

Previous multilevel ACDF patient with ongoing symptoms treated with posterior instrumentation and posterolateral application of nanocrystalline hydroxyapatite (NanoBone® Bone Graft)

*Vikram Udani, MD
San Diego, CA*

Preoperative

Patient is an 80-year-old sedentary male with a previous multilevel anterior cervical discectomy and fusion (ACDF) with continued degenerative disc disease (DDD) and spinal stenosis from C3-T1.

Surgical Procedure

The patient underwent posterior cervical fusion from C3-T1 with posterior instrumentation, pedicle screws and rods. The patient had 30ml of NanoBone QD Bone Graft delivered directly into the lateral gutters. Posterolateral gutter fusion surgery is the gold standard surgical approach to achieve spinal fusion involving the placement of bone graft in the posterolateral portion of the spine.

Postoperative Course

At 5-months following surgery, VAS neck and arm/shoulder pain decreased from 9.0 to 0. The NDI score improved from 54 to 25 with an Odom rating of Excellent. Postoperative radiography demonstrates intact hardware, well-positioned with a solid fusion mass present in the lateral gutters. The patient is able to undergo light-intensity activities and has been able to decrease narcotics use.



Preoperative lateral X-ray demonstrating prior fusion



5-month Postoperative X-ray demonstrating fusion