



CASE STUDY



SPINE

C3-C6 Anterior Cervical Fusion

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History

A 78 year old woman was seen for a long history of axial neck pain and numb, clumsy hands. Workup revealed cervical stenosis at C3-4, C4-5 and C5-6 (Figure 1). She underwent and ultimately failed conservative management. Surgical intervention was requested by the patient.

Surgical Procedure

The patient was first placed in the supine position. After prep and an incision were made, blunt dissection was used to access the anterior cervical spine. Once C3-C6 was exposed, retractors were placed. Starting at C3-4, a discectomy was carried out. Very large osteophytes were drilled down and resected. Generous foraminotomies were performed. The cartilaginous endplates were removed and the bony endplates were roughened, down to bleeding bone. A 6mm, 8-degree lordotic Globus® PEEK cage was filled with an 8mm Bacterin OsteoSponge® block and placed in the disc space. Next, under distraction at C4-5, a discectomy was carried out after incision of the annulus. Posterior osteophytes were taken down and generous foraminotomies were again performed. The endplates were prepared and taken down to bleeding bone. A 7mm, 8-degree lordotic Globus® PEEK cage was filled with a 10mm Bacterin OsteoSponge® block and placed in the disc space. Under distraction, C5-6 anterior cervical discectomy was carried out. Again, the posterior osteophytes, which were quite pronounced, were drilled down and the PLL was opened. It was resected along with more posterior osteophytes. Thorough foraminotomies were performed. The endplates were prepared and taken down to bleeding bone. At this level, a 6mm footprint 8-degree lordotic Globus PEEK cage was filled with an 8mm Bacterin OsteoSponge® block and placed in the disk space. After further preparation, a Globus plate was contoured and put into place. After closure, the patient was transferred to post-op and recovered in satisfactory condition.

Post-Operative Course

Post-operative examination occurred on 06/16/2012, approximately 1.5 months after surgery. The patient states that she is feeling much better. She is swallowing without difficulty and the muscle tightness has subsided. She is doing physical therapy for her neck, is very satisfied with her current status, and claims to be much better than her pre-operative condition. After completion of physical therapy, she will complete HEP. Follow-up images show intact hardware, good alignment, and early arthrodesis (Figure 2).

Discussion/Results/Conclusion

Prior to being educated on the benefits of OsteoSponge®, the author was using and trialing other allografts. Fusion at the arthrodesis site had not been observed post-operatively as early with other products as it has been seen with OsteoSponge®. Several other cases which utilized OsteoSponge® have confirmed this observation, and OsteoSponge® has become the author's allograft of choice for spine fusions.



Figure 1
Pre-operative x-ray



Figure 2
Post-operative x-ray

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