Surgeon – Amit Bhandarkar MD

Preoperative Diagnosis: Lumbar facet syndrome, arthropathy and pain L4-5 and L5- S1 bilateral

Postoperative Diagnosis: Lumbar facet syndrome, arthropathy and pain L4-5 and L5- S1 bilateral

1) L3 – L4 -medial branch and L5 dorsal rami radiofrequency ablation Bilateral – denervation of the nerve supply to L4-5 and L5- S1 facet joints.

2) Fluoroscopic needle guidance

ESTIMATED BLOOD LOSS: Scant

COMPLICATIONS: None

PROCEDURE: Oxygen saturation and vital signs were monitored continuously throughout the procedure. Patient was administered sedation by CRNA. The patient had high anxiety and remained awake during the key parts of the procedure to interact and give feedback. The x-ray technician was supervised and instructed to operate the fluoroscopy machine.

INFORMED CONSENT: The risks, benefits and alternatives of the procedure were discussed with the patient. The patient was given opportunity to ask questions regarding the procedure, its indications and the associated risks. The risk of the procedure discussed include infection, bleeding, allergic reaction, Dural puncture, headache, nerve injuries, spinal cord injury, and cardiovascular and CNS side effects with possible of vascular entry of medications. I also informed the patient of potential side effects or reactions to the medications potentially used during the procedure including sedatives, narcotics, nonionic contrast agents, anesthetics, and corticosteroids. The patient was informed both verbally and in writing. The patient understood the informed consent and desired to have the procedure performed. Patient was marked for the planned procedure.

MEDICATIONS INJECTED: Before the ablation, 1 mL of 1% lidocaine was injected at each level. After the ablation, 1.5 cc of mix of 0.5 mL of Dexamethasone. 0.5 cc of 1% lidocaine and 0.5 cc 0f 0.25% Marcaine. was injected at the ablation site as the needles were removed.

TECHNIQUE: Lying in a prone position, the patient was prepped and draped in the usual sterile fashion using DuraPrep and a fenestrated drape Time-out was taken to identify and confirm the identity, diagnosis, procedure planned and Allergies. The levels were determined under fluoroscopy. We initially started on the left side the c – arm was manipulated to nicely obtain an oblique laminar view to see the junction of the superior articular facet and the transverse process. Local anesthetic was given by raising a skin wheal at the skin entry point. With fluoroscopy, a 20 gauge 10-mm bent Teflon coated needle was gently guided into the groove between the SAP and the transvers process avoiding the mammillary accessory ligament at L4 and L 5 vertebrae. The C arm was then subsequently manipulated to have a clear view of the junction of SAP of S1 and the sacrum for the dorsal ramus of L5. An entry point was taken after local anesthesia in the skin and a similar needle was driven to the location under intermittent fluoroscopy. Sensory stimulation using 0.3 volts was used at each level which created pain. The following technique was used to confirm correct placement. Motor stimulation was applied at 3 Hz with 1 millisecond duration. No extremity movement was noted at less than 3 volts.

1 mL of 1% lidocaine was then injected slowly at each level. After waiting 30-60 seconds, ablation was performed utilizing a radiofrequency generator at 80 degrees C for 90 seconds. After the ablation, the above injectate was given at each level. The procedure was completed without complications and was tolerated well. Similar procedure was then carried out on the right side. There was appropriate placement of the needle and no stimulation of the ventral ramus. Patient was allergic to dye and we were not able to introduce any dye. There was good impedance at all the location.

The patient was monitored after the procedure. Post-procedure vital signs and oximetry were stable. The patient was discharged with instructions to ice the injection site as needed for 15-20 minutes as frequently as twice per hour for the next day and to avoid aggressive activities for 1 day. The patient was told to resume all medications. The patient was told to be in relative rest for 1 day but then could resume all normal activities. The patient was given post-procedure and discharge instructions to follow at home. The patient was discharged in stable condition. A follow-up appointment was made.

Pre-procedure pain score: 9/10 Post-procedure pain score: 3/10

The patient was instructed to seek immediate medical attention for shortness of breath, chest pain, fever, chills, increased pain, weakness, sensory or motor changes, or changes in bowel or bladder function. And to contact Prairie spine number in case of any concerns questions or complaints.