

# MIS Tubular Lateral Interbody Fusion with DualX LLIF - A novel lateral fusion procedure with minimal psoas disruption

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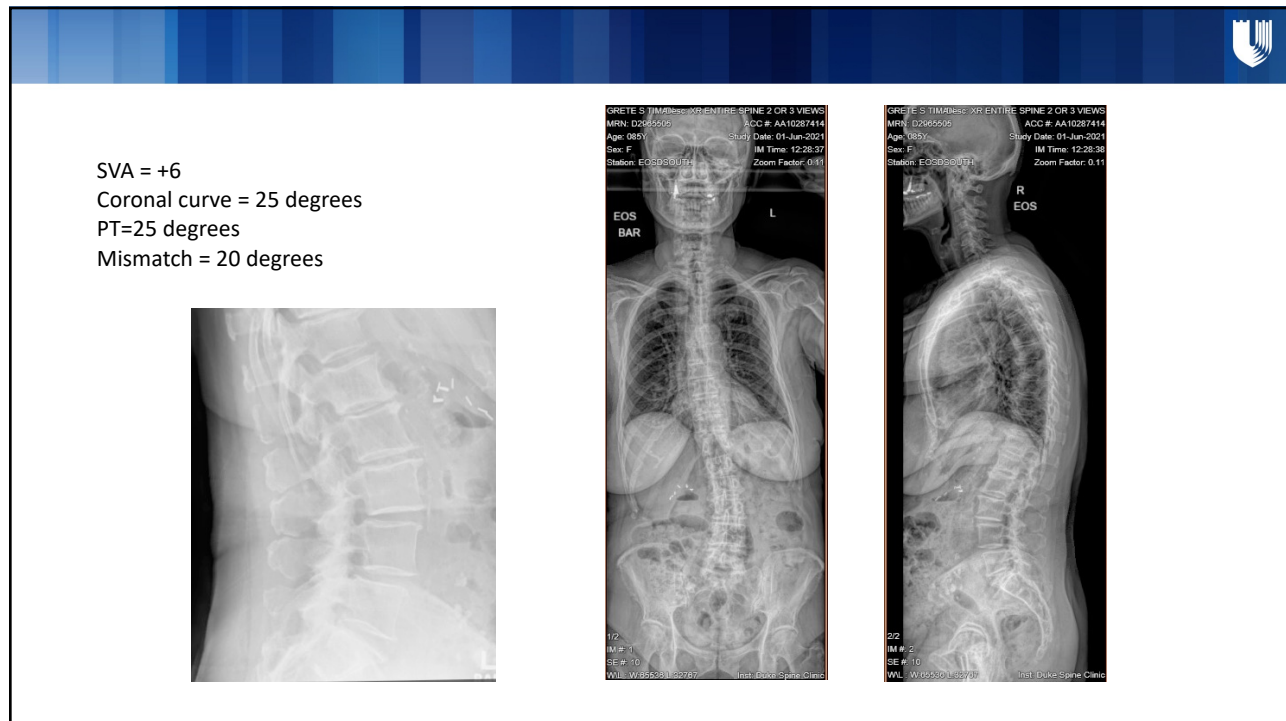


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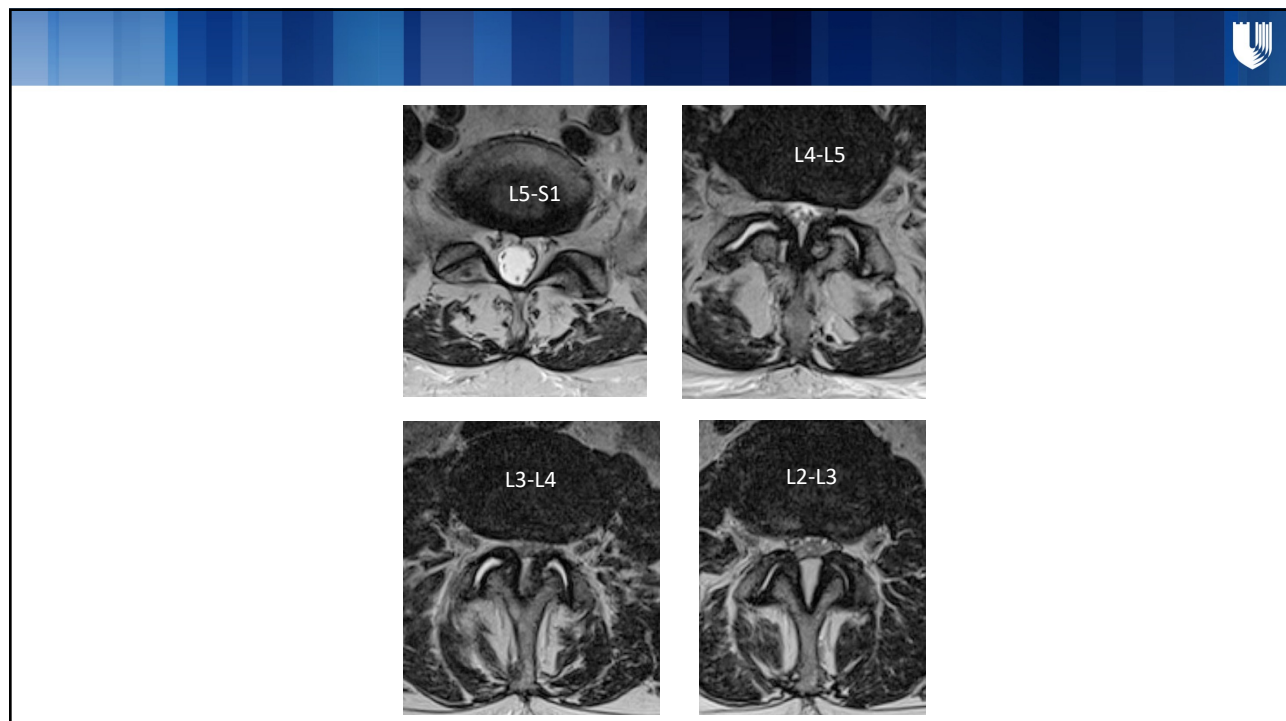


- 85yo female
- Extremely active 5+ mile walks daily
- 6-month rapid decline with increasing back pain and BLE pain and left sided thigh weakness.
- Can only exercise in a stationary bicycle.

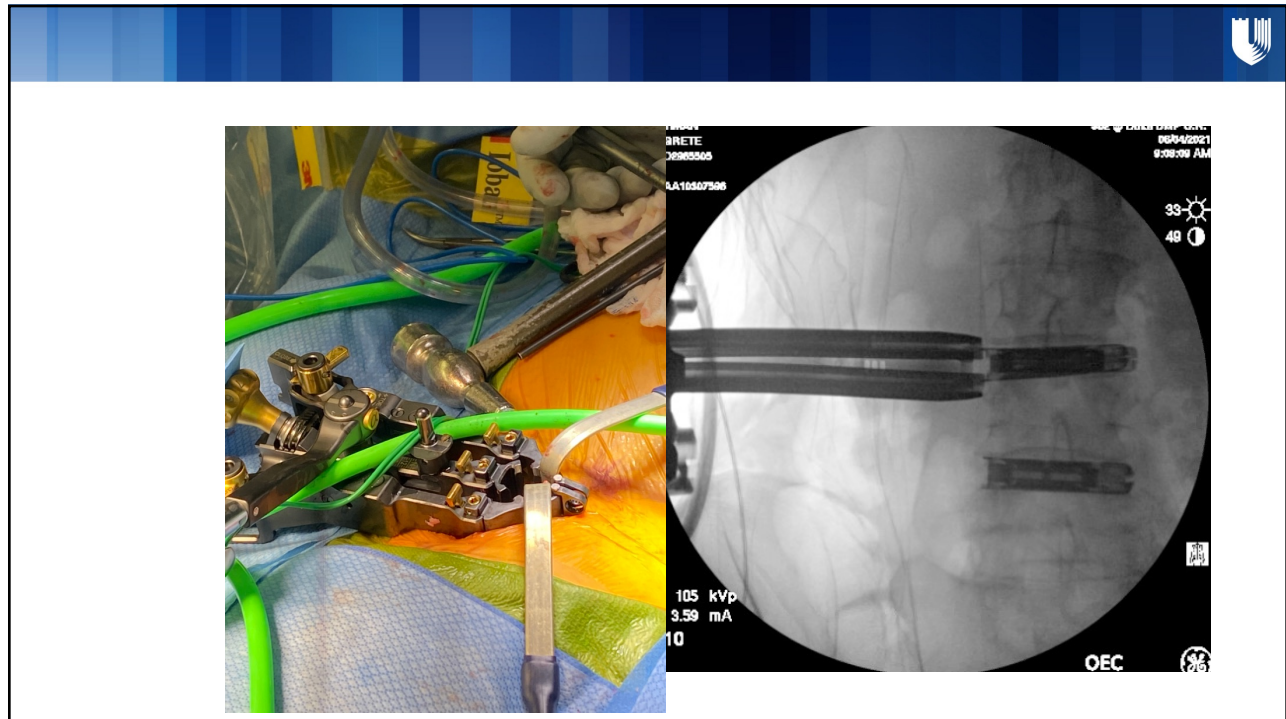
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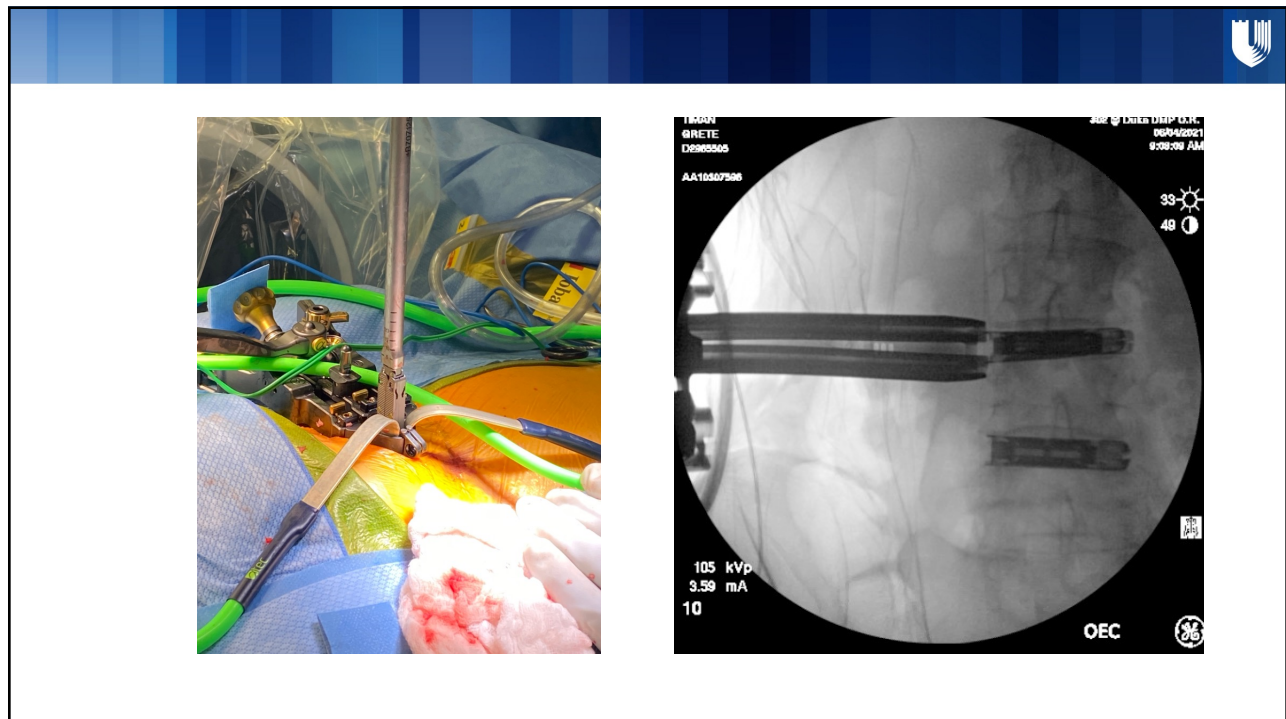
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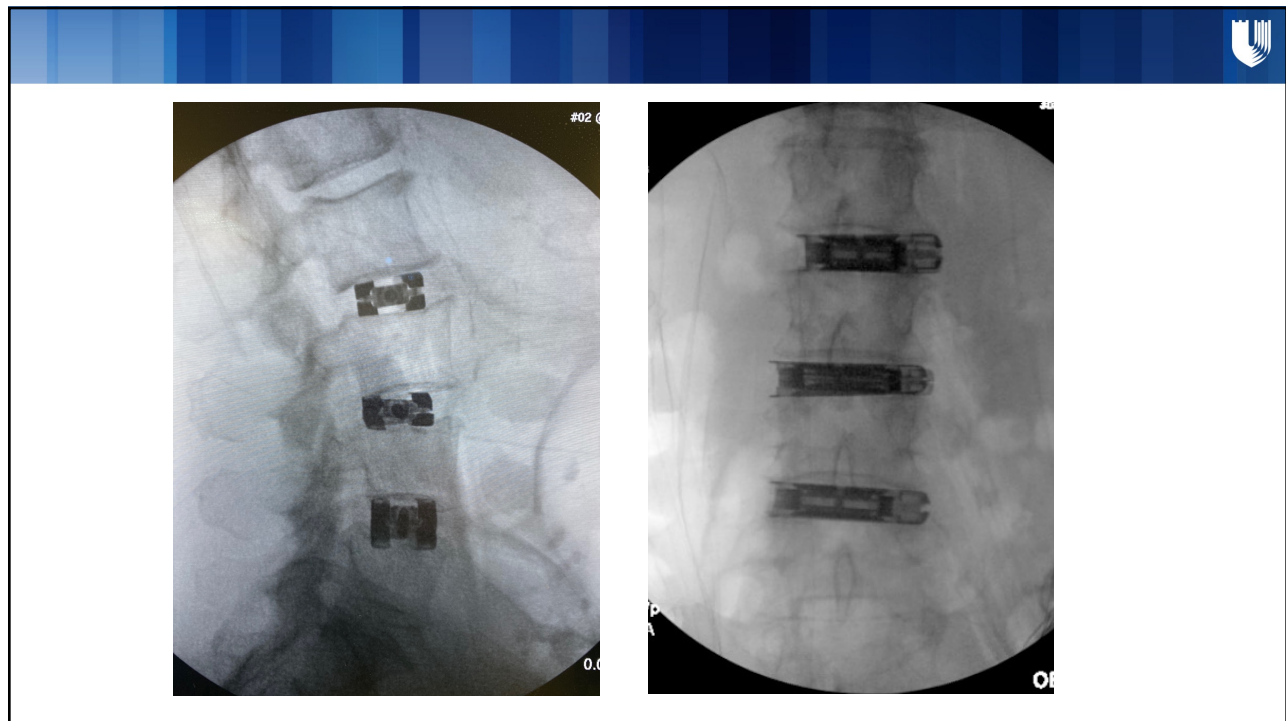
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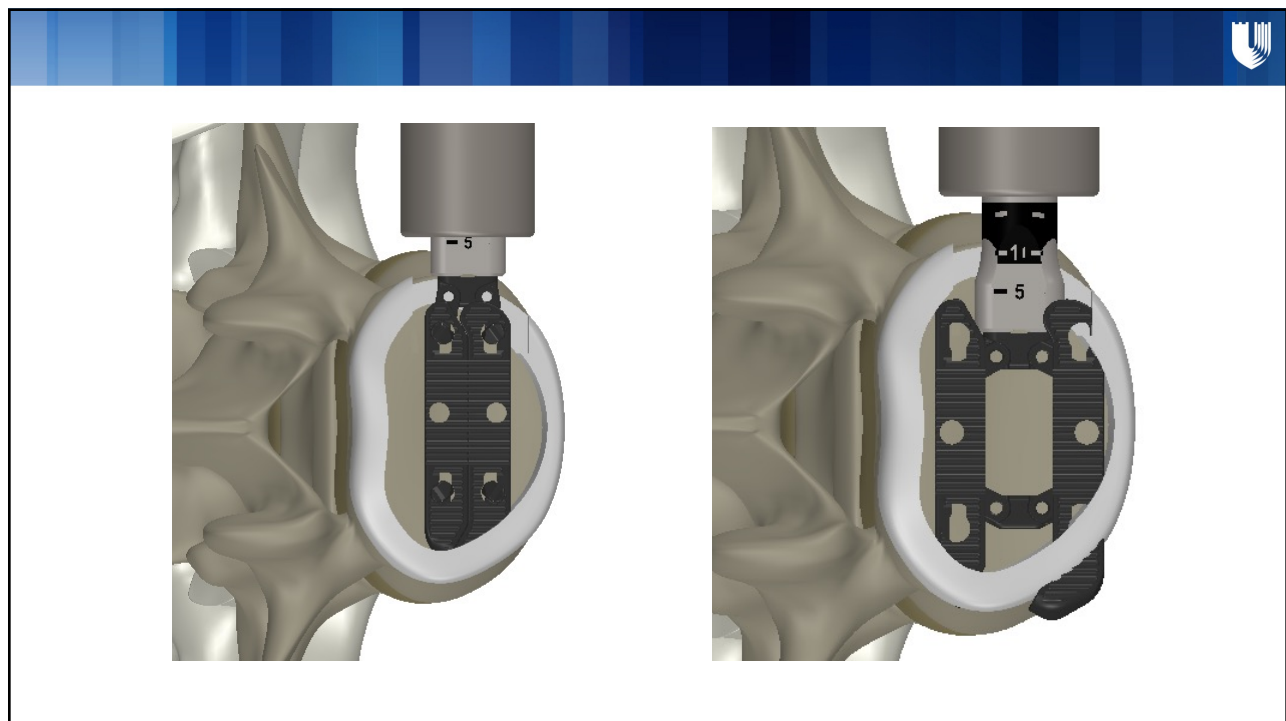
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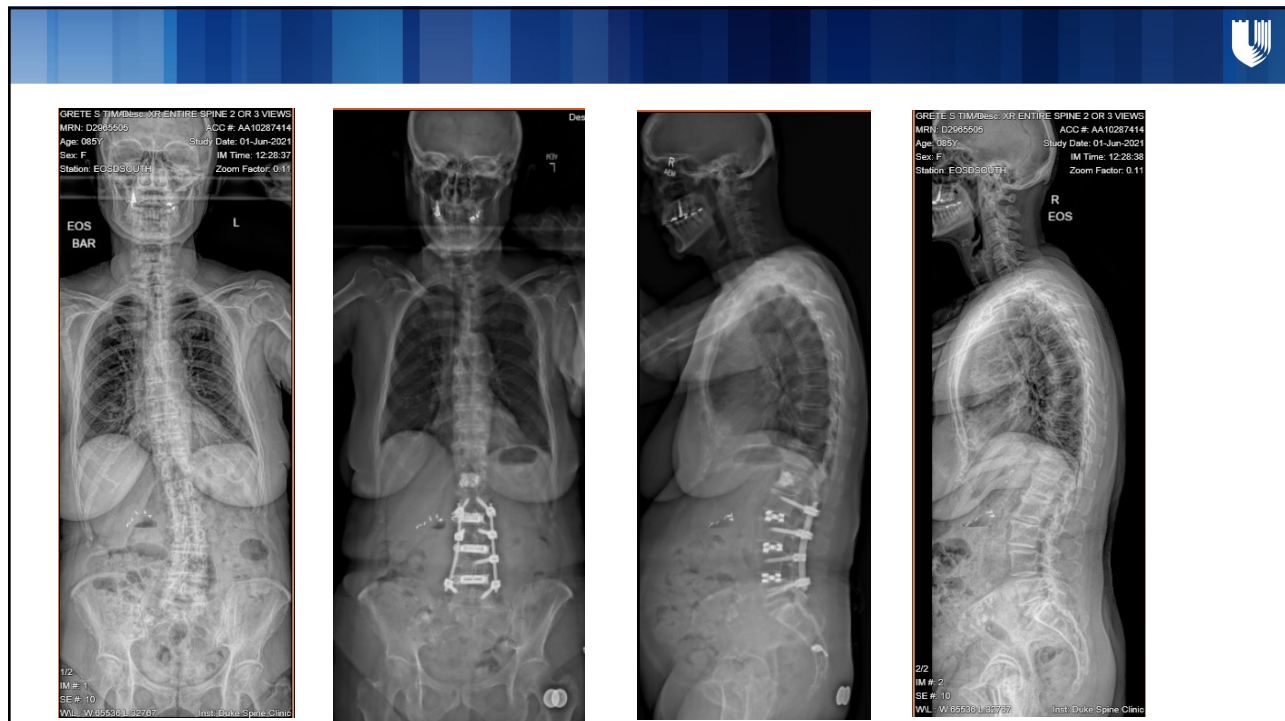
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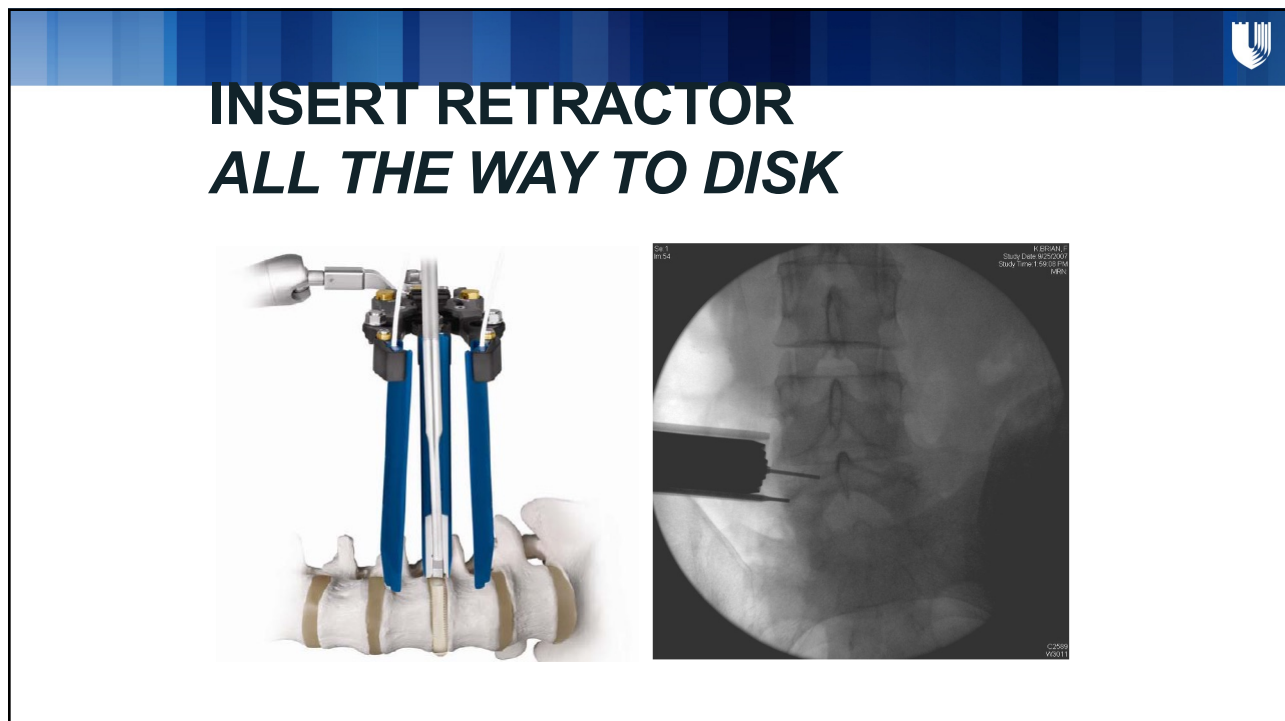
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LLIF

## BLADE ADJUSTMENT



### INDEPENDENT BLADE ADJUSTMENTS

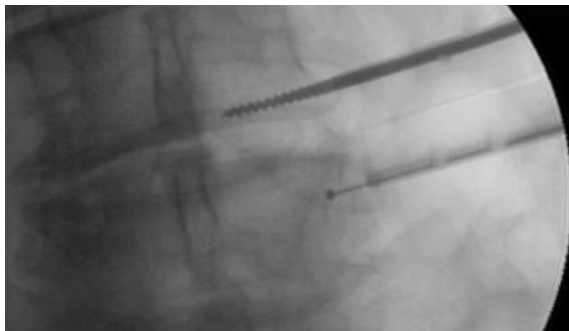
- Spread apart
- Tow in



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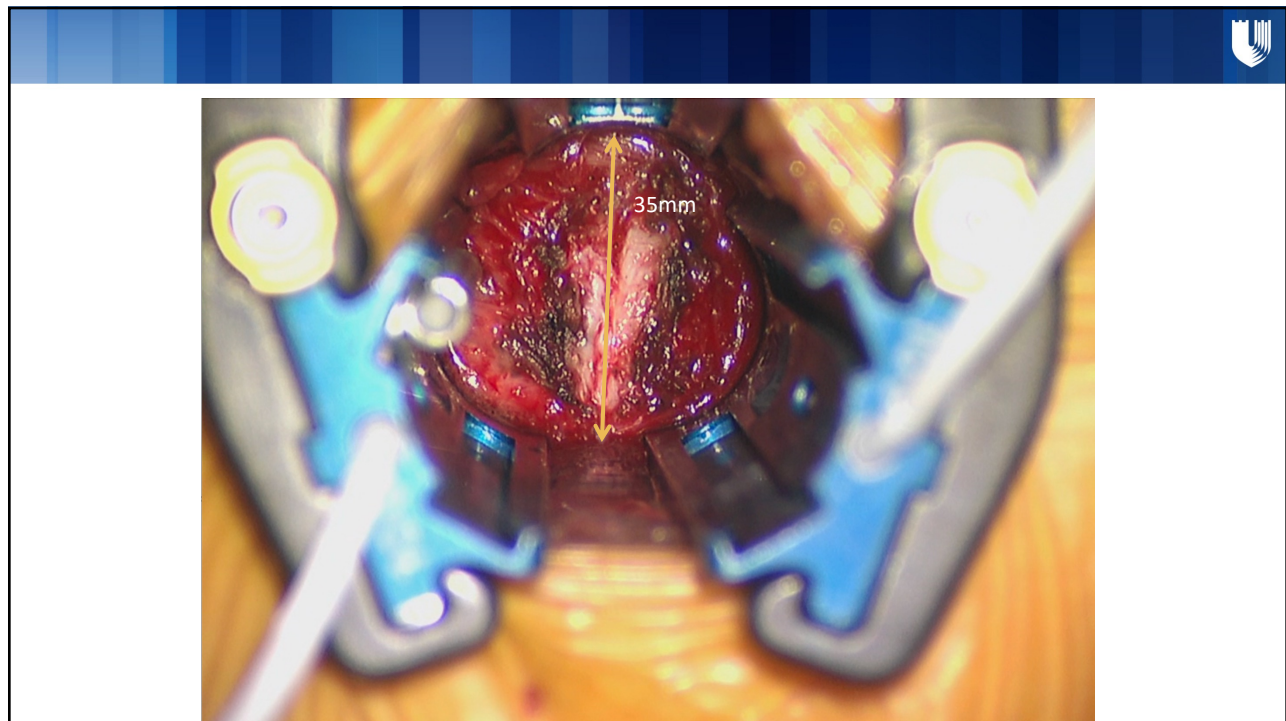


## Bone Screw Fixation



12





15

Trans-Psoas approach:

4.8% femoral nerve injury  
4.0% abdominal wall weakness

Motor nerve injuries following the minimally invasive lateral transpsoas approach. Cahill KS, Martinez JL, Wang MY, Vanni S, Levi AD. J Neurosurg Spine 17(3):227-231, 2012

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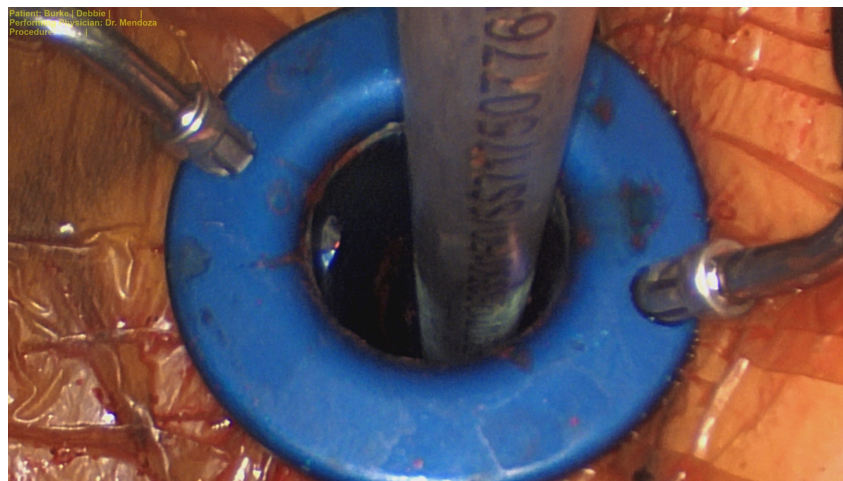


### Trans-psoas vs. ATP?

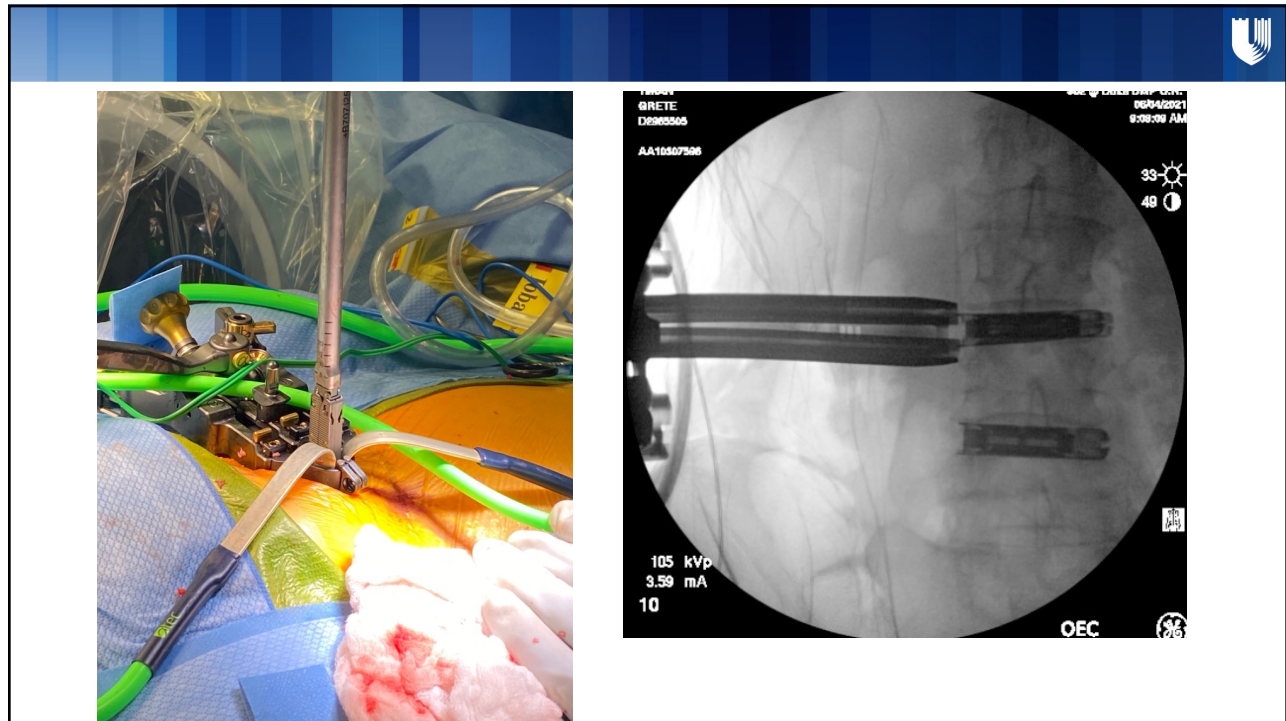
Complication	Trans-Psoas	ATP	p
Transient sensory deficit	21.7%	8.7%	0.002
Transient hip flexor weakness	19.7%	5.7%	<0.001
Permanent weakness	2.8%	1.0%	0.005
Sympathectomy	0%	5.4%	0.03
Major Vascular Injury	0.4%	1.8%	0.01
Infection	3.1%	1.1%	0.01
Bowel perf, ureter injury, ileus, hematoma			>0.05
Pseudoarthrosis	7.5%	9.9%	0.57
Subsidence	13.8%	12.2%	0.78

Complications for minimally invasive lateral interbody arthrodesis: a systematic review and meta-analysis comparing prepsoas and transpsoas approaches. [Corey T. Walker](#), [S. Harrison Farber](#), [Tyler S. Cole](#), [David S. Xu](#), [Jakub Godzik](#), [Alexander C. Whiting](#), [Cory Hartman](#), [Randall W. Porter](#), [Jay D. Turner](#) and [Juan Uribe](#). JNS Spine Jan 25: 1-15, 2019, E-Pub ahead of print.

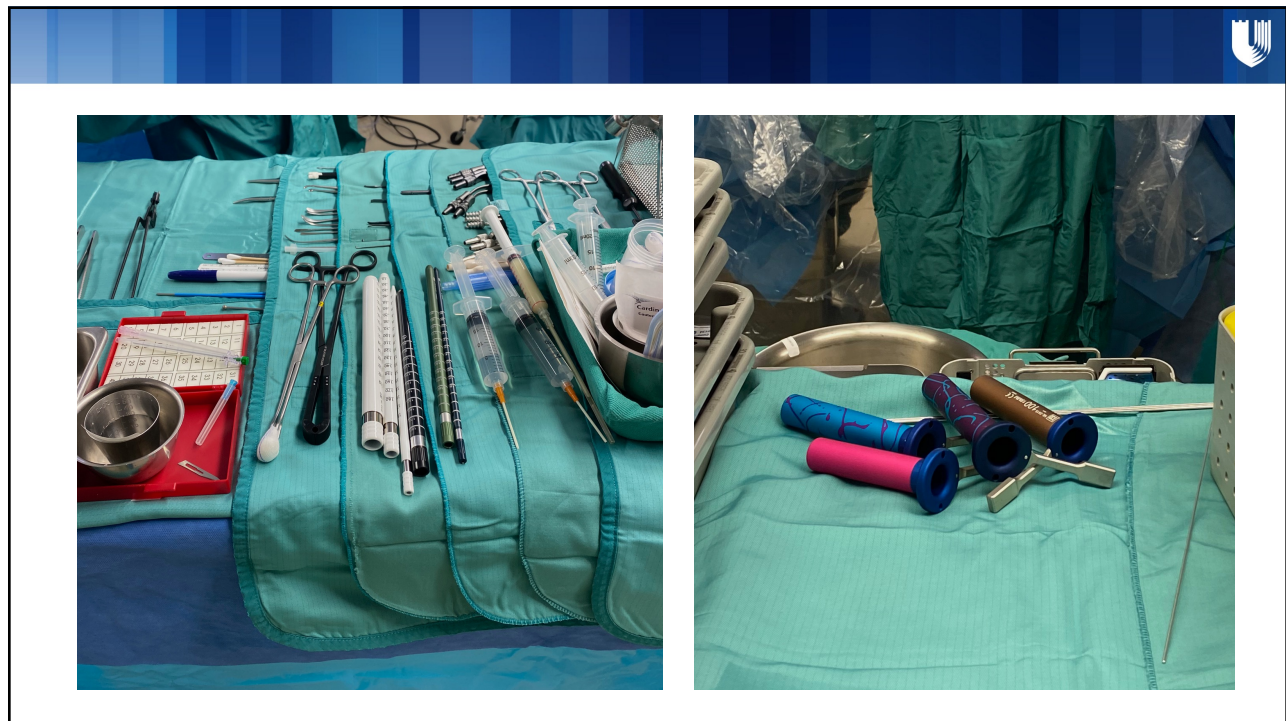
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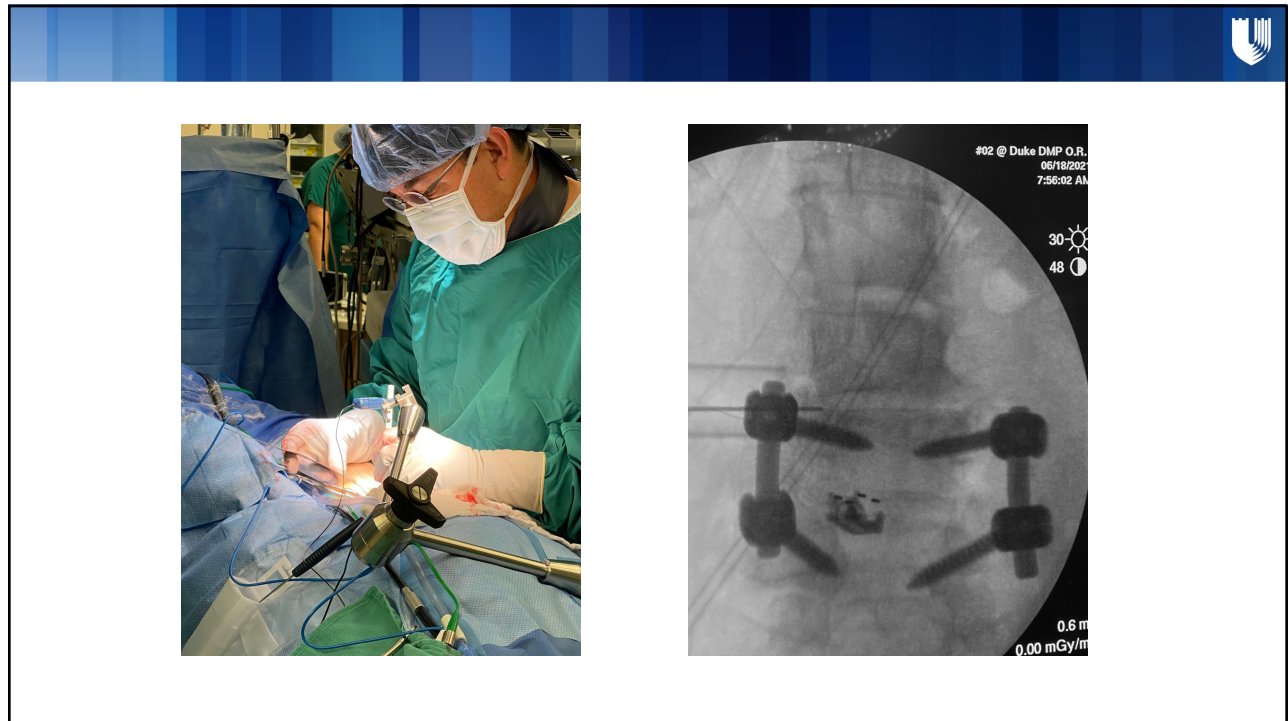
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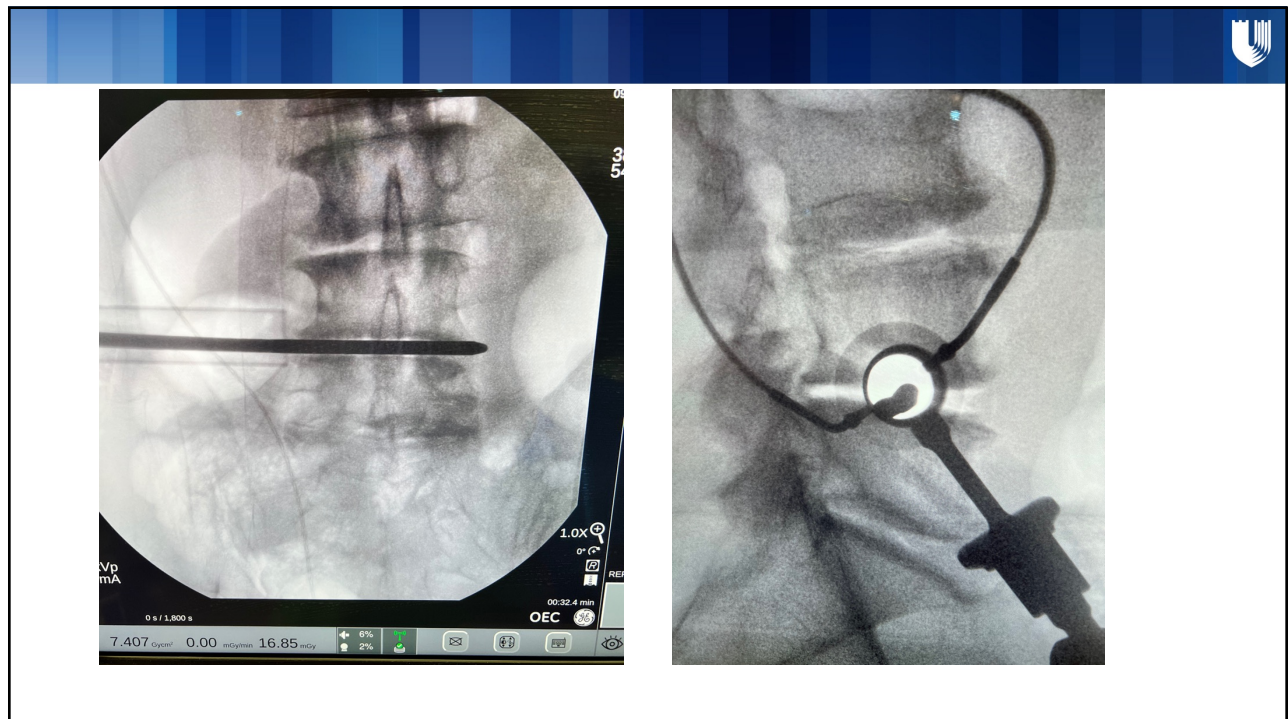
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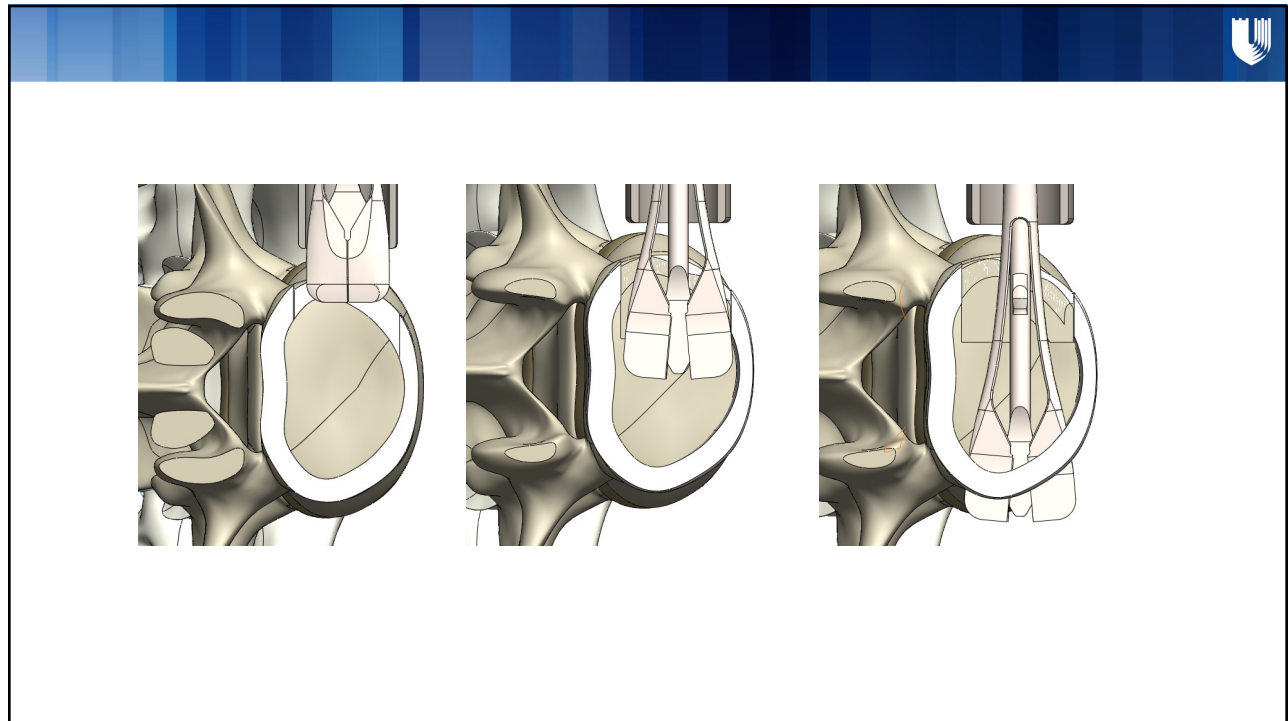
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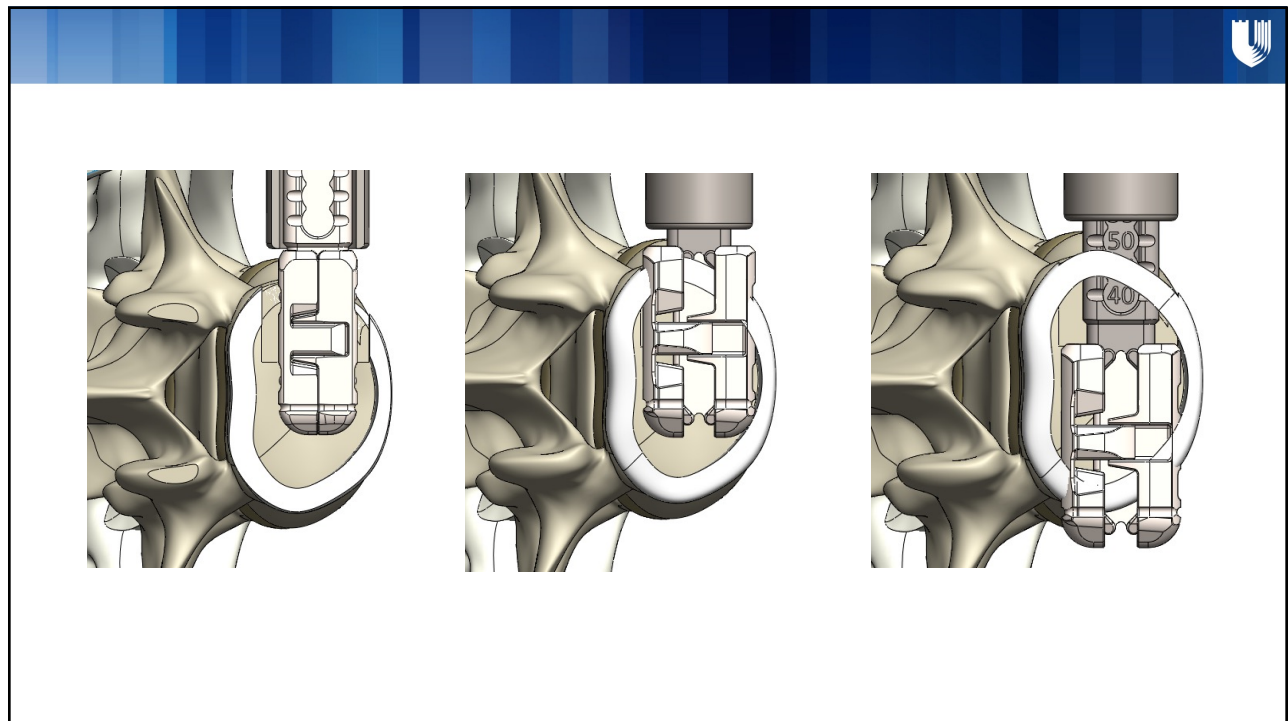
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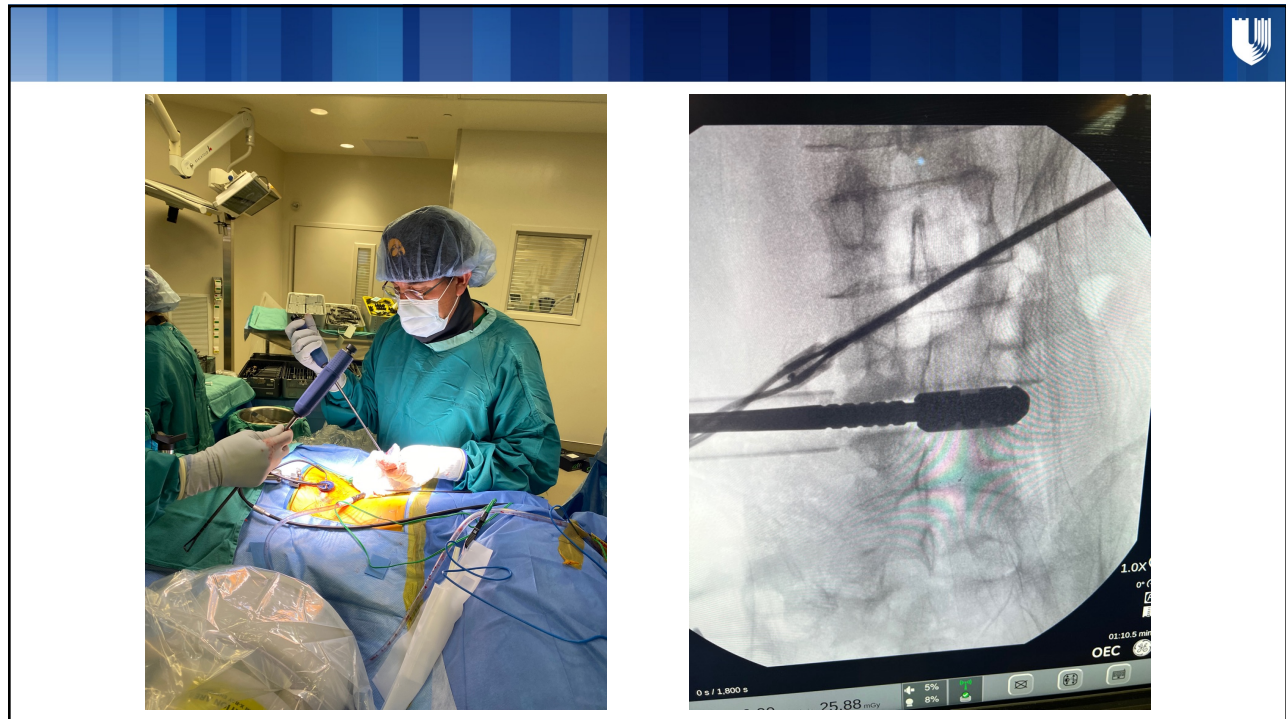
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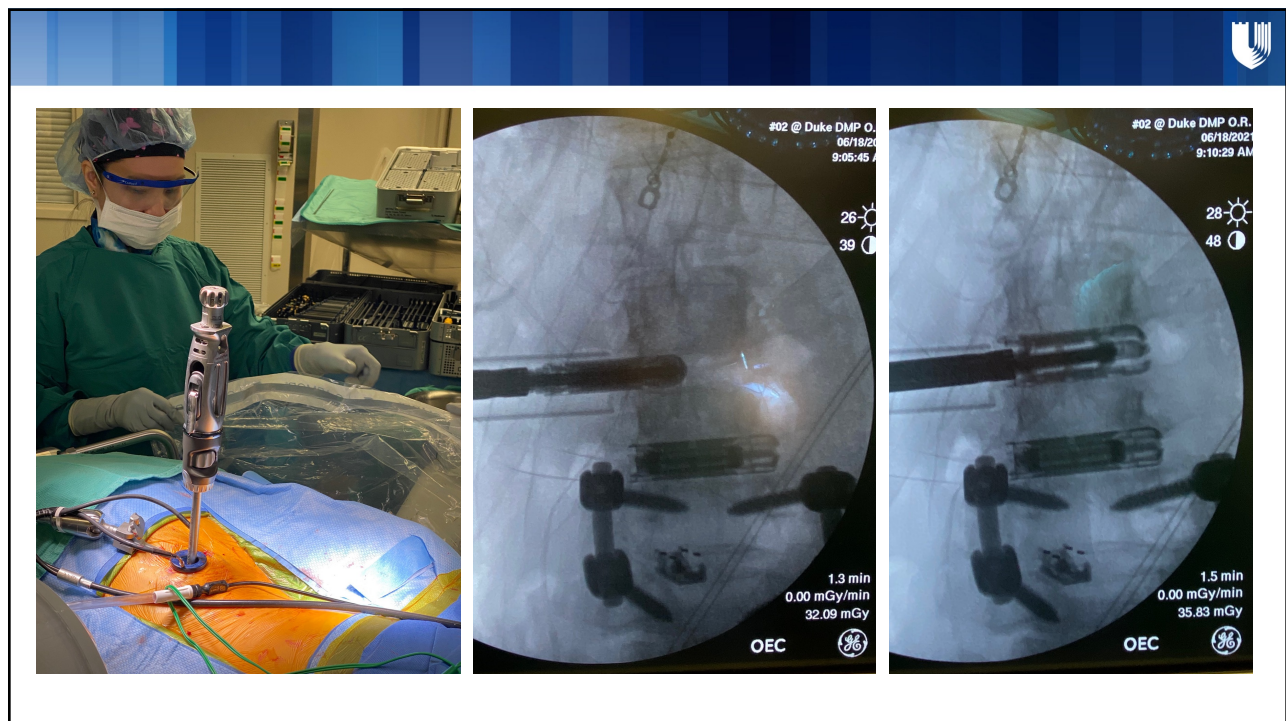
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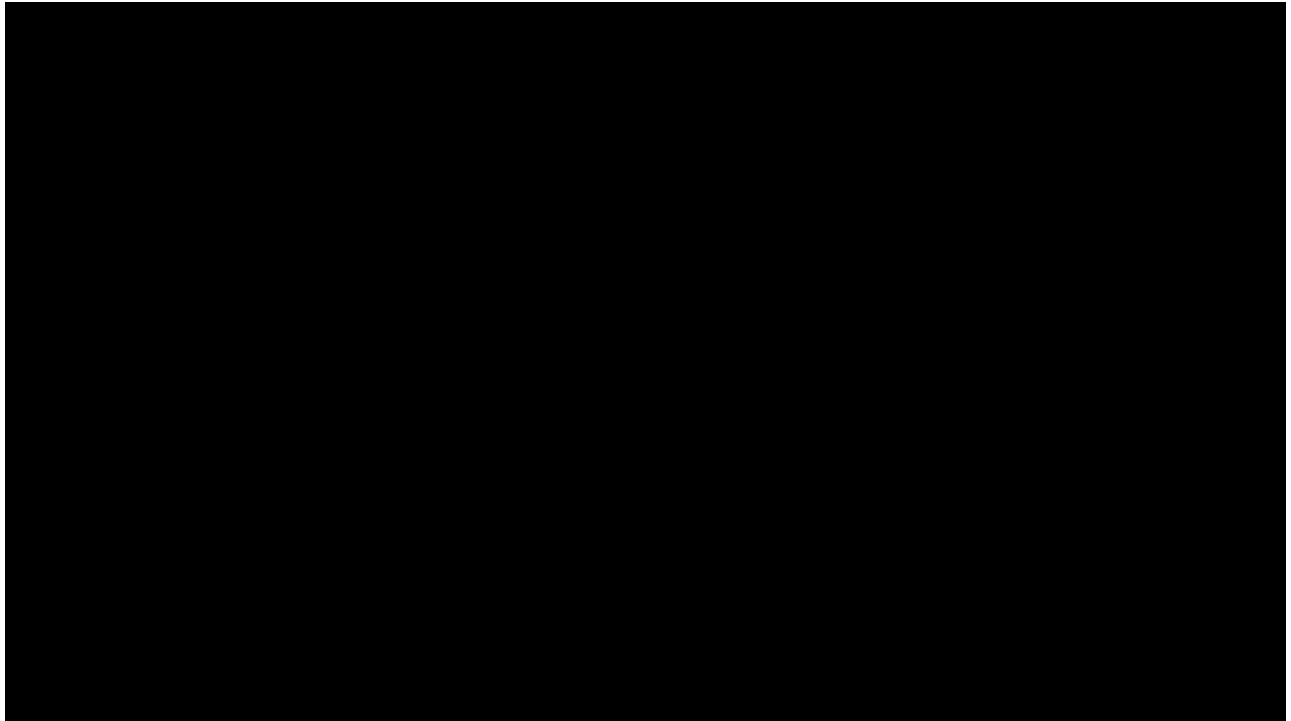
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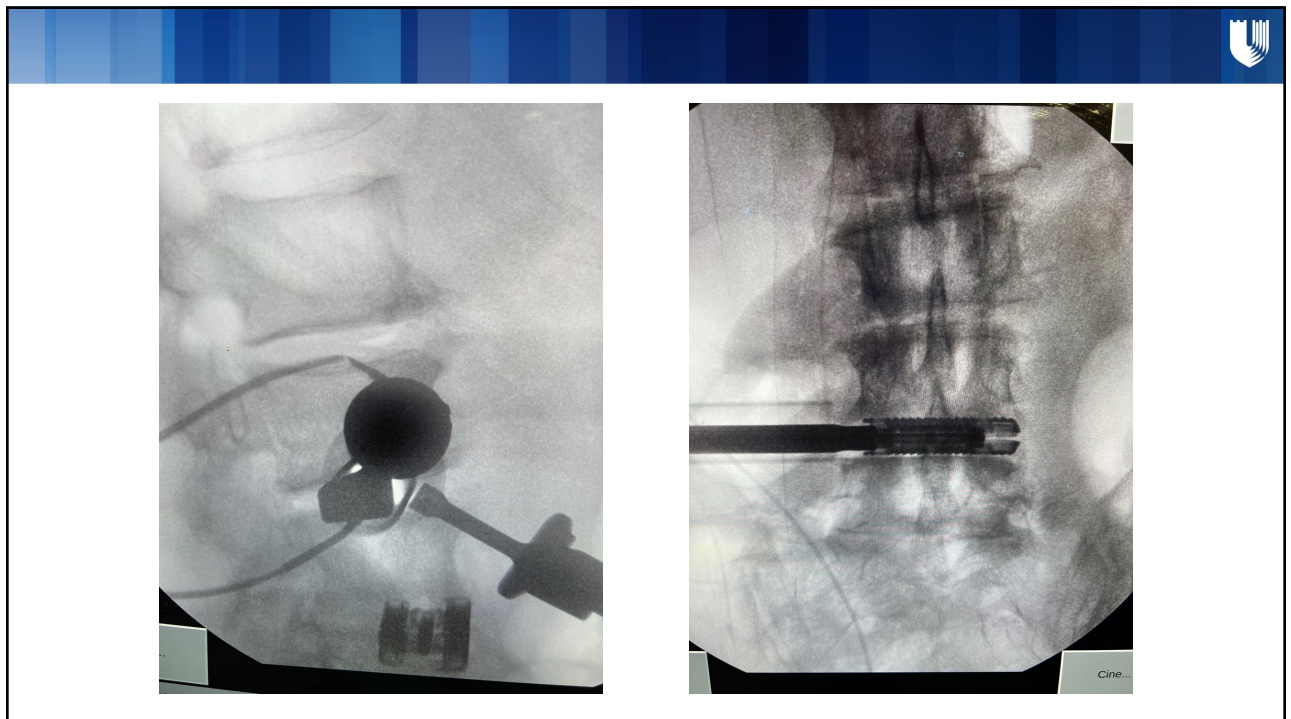
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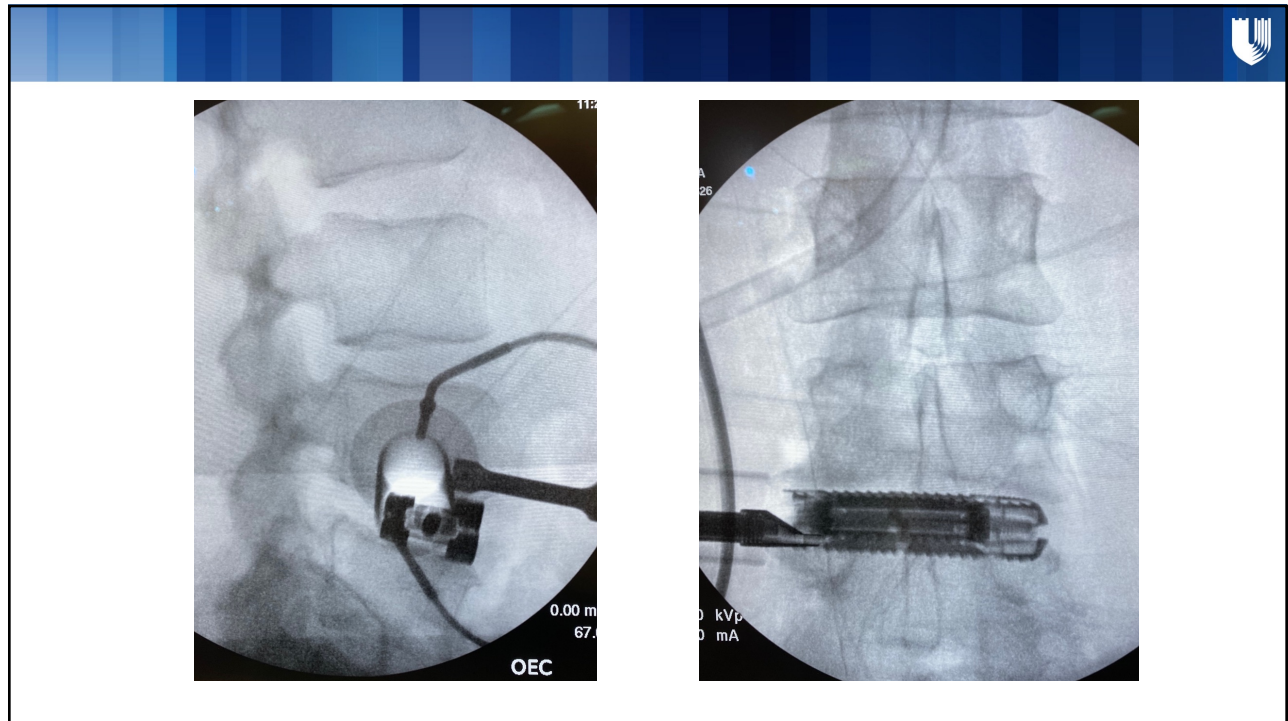
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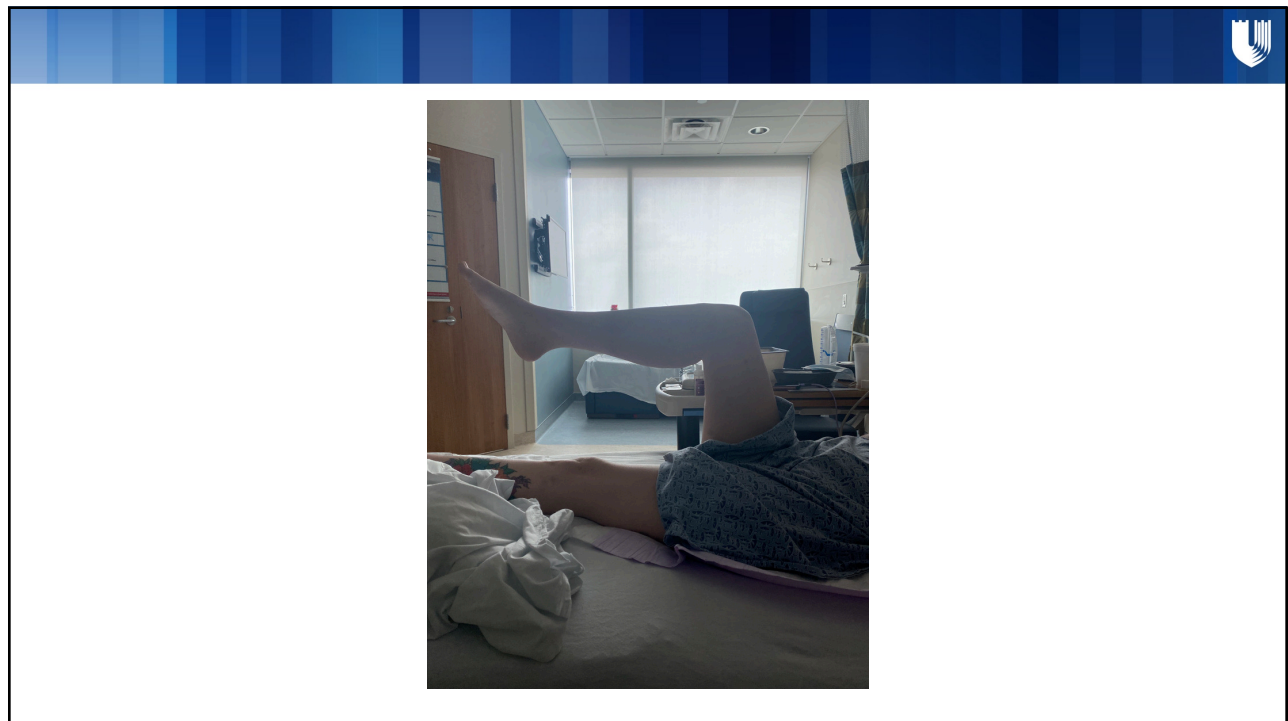
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