## CASE STUDIES

EARLY GROWTH IN POSTEROLATERAL SPINE FUSION WITH THE USE OF DEMINERALIZED BONE MATRIX (DBM)

## History

A 42-year-old woman presented with a history of severe intractable low back pain and lumbar radiculopathy. MRI demonstrated L4-L5 significant degenerative disc disease with disc space collapse, foraminal stenosis and grade I spondylolisthesis.

## **Treatment**

After failure of conservative treatments, the patient underwent bilateral L4-L5 posterior lumbar interbody fusion and posterolateral fusion, supplemented with L4-L5 posterior instrumentation with pedicle screws. The posterolateral fusion was performed using a total of 30cc of DBM granules (150µm to 800µm) soaked in autologous bone marrow aspirated from the patient's iliac crest.

## Postoperative Results and Outcome

The postoperative course was uneventful. Neither generalized nor local adverse reactions were observed postoperatively. Follow-up radiographs were obtained at six months after the surgery. The AP X-rays demonstrated clear evidence of early bilateral posterior lateral fusion (Fig. 1). Further follow-up evaluation is planned.



Figure 1. 6 Months
Postoperative: bilateral
fusion mass is clearly visible
in the posterior lateral
regions on AP views.