PREOPERATIVE DIAGNOSIS: ,Cervical spondylosis and herniated nucleus pulposus of C4-C5.,POSTOPERATIVE DIAGNOSIS:, Cervical spondylosis and herniated nucleus pulposus of C4-C5.,TITLE OF OPERATION:, Anterior cervical discectomy C4-C5 arthrodesis with 8 mm lordotic ACF spacer, corticocancellous, and stabilization with Synthes Vector plate and screws.,ESTIMATED BLOOD LOSS:, Less than 100 mL.,OPERATIVE PROCEDURE IN DETAIL: , After identification, the patient was taken to the operating room and placed in supine position. Following the induction of satisfactory general endotracheal anesthesia, the patient was prepared for surgery. A shoulder roll was placed between the scapula and the head was rested on a doughnut in a slightly extended position. A preoperative x-ray was obtained to identify the operative level and neck position. An incision was marked at the C4-C5 level on the right side. The incision was opened with #10 blade knife. Dissection was carried down through subcutaneous tissues using Bovie electrocautery. The platysma muscle was divided with the cautery and mobilized rostrally and caudally. The anterior border of sternocleidomastoid muscle was then dissected rostrally and caudally with sharp and blunt dissection. The avascular plane was then entered and dissection was carried bluntly down to the anterior cervical fascia. This was opened with scissors and dissected rostrally and caudally with the peanut dissectors. The operative level was confirmed with an intraoperative x-ray. The longus colli muscles were mobilized bilaterally using bipolar electrocautery and periosteal elevator.

The anterior longitudinal ligament was then taken down with the insulated Bovie electrocautery tip exposing the vertebral bodies of C4 and C5. Self-retaining retractor was placed in submuscular position, and distraction pins were placed in the vertebral bodies of C4 and C5, and distraction was instituted. We then incise the annulus of C4-C5 and a discectomy was now carried out using pituitary rongeurs and straight and angled curettes. Operating microscope was draped and brought into play. Dissection was carried down through the disc space to the posterior aspect of the disc space removing the disc with the angled curette as we went. We now use the diamond bit to thin the posterior bone spurs and osteophytes at the uncovertebral joints bilaterally. Bone was then removed with 2 mm Kerrison punch and then we were able to traverse the posterior longitudinal ligament and this ligament was now removed in a piecemeal fashion with a 2 mm Kerrison punch. There was a transligamentous disc herniation, which was removed during this process. We then carried out bilateral foraminotomies with removal of the uncovertebral osteophytes until the foramina were widely patent. Cord was seen to be pulsating freely behind the dura. There appeared to be no complications and the decompression appeared adequate. We now used a cutting bit to prepare the inner space for arthrodesis fashioning a posterior ledge on the posterior aspect of the C5 vertebral body. An 8 mm lordotic trial was used and appeared perfect. We then used a corticocancellous 8 mm lordotic graft. This was tapped into position. Distraction was released, appeared to be in excellent position. We then

positioned an 18 mm Vector plate over the inner space. Intraoperative x-ray was obtained with the stay screw in place; plates appeared to be in excellent position. We then use a 14 mm self-tapping variable angle screws in each of the four locations drilling 14 mm pilot holes at each location prior to screw insertion. All of the screws locked to the plate and this was confirmed on visual inspection. Intraoperative x-ray was again obtained. Construct appeared satisfactory. Attention was then directed to closure. The wound was copiously irrigated. All of the self-retaining retractors were removed. Bleeding points were controlled with bone wax and bipolar electrocautery. The platysma layer was now closed with interrupted 3-0 Vicryl sutures. The skin was closed with running 3-0 Vicryl subcuticular stitch. Steri-Strips were applied. A sterile bandage was applied. All sponge, needle, and cottonoid counts were reported as correct. The patient tolerated the procedure well. He was subsequently extubated in the operating room and transferred to PACU in satisfactory condition.