HISTORY: Patient presented to the ER after having a CT myelogram-related post dural puncture headache. The myelogram was done around five days back and was requested by Dr. Kube. The patient had a severe post dural puncture headache and presented himself to the ER at Good Sam Hospital, but got discharged as there was a delay in helping him out. The patient presented today at Fairfield Hospital and was able to consult the anesthesia team here which in turn consulted me to go ahead and do a post dural puncture headache-related blood patch under fluoroscopic guidance. Under fluoroscopic guidance, the procedure will be much safer than doing it blindly. Again, the patient's preoperative diagnosis is post dural puncture headache due to a dural puncture done five days back. The postoperative diagnosis is the same. The patient gives a history that he had multiple punctures while doing the myelogram, and because of his arthritis they were not able to get through. Ultimately, he had a myelogram done. He has cervical myelogram. The patient did not have relevant MRI images available to me at this time, but the patient did have a CT scan which showed evidence of severe stenosis, and he also had an MRI report which shows evidence of severe stenosis at L4-L5 which is central canal stenosis with spondylolisthesis, so we decided not to proceed with any kind of intervention at L4-L5 and decided to go ahead and do intervention at L3-L4.

PROCEDURE PERFORMED: L3-L4 epidural blood patch using 15 mL of autologous blood.

COMPLICATIONS: None.

ASSISTANT: None.

BLOOD LOSS: Scant.

PREOPERATIVE PAIN LEVEL: 4.

Postoperatively, he showed some improvement in the pain and was further improving. Procedure was done under sedation

DESCRIPTION OF PROCEDURE: In the preoperative area, the patient was seen and assessed, and all of the risks involved with the procedure, being infection, possibility of dural puncture, and aggravation of headache and even possibly the need for additional blood patch and also the possibility of compression of dural sac were explained to the patient in detail. The patient understood and verbalized agreement for the current plan . The patient also gave full informed consent for epidural blood patch. After informed consent, the patient was wheeled into the operative area where the patient was identified by the head nurse. The patient was positioned prone on the radiolucent table. All of the bony prominences were padded. The patient was then prepped and draped in the usual sterile fashion. A time-out was then carried out to confirm patient's site and the planned procedure. The patient was monitored. After that, I was able to go ahead and bring the C-arm in. I was then able to go ahead and nicely map the lumbar spine area. I was able to determine the L3-L4 interlaminar window. I was then able to go ahead and mark my skin entry point which was one level below L3-L4 as L4-L5 was the critical area. Again, the patient had huge amount of fat on the back, and we decided to go with a bigger needle. Ultimately, we chose a 17-gauge needle which was 5 inches in length. I was then able under fluoroscopic guidance to nicely center the needle in the midline. After that, I was able to go and advance the needle toward the interlaminar window. I was able to walk the needle over the laminar arthrosis. Once I met tension at the lamina and the ligamentum flavum, I was able to go ahead and see the lateral view. I slowly advanced the needle to spinal laminar line under fluoroscopic guidance. When it was in proximity with the spinal laminar line, I was then able to go ahead and insert the needle further and check for loss of resistance periodically. I was then able to get the loss of resistance. After getting loss of resistance, I was able to go ahead and inject 3 mL of normal saline which confirmed that the needle was in the epidural space. I was then able to go ahead and inject the dye which showed a nice epidurogram. After obtaining a nice epidurogram, I was then able to go ahead and ask my assistant to sterilely harvest around 15-20 mL of blood, and she was able to harvest around 15-20 mL of blood. Using the 20 mL of blood which was freshly harvested and sterile, this was then inserted into the epidural space with the needle which was placed. We were able to achieve this without any undue complications and without any undue excessive pain and without much resistance. I was able to perform an epidurogram and rule out myelogram. I was then able to remove the needle and cover the wound with a band-aid. A sterile dressing was then applied.

DISPOSITION: As the patient had multiple interventions in the near past, he also had multiple puncture signs that I was able to see on the myelogram and had some grooving around that site, so I decided to put him on some antibiotic prophylactically with Keflex. I asked him to be on antibiotics twice a day for five days. I explained to him about the further postoperative course. He will be seeing his primary physician, Dr. Kube, pretty soon. If he happens to have any increased pain, I would recommend that he have a second post dural puncture headache-related blood patch in the epidural area. I instructed the patient to avoid any excessive bending, twisting, or exertional activities and to restrict his mobility at this time, and slowly he can proceed with further activity as he moves forward. The patient understood and verbalized agreement for the current plan. The patient was instructed to call us if any increased pain, weakness, numbness, or any signs of infection. For any further questions, give me a call back.