



OUTPATIENT INSTRUMENTED ANTERIOR/POSTERIOR LUMBAR FUSION

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Purpose



- To demonstrate feasibility, safety, and early clinical results of minimally invasive circumferential lumbar fusions done at ambulatory surgery center.

Methods



- Retrospective chart review
- 24 patients with circumferential fusion using anterior interbody device filled with allograft and posterior pedicle screws from 7/09 to 7/10.
- Indications were discogenic back pain due to degenerative disc disease, with or without herniated disc, and leg pain.
- Outcomes:
 - Operative time,
 - Recovery time in ASC
 - Patient questionnaire

Procedure



- Percutaneous placement of both interbody device and pedicle screw system.
- Patients discharged from ASC to local hotel with visiting nurse visit that night (or to home if nearby), then clinic visit next day.

Results



- 10 females/14 males,
- Mean age 44.6 yrs (range: 31 – 61).
- Levels fused: one = 16, two = 6, three = 2
- Total 34 levels
- Mean EBL = 87ml (+/- 41),
- OR time = 117 min (+/- 50),
- Recovery time = 178 (+/- 56).
- Follow-up 3 to 12 mo.
- No nerve root injuries.
- One patient discharged to hospital for pain management.

Questionnaires



- N = 23 (1 patient not contacted)
 - much better = 6 (26%),
 - somewhat better = 15 (65%),
 - no better = 0,
 - worse = 2 (9%)

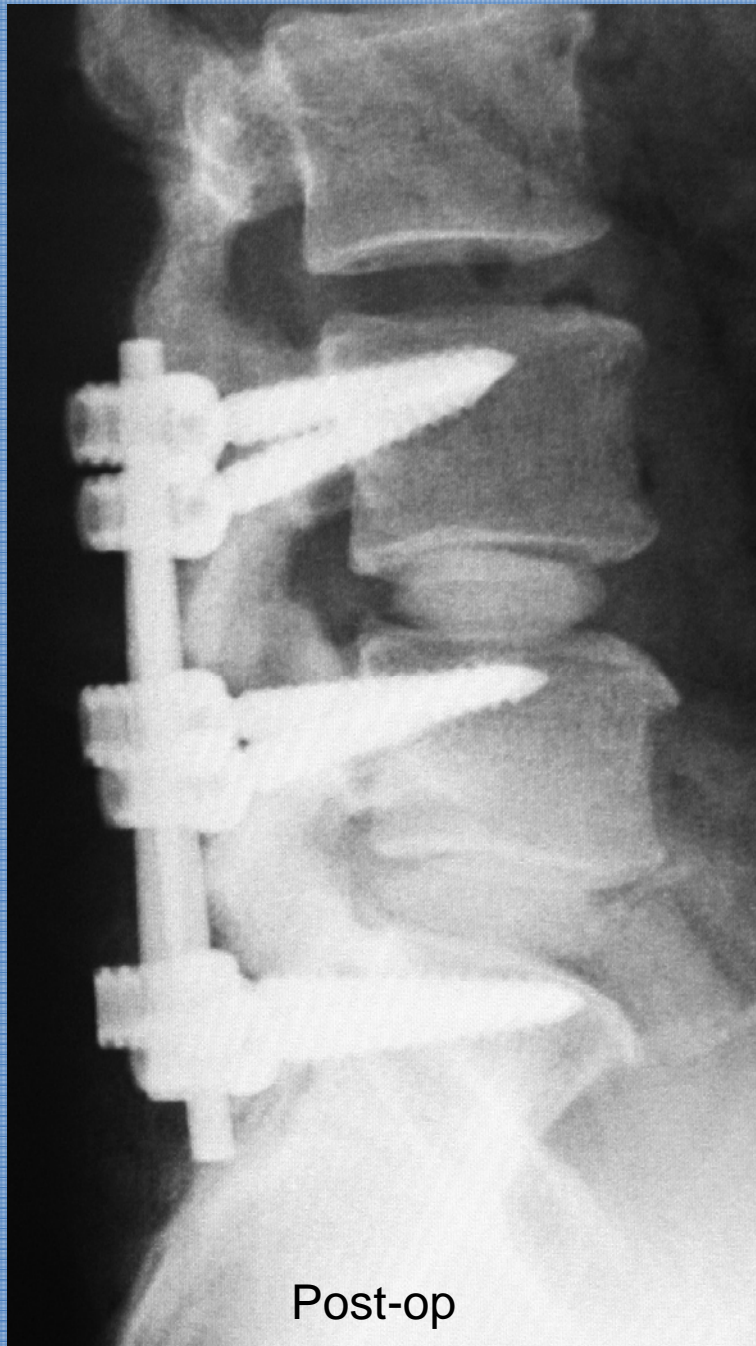
- 91% (21/23) would have the surgery again.

Case 1



- 45 y.o. female
- LDDD T11-12
- EBL: 100 cc
- OR time: 67 min
- Recovery time to D/C: 139 min
- Patient self-assessment: "better"

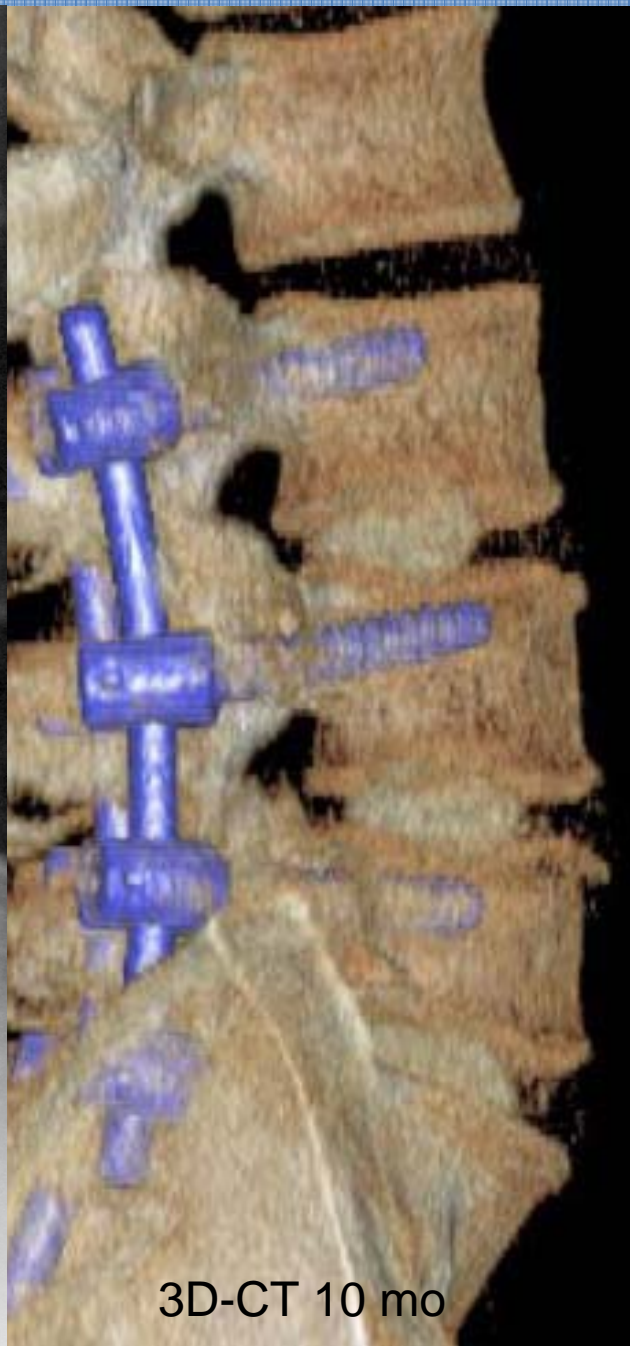
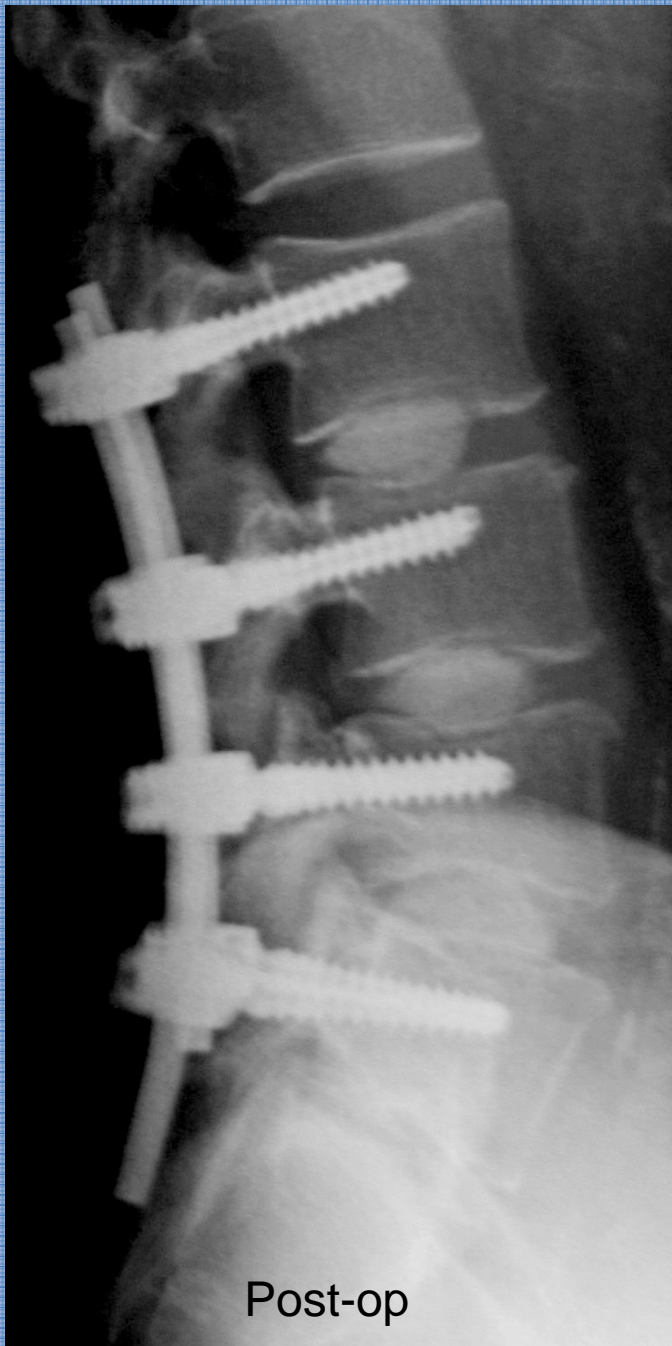
Case 2



- 45 y.o. male
- LDDDD L4-5/L5-S1
- EBL: 100 cc
- OR time: 62 min
- Recovery time to D/C: 130 min
- Patient self-assessment: “better”

Case 3

- 43 y.o. male
- LDDD L3-4/L4-5/L5-S1
- EBL: 150 cc
- OR time: 185 min
- Recovery time to D/C: 180 min
- Patient self-assessment: “much better”



Conclusions



- Anterior/posterior instrumented lumbar fusions can be done safely in an ASC with minimal complications, early ambulation and discharge, and high patient satisfaction.