



Anterior Cervical Discectomy and Fusion with H-GENIN™ DBM Putty



Figure 1
Preoperative.



Figure 2
5 Months Postoperative.



Figure 3
18 Months Postoperative: stable C4-C7 fusion.



Figure 4
36 Months Postoperative: stable cervical fusion.

Case Study H1

History

A 45-year-old female with rheumatic heart disease history presented with left sided neck pain radiating to arm and forearm, electric pain, and severe headaches (see Fig. 1 PreOp).

Treatment

Given the progressive nature of the symptoms and the failure of physical therapy and treatment of epidural steroids, the patient underwent C5 corpectomy and C4-C7 anterior cervical discectomy and fusion (ACDF) with H-GENIN DBM putty and bone marrow aspirate (see Fig. 2 PostOp).

Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained at regular intervals, which demonstrated stable cervical fusion, with no evidence of hardware failure (see Figs. 3 and 4 at 18 and 36 months, respectively). Three years after surgery, the symptoms are resolved and the patient's neck pain has substantially decreased.



Figure 1
Preoperative.



Figure 2
2 Weeks Postoperative.

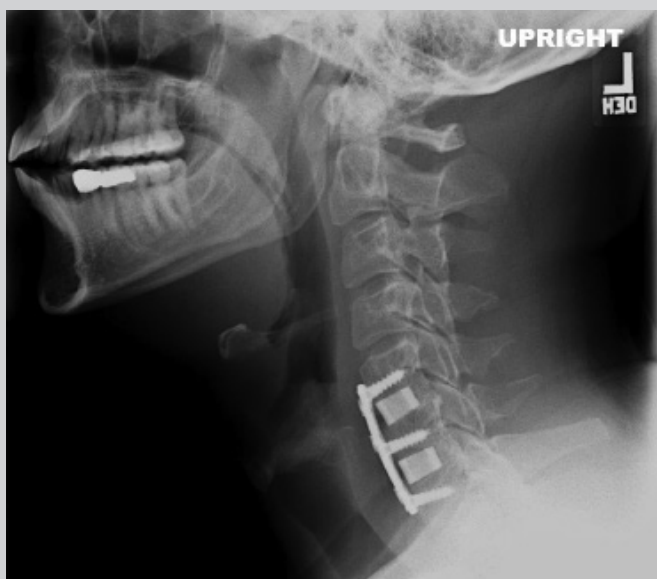


Figure 3
12 Months Postoperative: stable C5-C7 fusion.

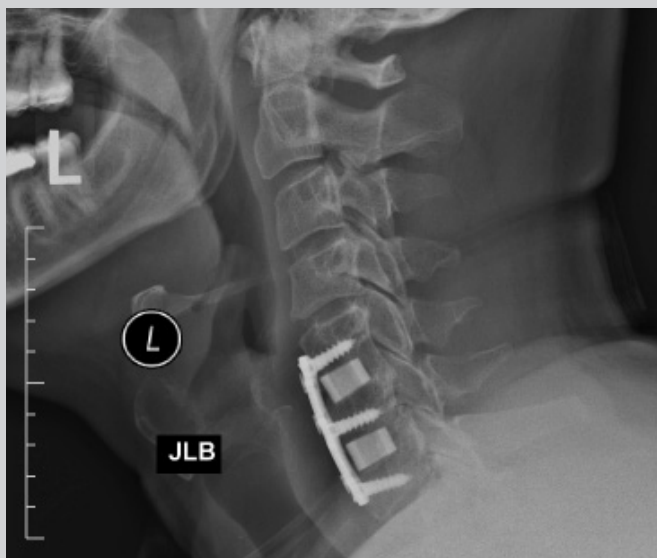


Figure 4
36 Months Postoperative: stable cervical fusion.

Case Study H2

History

A 41-year-old male presented with 15 years of chronic neck pain, following a high speed motor vehicle accident with T-bone mechanism of impact. The patient suffered from neck tightness, axial pain, with minimal radiating arm pain (see Fig. 1 PreOp).

Treatment

Given the nature of the symptoms and the failure of physical therapy, chiropractic treatment and epidural steroid injections, the patient underwent C5-C7 anterior cervical discectomy and fusion (ACDF) with H-GENIN DBM putty and bone marrow aspirate (see Fig. 2 PostOp).

Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained at regular intervals, which demonstrated stable fusion, with no evidence of hardware failure (see Figs. 3 and 4 at 12 and 36 months, respectively). Three years after surgery, symptoms have substantially been relieved and the patient is able to resume normal physical activities.



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Treatment of Lumbar Spondylosis with H-GENIN™ DBM Putty

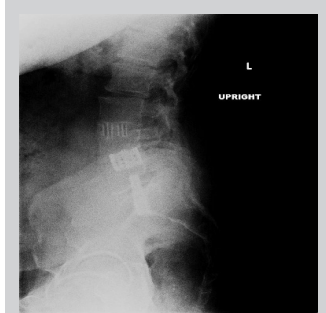


Figure 1
Preoperative.

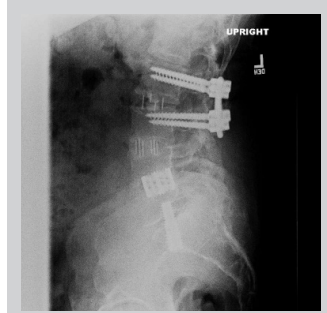


Figure 2
2 Weeks Postoperative.

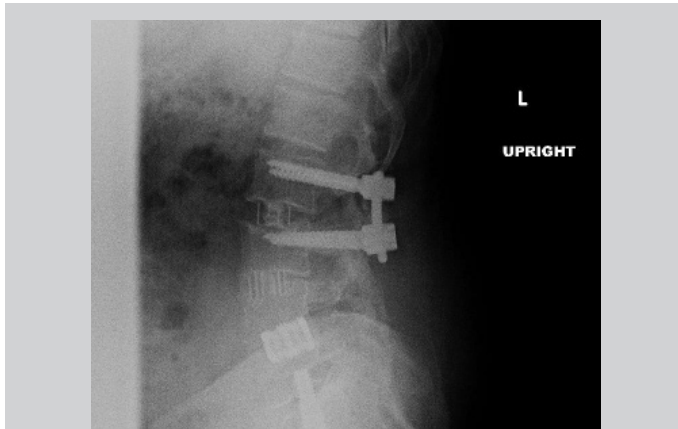


Figure 3
9 Months Postoperative: stable L2-L3 fusion.



Figure 4
36 Months Postoperative: stable lumbar fusion.

Case Study H3

History

A 58-year-old male presented with multiple prior lumbar surgeries with adjacent level breakdown / spondylosis at L2-L3 (see Fig. 1 PreOp).

Treatment

Given the progressive nature of the symptoms and the x-ray findings, the patient underwent L2-L3 fusion with H-GENIN DBM putty and bone marrow aspirate (see Fig. 2 PostOp).

Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained and demonstrated stable fusion, with no evidence of hardware failure, posterolaterally (see Figs. 3 and 4). At 9 months, the implanted area was already fused. Three year after surgery, the patient is ambulating without difficulty. Back pain has decreased substantially and normal motor activity has been restored.



Figure 1
Preoperative.

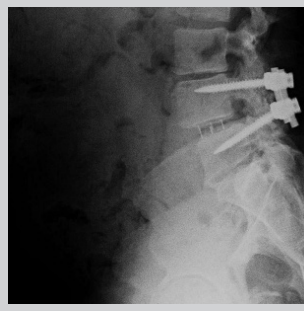


Figure 2
2 Weeks Postoperative.



Figure 3
3 Months Postoperative: stable L4-L5 fusion.

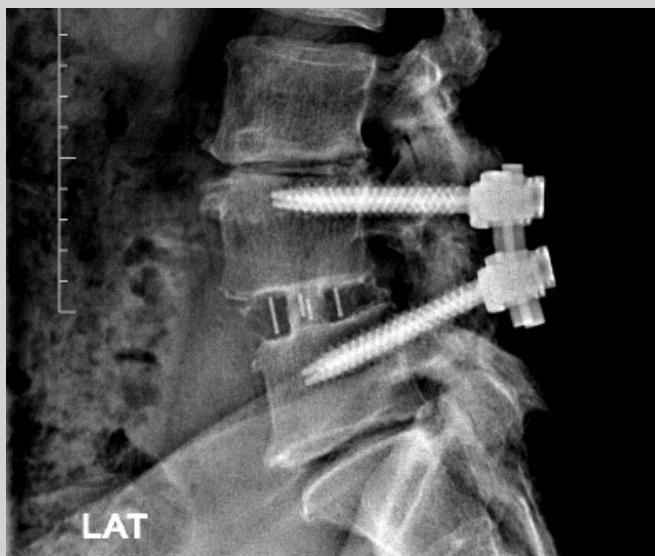


Figure 4
32 Months Postoperative: stable lumbar fusion.

Case Study H4

History

A 51-year-old male presented with lower back pain radiating to anterior thigh, sparing leg and foot (see Fig. 1 PreOp). Crampy pain was chronic for 15 years, with worsening intensity over the last several months.

Treatment

Given the progressive nature of the symptoms and the failure of physical therapy and epidural steroid injections, the patient underwent L4-L5 fusion with H-GENIN DBM putty and bone marrow aspirate (see Fig. 2 PostOp).

Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained at regular intervals, which demonstrated progressively stable fusion, with no evidence of hardware failure, posterolaterally (see Figs. 3 and 4). Three years after surgery, the patient has resumed normal physical activity and back pain has decreased substantially.



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Figure 1
Preoperative.

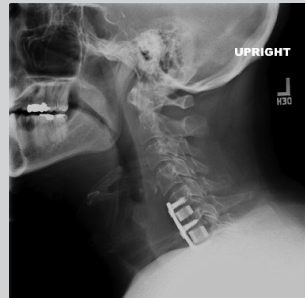


Figure 2
5 Months Postoperative.

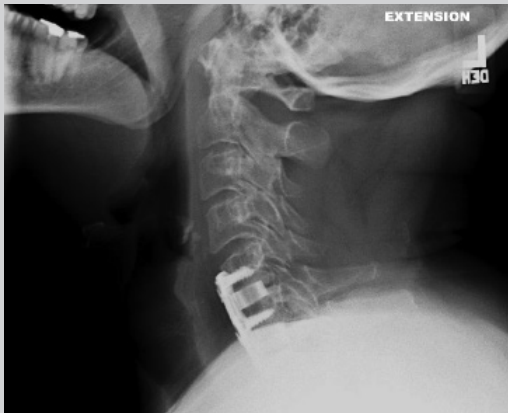


Figure 3
6 Months Postoperative: stable C5-C7 fusion.

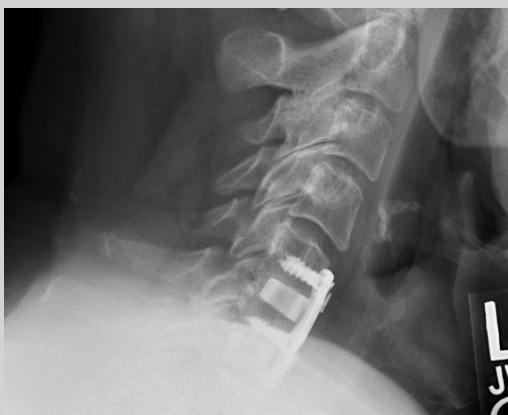


Figure 4
27 Months Postoperative: stable cervical fusion.

Case Study H5

History

A 57-year-old male presented with steadily increasing neck pain, trapezial numbness and pain, and severe headaches (see Fig. 1 PreOp).

Treatment

Given the progressive nature of the symptoms and the failure of physical therapy and epidural steroid injections, the patient underwent C5-C7 anterior cervical discectomy and fusion (ACDF) with H-GENIN DBM putty and bone marrow aspirate (see Fig. 2 PostOp).

Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained at regular intervals, which demonstrated stable fusion, with no evidence of hardware failure, posterolaterally (see Figs. 3 and 4). More than two years after surgery, the patient's neck pain has substantially decreased and the implanted cervical area is fused.



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