

PREOPERATIVE DIAGNOSES:,1. Lumbar osteomyelitis.,2.

Need for durable central intravenous

access.,POSTOPERATIVE DIAGNOSES:,1. Lumbar

osteomyelitis.,2. Need for durable central intravenous

access.,ANESTHESIA:, General.,PROCEDURE:, Placement

of left subclavian 4-French Broviac catheter.,INDICATIONS:

,The patient is a toddler admitted with a limp and back pain, who was eventually found on bone scan and septic workup to have probable osteomyelitis of the lumbar spine at disk areas.

The patient needs prolonged IV antibiotic therapy, but attempt at a PICC line failed. She has exhausted most of her easy

peripheral IV access routes and referral was made to the

Pediatric Surgery Service for Broviac placement. I met with

the patient's mom. With the help of a Spanish interpreter, I

explained the technique for Broviac placement. We discussed

the surgical risks and alternatives, most of which have been

exhausted. All their questions have been answered, and the

patient is fit for operation today.,DESCRIPTION OF

OPERATION: ,The patient came to the operating room and

had an uneventful induction of general anesthesia. We

conducted a surgical time-out to reiterate all of the patient's

important identifying information and to confirm that we were

here to place the Broviac catheter. Preparation and draping of

her skin was performed with chlorhexidine based prep

solution and then an infraclavicular approach to left

subclavian vein was performed. A flexible guidewire was

inserted into the central location and then a 4-French Broviac

catheter was tunneled through the subcutaneous tissues and

exiting on the right anterolateral chest wall well below and lateral to the breast and pectoralis major margins. The catheter was brought to the subclavian insertion site and trimmed so that the tip would lie at the junction of the superior vena cava and right atrium based on fluoroscopic guidelines. The peel-away sheath was passed over the guidewire and then the 4-French catheter was deployed through the peel-away sheath. There was easy blood return and fluoroscopic imaging showed initially the catheter had transited across the mediastinum up the opposite subclavian vein, then it was withdrawn and easily replaced in the superior vena cava. The catheter insertion site was closed with one buried 5-0 Monocryl stitch and the same 5-0 Monocryl was used to tether the catheter at the exit site until fibrous ingrowth of the attached cuff has occurred. Heparinized saline solution was used to flush the line. A sterile occlusive dressing was applied, and the line was prepared for immediate use. The patient was transported to the recovery room in good condition. There were no intraoperative complications, and her blood loss was between 5 and 10 mL during the line placement portion of the procedure.