
Documentation Dissection

PREOPERATIVE DIAGNOSIS: Breast cancer with metastatic spinal leptomeningeal carcinomatosis and cauda equina syndrome.

POSTOPERATIVE DIAGNOSIS: Breast cancer with metastatic spinal leptomeningeal carcinomatosis and cauda equina syndrome ^[1].

PROCEDURE PERFORMED: Placement of right frontal Ommaya intraventricular reservoir ^[2].

ANESTHESIA: General endotracheal.

ESTIMATED BLOOD LOSS: Approximately 20 mL.

IMPLANTS: Intraventricular reservoir.

SPECIMENS: CSF sent for gram stain, glucose, protein, cultures, and cytology.

DRAINS: None.

COMPLICATIONS: None.

INDICATIONS: This is a very pleasant 33-year-old female with a history of metastatic breast cancer. The patient was seen in consultation at the Institute due to new onset of lower extremity weakness and bowel and bladder incontinence. Imaging of her spinal access revealed diffuse leptomeningeal enhancement. The oncology service requested placement of an Ommaya reservoir for intrathecal chemotherapy. The patient had coags drawn prior to the operating room, which were within normal limits. Her INR was 1.0.

DESCRIPTION OF PROCEDURE: After thorough informed consent was obtained including discussing the risks and benefits of the procedure, the patient was taken to the operating room, placed supine on the operating room table. After induction of general endotracheal anesthesia ^[3], Dr. A was present for a formal time-out. Preoperative antibiotics were administered. The patient was placed in a horseshoe head holder with Mayfield attachment. The area to be incised was marked out and then prepped and draped in standard sterile fashion. 10 mL of local anesthesia were infiltrated into subcutaneous tissues. We did plan a semicircular incision for this procedure. This incision was then opened sharply with a #10 blade scalpel and Bovie electrocautery as well as Metzenbaum scissors were used to carry the dissection down to the periosteum. A subfascial pocket was created for the reservoir placement and all bleeding skin and galeal edges were cauterized with bipolar cautery ^[4]. The periosteum was incised using Bovie electrocautery and 1 burr hole was made in order to turn the bone flap ^[5]. Bleeding bone edges were controlled with electrocautery and bone wax as needed. At this time, the dura was coagulated with bipolar electrocautery and then opened with a #11 blade scalpel. The dural leaflets were opened and cauterized with bipolar cautery. Epidural bleeding was again controlled with bipolar cautery. The cortex was then cauterized in a linear fashion with a #11 blade scalpel. Hemostasis was obtained using bipolar electrocautery. Once exquisite hemostasis was obtained, we took the ventricular catheter using appropriate landmarks of the medial canthus and the tragus. We inserted the catheter to depth of 6 cm without difficulty or resistance ^[6]. There was immediate good return of CSF flow. We did remove approximately 5 mL of spinal fluid, which was sent to the laboratory for protein, glucose, culture, gram stain, and cytology. At this time, the proximal catheter was cut to the appropriate length and hooked to the Ommaya reservoir. The Ommaya reservoir was then tucked into the subgaleal pocket ^[7]. A 25-gauge needle was used to aspirate the reservoir with good return of CSF. A silk tie was placed around the insertion point of the catheter and the reservoir to ensure that this would not come unclamped. The wound was then aggressively irrigated with bacitracin irrigation. Hemostasis was obtained with Bovie electrocautery. The fascia was then closed with 3-0 interrupted Vicryl sutures and the skin was closed with staples. Telfa and Mefix were then applied sterilely to the incision. The patient was extubated without difficulty and was taken to the Huntsman Recovery Room in stable condition. At the conclusion of the case, all sponge and needle counts were correct x 2. We will obtain a postoperative CT scan to ensure proper placement of the ventricular catheter.

^[1] Postoperative diagnosis is used for coding unless additional information is found within the body of the operative report.

^[2] Procedure performed.

- ^[3] General anesthesia was used.
- ^[4] A pocket is created to hold the reservoir.
- ^[5] A burr hole was used to turn the bone flap.
- ^[6] Catheter inserted for the reservoir.
- ^[7] The reservoir was placed into the pocket.

What are the CPT® and ICD-10-CM codes reported?

CPT® Code: 61210

ICD-10-CM Codes: C79.49, C50.919, G83.4

Rationales:

CPT®: A ventricular catheter and subcutaneous reservoir were inserted into the brain. Look in the CPT® Index for Insertion/Reservoir/Brain directing you to 61210–61215. In the Nervous System section, 61210 is reported for the burr hole for access to implant the ventricular catheter and the subcutaneous reservoir. Do not report 61215, because this does not include the burr hole and the insertion of the ventricular catheter.

ICD-10-CM: The patient has metastatic breast cancer with diffuse spinal leptomeningeal carcinomatosis and cauda equina syndrome. This is saying that the patient has breast cancer that has metastasized to the meninges. The Ommaya reservoir is being placed to treat the secondary cancer of the meninges, so it is reported first. Look in the ICD-10-CM Alphabetic Index for Carcinomatosis referring you to C80.0. When you check the Tabular List, you will see that this refers to disseminated malignant neoplasm, unspecified. This is specified, so look in the Table of Neoplasms for Neoplasm, neoplastic/meninges/spinal (cord)/Malignant Secondary referring you to C79.49. Next report the primary cancer of the breast. Look in the Table of Neoplasms for Neoplasm, neoplastic/breast/Malignant Primary referring you to C50.9-. Report C50.919 for primary breast cancer of unspecified site of unspecified breast. The cauda equine syndrome is found by looking in the Alphabetic Index for Syndrome/cauda equina referring you to G83.4. Verify codes in the Tabular list.