Task-Specific Checklist Spinal Cord Stimulator Trial and Implants

Not performed Performed Poorly Performed Well

1. Preoperative Planning
    a. IPG site (below rib above iliac crest)
2. Positioning patient on table
    a. Prone (proper support to decrease lumbar lordosis)
    b. Baseline Fluoroscopy imaging
        i. True AP image (identified and aligned superior endplate, inferior endplate, pedicle, spinal process)
        ii. True lateral image
3. Determining needle entry point and trajectory
    a. Mark up skin entry
    b. Mark up interlaminar space/epidural access
4. Prepare Midline Incision (Anchor site)
    a. Dissects the subcutaneous tissue down to fascia plane
    b. Develop a smooth plane to suture the anchor beneath the edges of the incision
    c. Incision long enough to allow placement of the anchor and leads without introducing kinks or sharp bends
5. Needle entry and epidural access
    a. Needle angle 30^{o}
    b. Bevel up
    c. Contact lamina-walk off lamina
    d. Removed stylet and started LOR
    e. Confirm depth in Lateral Fluoroscopy view
6. Lead placement
    a. Grasps the lead and inserts in needle hub
    b. Steer the lead with the other hand by holding the stylet steering mechanism at the distal end of the lead using index finger and thumb
    c. Advance the lead slowly with pulsed- live low-dose fluoroscopy image while steering the lead
    d. Determines lead target (exp. T7) and confirms dorsal epidural positioning
    e. Confirms dorsal placement
7. Intraoperative testing
    a. Plugs the left lead into port 1–8 and the right lead into port 9–16 of the multi-lead trial lead cable and hands the end of the cable to the rep.
    b. Test impedances
    c. Set bipole on the lead. Increase amplitude by .3–.5 mA
    d. Paresthesia to map coverage over painful areas
8. Removing needle and placing Anchor
    a. Needles removed under pulsed-live low-dose fluoroscopy in AP while avoiding lead migration from designated target
    b. Places two tie-down sutures with nonabsorbable suture thread to fascia
    c. Slides anchor over lead towards fascia
    d. Attaches the anchor securely to surrounding fascia by tie-down sutures
9. Prepare Pocket Site
    a. Pocket should be large enough to accommodate IPG
    b. Should be no more than 2.5 cm beneath the skin.
    c. Uses electrocautery to control surgical bleeding
    d. Places two tie-down sutures with nonabsorbable suture thread to floor of pocket
    e. Secures IPG in the pocket with nonabsorbable suture
10. Tunneling the Leads
    a. Obtains the tunneling tool and ensure cannula sleeve is on tunneling tool
    b. Begins tunneling from the midline lead incision site to the IPG pocket.
    c. Removes the tunneling tool, leaves the straw in place and passes the leads through the straw
    d. Creates subcutaneous loops in the midline lead incision
    e. Creates extra loop in the pocket
11. Connecting leads to IPG
    a. Wipes leads prior to inserting into the IPG.
    b. Unscrews the screws
    c. Advances leads into the port
    d. Inserts the torque wrench and tighten the set screw clockwise until one click is heard
    e. Places the IPG into the pocket