

The Role of Interbody Devices in the Degenerative Spine

Anthony Bozzio MD

Clinical Assistant Professor

Michigan State University

College of Human Medicine

Spine Surgeon

Bay Street Orthopaedics & Spine



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Disclosures

Research funding and assistance from Globus Medical

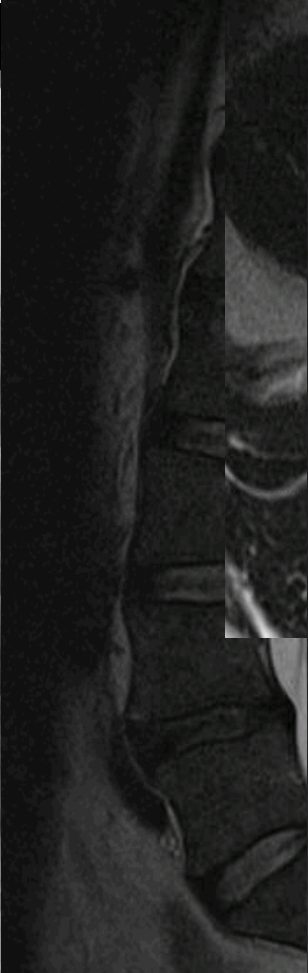
Research funding from Innovasis

Consultant for Carvature

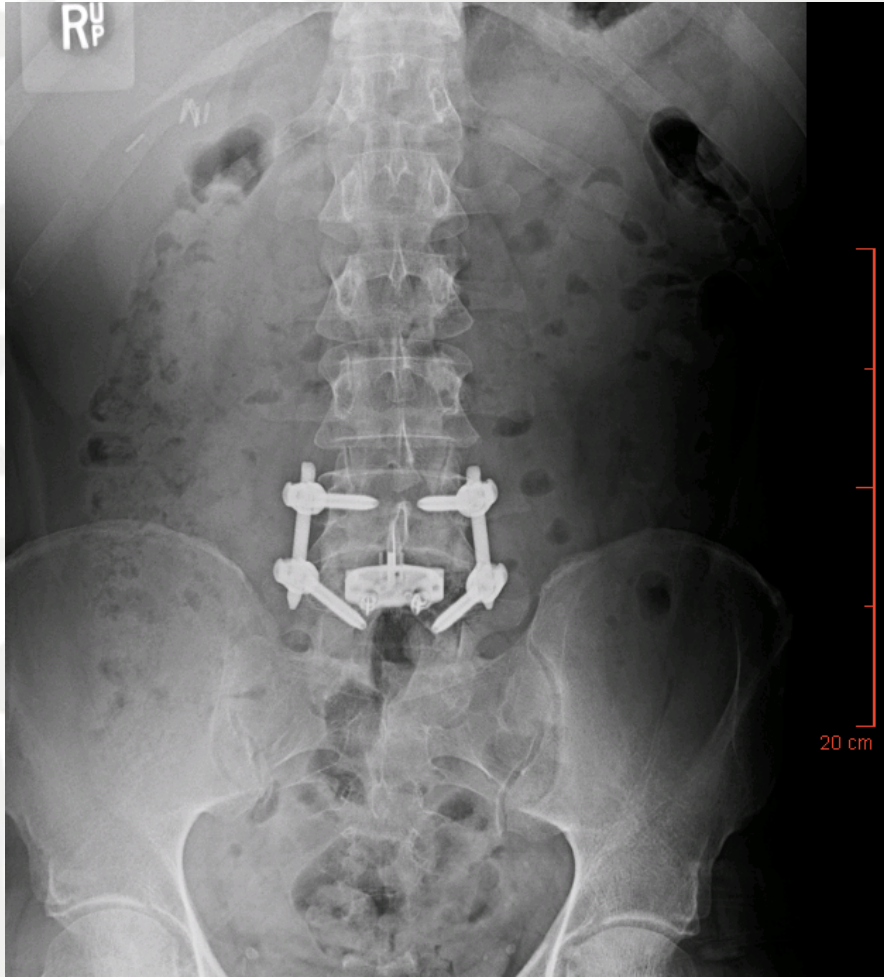


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Case 1



Case 1



6 weeks post op: VAS: 1.5 Back, 0 leg

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Background

Interbody devices placed through various approaches have been shown to improve fusion rate as compared to posterolateral fusion techniques alone.

Indicated for degenerative pathologies, trauma, deformity, tumor, infection.

Anterior, Oblique, Lateral, Transforaminal, Posterior are all options

Eck JC, Hodges S, Humphreys SC. Minimally invasive lumbar spinal fusion. *J Am Acad Orthop Surg* 2007;15:321-9.

Resnick DK, Choudhri TF, Dailey AT, et al. Guidelines for the performance of fusion procedures for degenerative disease of the lumbar spine. Part 7: intractable low-back pain without stenosis or spondylolisthesis. *J Neurosurg Spine* 2005;2:670-2.



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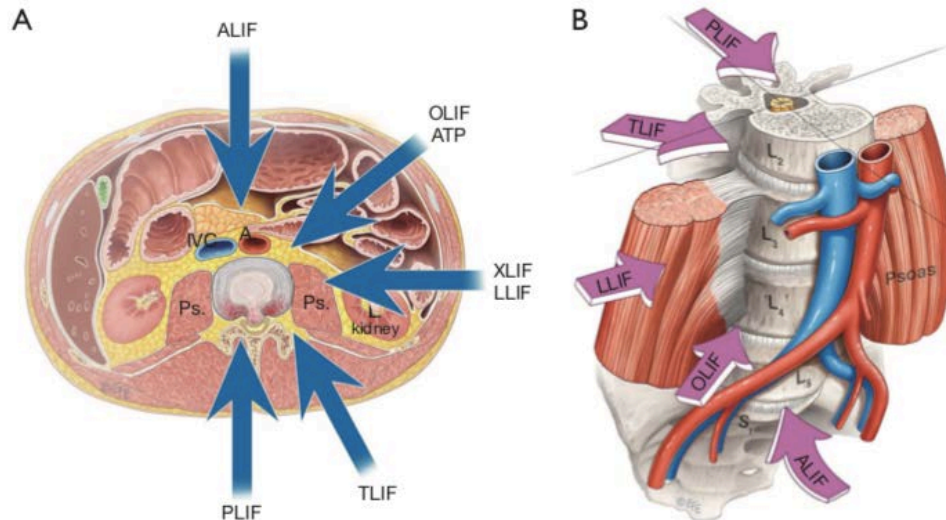
Background

Review Article

Lumbar interbody fusion: techniques, indications and comparison of interbody fusion options including PLIF, TLIF, MI-TLIF, OLIF/ATP, LLIF and ALIF

Ralph J. Mobbs^{1,2,3}, Kevin Phan^{1,2,3}, Greg Malham⁴, Kevin Seex⁵, Prashanth J. Rao^{1,2,3}

Mobbs et al. Lumbar interbody fusion techniques



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Role of Interbody Devices

Higher fusion rate

Indirect decompression

Sagittal correction

Correction of coronal deformity

Spondylolisthesis reduction



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History

Interbody fusion

- Developed from experience in 1880s with tuberculous abscesses
- First reports of anterior lumbar interbody fusion 1930s, Burns, Capener.
- Ito and Mercer 1930s, 1940s

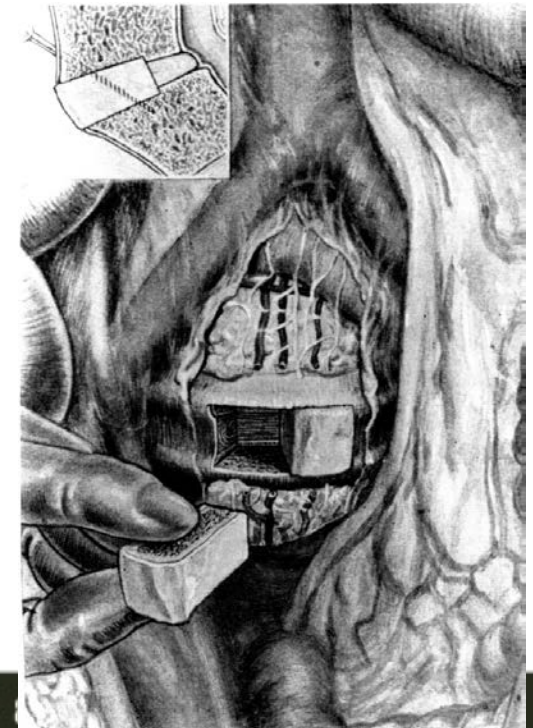
Lancet 1933;1:1233

An Operation for Spondylolisthesis.
Burns BH.

J Bone Joint Surg 1934;16:499-515
A new operation for Pott's disease.
Ito H et al.

Edinb Med J 1936;43:545-572
Spondylolisthesis.

Mercer W.



History

Interbody Fusion

- Watkins, Wiltse 1950s, 1960s posterolateral fusions
- Cloward 1953 PLIF with iliac crest, distraction of the disc space
- Harms and Rollinger TLIF 1982
- Lateral interbodies, transpoas surgery, MIS approach Ozgur 2006
- Axialif
- OLIF

* J Bone Joint Surg [Am] 1953;35:1014-9

+ J Bone Joint Surg [Am] 1968;50:919-26



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TLIF

TLIF/PLIF commonly performed



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Case 2

Study Date: 08/05/2019
Study Time: 10:27:17
MRN: 251348

Im: 1002

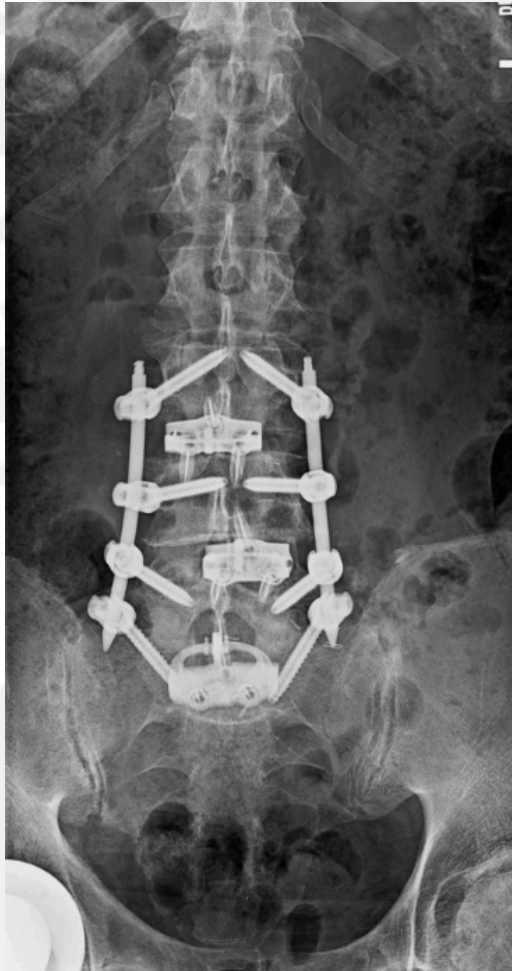
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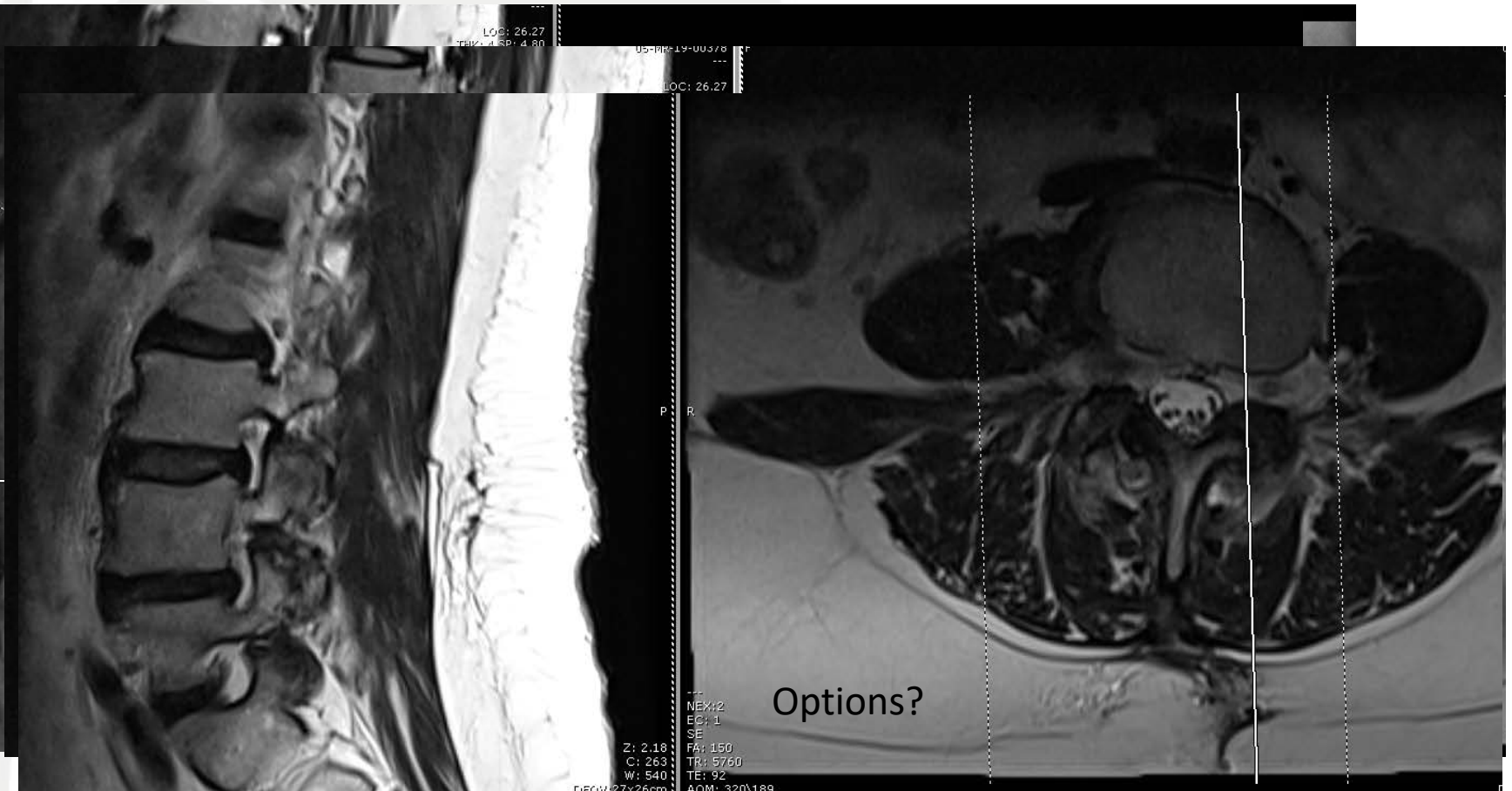
Options?

Case 2

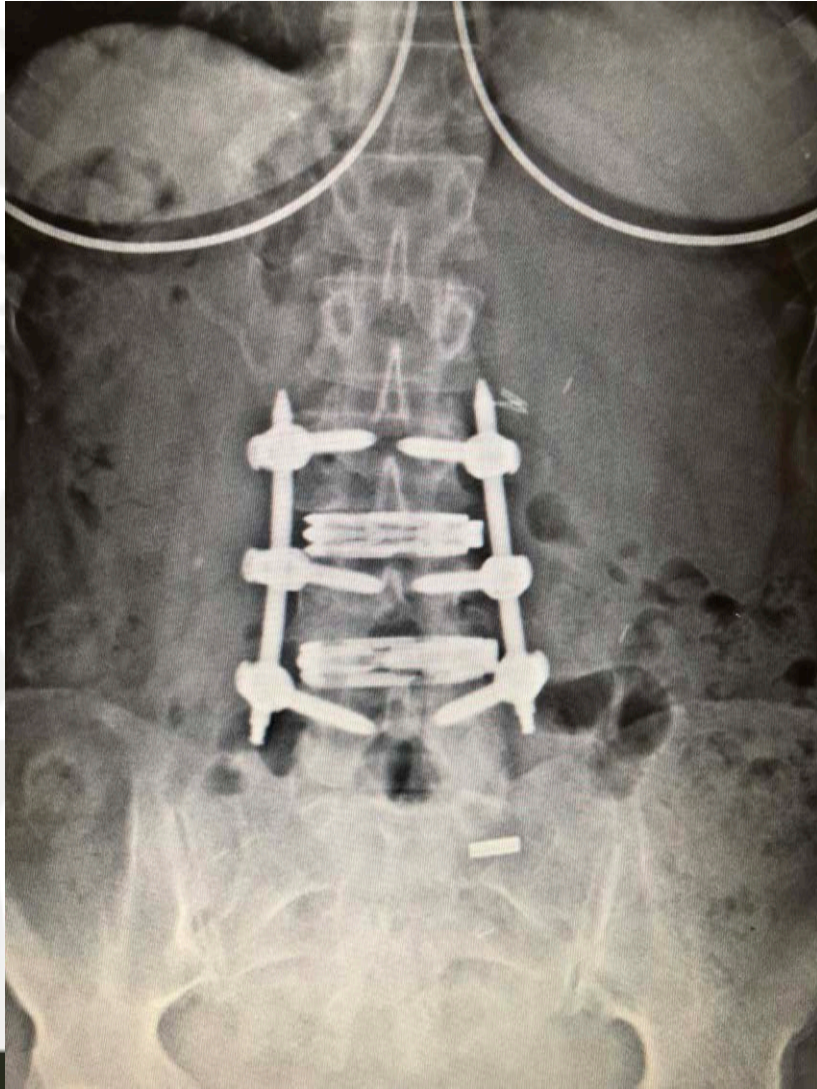


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Case 3



Case 3





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Thank You!

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