

## Right/Left Thoracotomy/ Thoracoscopy, Resection of Paraspinal Thoracic Neuroblastoma

90

Sara A. Mansfield and Jennifer H. Aldrink

## Indications and Benefits

Thoracic mass, suspected neuroblastic in origin

## **Risks and Alternatives**

- Standard risks (bleeding, infection, need for additional procedures, risks of anesthesia)
- Injury to adjacent structures (upper cervical nerve roots resulting in Horner syndrome, vascular structures, thoracic duct, phrenic nerve)
- Recurrence

## **Template Operative Dictation** (Open)

**Preoperative Diagnosis** *Right/left* paraspinal/ thoracic mass

S. A. Mansfield

The Ohio State University Wexner Medical Center, Department of General Surgery, Columbus, OH, USA

J. H. Aldrink (⊠)

Nationwide Children's Hospital, The Ohio State University College of Medicine, Division of Pediatric Surgery, Department of Surgery,

Columbus, OH, USA

e-mail: Jennifer.Aldrink@nationwidechildrens.org

**Postoperative Diagnosis** Same as preoperative diagnosis

**Findings** Describe intraoperative findings

**Procedure(s) Performed** Right/left thoracotomy/thoracoscopy, resection of paraspinal thoracic neuroblastoma

**Anesthesia** General/regional/procedural sedation

**Specimen** *Right/left* paraspinal/thoracic mass

**Drains** \_\_\_ chest tube

Estimated Blood Loss \_\_\_\_

**Indications** This is a/an \_\_\_\_\_\_\_-day/week/month/year-old male/female with a paraspinal mass suspicious for a neuroblastic tumor. He/she was deemed to be a suitable candidate for right/left thoracotomy/thoracoscopy, resection of paraspinal thoracic mass.

**Procedure in Detail** After verifying informed consent, the patient was taken to the operating room and placed supine upon the operating table. Following satisfactory induction of anesthesia, lung isolation was achieved with the use of a double lumen endotracheal tube/right/left mainstem positioning. The patient was placed in *right/left* 

lateral position and appropriately padded. Timeouts were performed using both pre-induction and pre-incision safety checklists with participation of all present in the operative suite. These confirmed the correct patient, procedure, operative site, and additional critical information prior to the start of the procedure. The *right/left* chest was then prepped and draped in the usual sterile fashion.

For thoracotomy: A transverse incision using a 15-blade scalpel was made along the rib just inferior to the tip of the scapula. Dissection was carried down through the skin and subcutaneous tissues, and then, flaps were raised above the muscle layer. The muscles were then split along their fibers, separating the latissimus from the serratus anterior. A submuscular plane was then developed. With the scapula gently retracted, the chest wall was palpated for the optimal entry point. The fourth/fifth intercostal space was then entered under direct visualization and following the achievement of single lung ventilation. Once the thoracic space was entered uneventfully, an appropriately sized Finochietto retractor was then placed, taking care to protect the skin. A second retractor was placed to retract the muscle and soft tissues from the wound.

For thoracoscopy: An incision was made using a 15-blade scalpel just inferior to the tip of the scapula. Following the achievement of single lung ventilation, the thoracic cavity was entered bluntly with a hemostat. A 5/10-mm trocar/port was placed through this incision, and a 5-mm camera was inserted. The thoracic cavity was perused. No injury from entrance was identified. CO2 was insufflated to acheive a pressure of 3 mmHg. The mass was visible in the expected location. Two/three additional ports were placed under direct visualization and following the infiltration of local anesthetic (describe locations).

For both approaches: The paraspinal mass was noted \_\_\_\_. Dissection began by taking the

pleura from around the edges of the mass circumferentially using electrocautery. A top-down and lateral mobilization approach was then performed, taking care to cauterize and LigaSure vascular structures as the mass was taken from the posterior chest wall. With the mass somewhat mobilized, the medial vascular structures were carefully dissected free from the tumor. Describe the association with vital structures and the dissection. Once the mass was completely resected, it was placed within an endoscopic retreival bag and removed. The specimen was sent as a fresh/frozen specimen to pathology for analysis. For thoracoscopy, the tumor as placed within an endocatch bag and removed through one of the incisions. This required enlargement of the incision for tumor extraction. The tumor bed was made hemostatic by use of electrocautery as needed. No lymphadenopathy was noted/lymph nodes were identified and removed sequentially using cautery and clips as appropriate. No lymphatic leak was identified. Thrombin spray was applied to the wound bed. A \_\_\_\_Fr straight Argyle chest tube was then placed through the sixth intercostal space and laid posterolaterally. It was secured to the skin using \_\_\_\_\_ Prolene/nylon/Ethibond suture. The chest wall was then closed as follows: For thoracotomy: \_\_\_-0 Vicryl pericostal sutures, \_\_-0 Vicryl interrupted sutures to close the muscle layers back together, and interrupted \_\_-0 Vicryl sutures in the Scarpa fascia. The deep dermis was closed with interrupted \_\_\_-0 Vicryl sutures, and a \_\_-0 running Vicryl was used subcuticularly to close the skin. For thoracoscopy: \_\_-0 Vicryl was used to close the fascia of 10-mm port site. All skin incisions were closed using \_\_-0 Vicryl suture. Mastisol and Steri-Strips and dry sterile dressing applied as well as a chest tube dressing. Chest tube was placed to -20 cm of suction on the Pleur-evac. The patient tolerated the procedure well, was rolled supine, and was extubated in the operating room. CXR is pending at the time of this dictation.