

SIX MONTH RADIOGRAPHIC OUTCOMES ON 40 CONSECUTIVE INTERFUSE[®] UPLIF[®] CASES

ABSTRACT:

The first forty (40) patients implanted with the InterFuse UPLIF Interbody Fusion System by five (5) surgeons were followed for six months post-op. Radiographic evaluations of CT scans and flexion/extension radiographs were performed by an independent Board-certified radiologist with experience in assessing spinal fusion.

At six months following surgery, all forty patients were found to be fused. There were no incidents of implant subsidence or migration and there was no breakage of the implant or the posterior fixation systems used in conjunction with the UPLIF Implant.

PURPOSE / SCOPE:

The purpose of this radiographic review was to gather information regarding the early clinical performance of the InterFuse UPLIF Interbody Fusion Implant from five surgeons who were early adopters of the System. These patients were not selected and represent the first forty InterFuse Implant cases at these centers that completed the six month post operative follow up, including radiographic studies.

EXPERIMENTAL:

Anonymized CT scans and flexion/extension radiographs were collected from five surgeons and sent to a Board-certified radiologist specializing in the assessment of spinal fusion.

DATA:

In addition to the radiographic images, patient demographic data and data about the surgical procedure and patient recovery were collected but are not reported here. The type of bone graft material used in the InterFuse Implant was not controlled and varied among surgeons.

RESULTS:

6 MONTH RADIOGRAPHIC OUTCOMES ON 40 CONSECUTIVE INTERFUSE UPLIF CASES

	FUSION	SUBSIDENCE	MIGRATION	HARDWARE LOOSENING
	# Patients Fused/ # Patients	# Patients Fused/ # Patients	# Patients Fused/ # Patients	# Patients Fused/ # Patients
Surgeon A	8/8	0/8	0/8	0/8
Surgeon B	14/14	0/14	0/14	0/14
Surgeon C	1/1	0/1	0/1	0/1
Surgeon D	10/10	0/10	0/10	0/10
Surgeon E	7/7	0/7	0/7	0/7
TOTAL	40/40	0/40	0/40	0/40

BONE GRAFT TYPE

Bone Graft Type	
Autograft (iliac crest and /or local bone)	9
BMP (alone or in combination)	16
Allograft	4
DBM (with or without local bone)	4
Not reported	7
Total	40



CT scan of InterFuse Implant six months post-op showing abundant bone growth through the device.

CONCLUSIONS:

At six months post-op, all forty patients were evaluated as fused for a 100% success rate. There were no patients with evidence of implant subsidence or migration and no instances of hardware loosening. These results support the design rationale that the large implant footprint of the InterFuse UPLIF, when used in conjunction with posterior stabilization, provides a stable construct for bone in growth and spinal fusion. It also supports the proposition that the large footprint reduces the possibility of implant subsidence and migration. The large footprint appears to reduce loading on the posterior stabilizing implants, thereby reducing the possibility of hardware loosening. These results are consistent across the broad range of bone graft types.