Based on these findings, treatment options were discussed including ongoing conservative

Description of procedure: After extensive preoperative counseling, informed consent was obtained. The patient was brought to the operating room, intubated, placed under general anesthesia, and positioned in the prone position. A wide area of the lumbar region was prepped and draped in standard fashion. A midline incision was marked overlying the L5–S1 spinous processes and infiltrated with 0.5% Marcaine with 1:200,000 epinephrine, A standard surgical timeout was performed wherein the patient was identified and the surgical site and procedure were confirmed. Preop dose of antibiotics was administered IV. The skin was incised, subcutaneous bleeding points were controlled. The subcutaneous fat was transgressed to the lumbodorsal fascia, which was incised in the midline from the top of the spinous process of L5 through the bottom of the spinous process of S1. Paraspinous musculature was elevated subperiosteally and reflected laterally towards the patient's left. A high speed osteotome was used to create a trailing edge laminotomy of L5

therapy and surgical intervention. After contemplating alternatives, the patient elected to

and a leading edge laminotomy of S1, encompassing the medial 3rd of the facet complex.

- <u>Microscope was then employed for magnification and illumination</u>. A variety of curettes and rongeurs were then used to complete the laminotomy. The bone resection was carried laterally until the medial edge of the pedicle was encountered. As the bone resection and ligamentous resection was conducted, a large fragment of synovium type material with
- admixed scar tissue was extracted, resulting in marked decompression of the thecal sac and root sleeve. A probe could then be admitted through the neural foramen. For this
- aspect of the procedure, the microscope was utilized for magnification and illumination. A confirmatory X-ray was obtained with the probe inserted through the L5–S1 foramen, both the L5 and S1 root sleeves were directly visualized and were completely without

closure was then conducted using interrupted 0 Vicryl sutures. The lumbodorsal fascia was closed using interrupted 0 Vicryl sutures in watertight fashion. The skin was closed using interrupted buried subcuticular 3-0 Vicryl sutures followed by Mastisol and Steri-Strips. Sterile dressing was applied. The patient was aroused from anesthesia and extubated without difficulty. All final needle and sponge counts were correct. There were no perioperative complications.

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

CPT[®] code: 63042-LT

ICD-9-CM codes: 724.4, 724.02

RATIONALE: CPT[®] code: The main procedure performed is the laminotomy between L4–L5. A laminotomy is partial removal of the lamina, also referred to as a hemilaminectomy. In the CPT[®] Index, look for Hemilaminectomy and you are directed to codes 63020–63044. Code range 63040–63044 are for re-explorations. The code selection is further defined by location. 63042 is the correct code. The use of the microscope is included in this procedure and should not be reported separately. Although code 63042 does not appear in the list of procedure codes following 69990, according to NCCI the microscope is bundled. Add a note in your codebook next to 69990 that codes 63001–63066 are bundled according to NCCI.

ICD-9-CM codes: Spinal stenosis is narrowing of the spine. Look in the ICD-9-CM Index to Diseases for Stenosis/spine/lumbar and you are directed to 724.02 if there is no indication of claudication. Then look for radiculopathy which directs you to radiculitis. Under radiculitis, lumbar, you are directed to 724.4. Verification in the Tabular List confirms code selection.

