

ENCOUNTERS WITH FLUOROSCOPY SYSTEMS

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1

DISCLOSURES

I have none.



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2

CASE STUDIES

- Maximum AKR measurements in fluoroscopy
- Measuring HVL for mini c-arms
- Challenges with evaluating image uniformity



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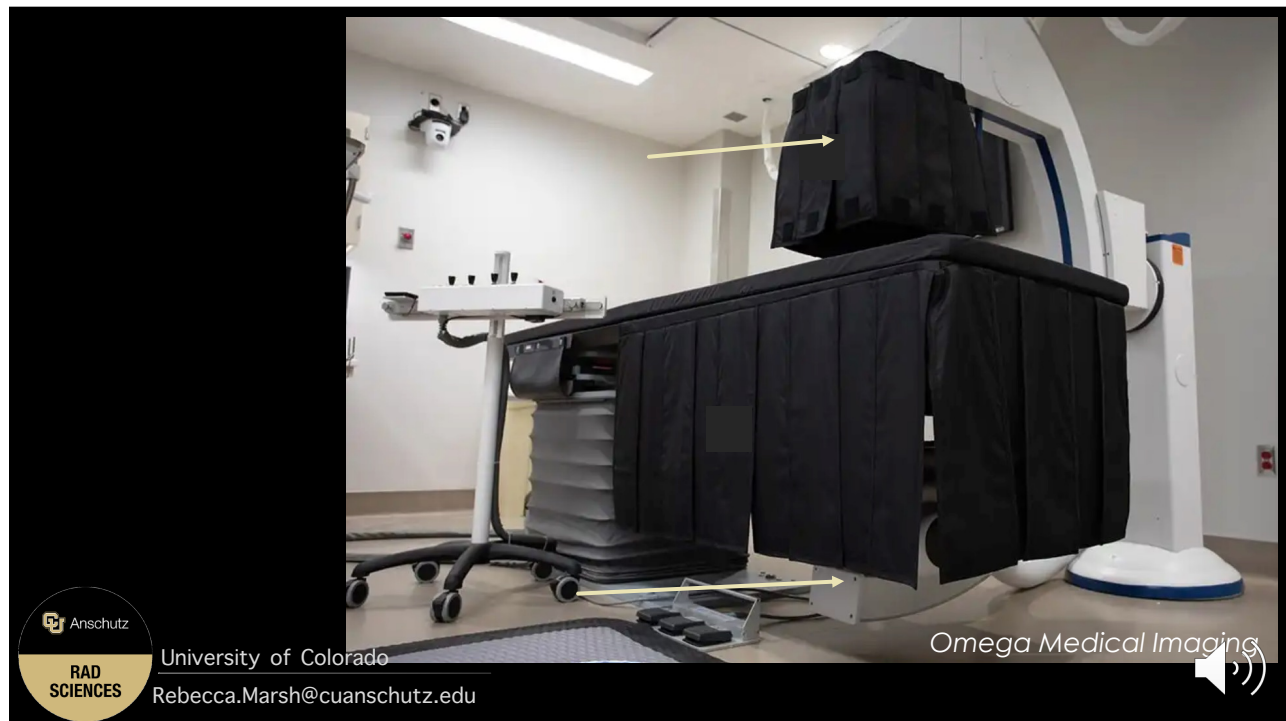


3

MAXIMUM AKR & FLUOROSCOPE CLASSIFICATION



4



5

21CFR (1020.32)

If the source is **below** the table:
Measure maximum AKR at 1cm above the table

	Measured AKR
SID ↑	↑

6

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Minimum table height + Minimum SID

Maximum measured AKR:

~ 9.3 R/min (82 mGy/min)



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7

21CFR (1020.32)

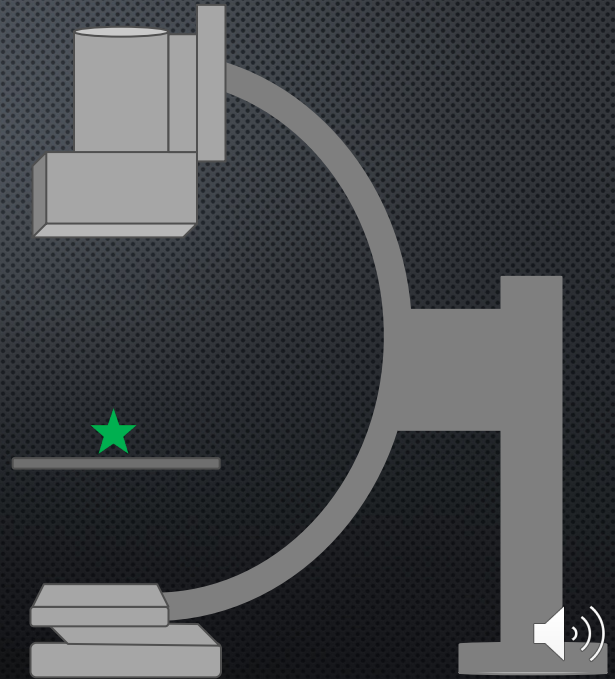
Minimum table height + Increased SID

Maximum measured AKR:

~ 15 R/min (132 mGy/min)



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8

21CFR (1020.32)

If the source is **below the table**:
Measure maximum AKR at 1cm above the table

	Measured AKR
SID ↑	↑

For a c-arm fluoroscope:
Measure maximum AKR at 30cm from the detector

	Measured AKR
SID ↑	—

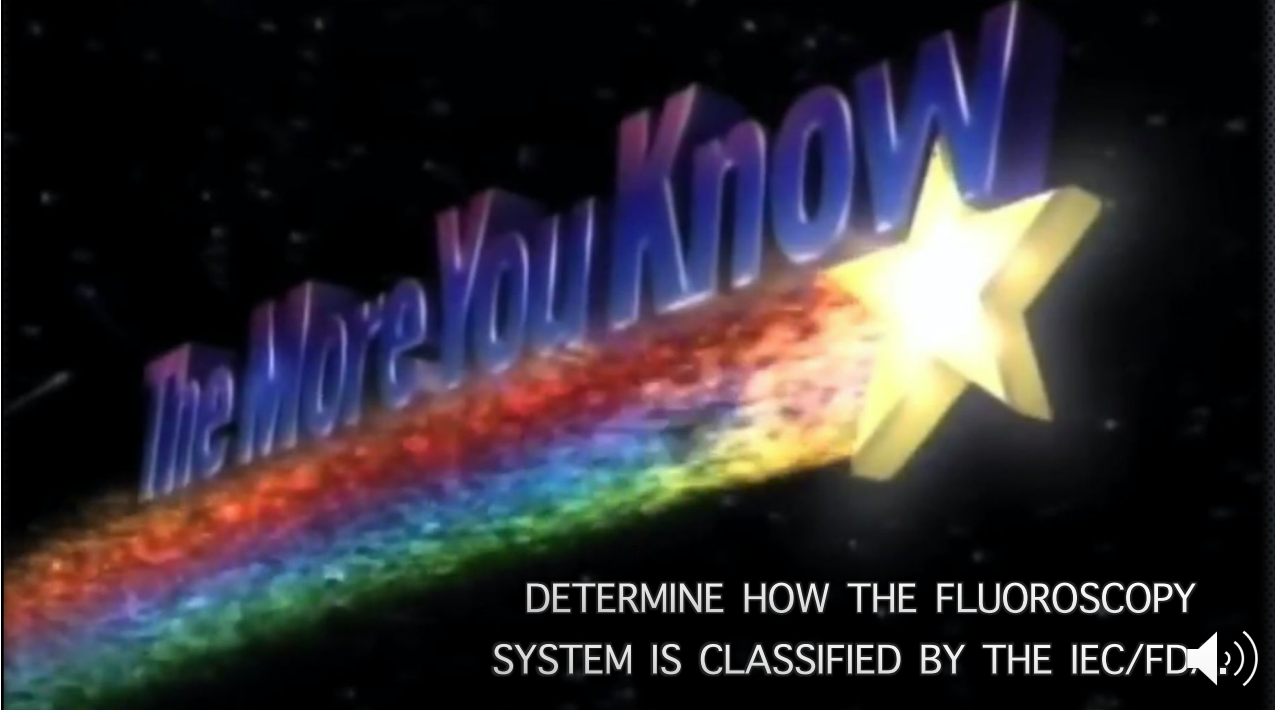
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9



DETERMINE HOW THE FLUOROSCOPY SYSTEM IS CLASSIFIED BY THE IEC/FDA

10

MINI C-ARMS & HVL



11

Max output:

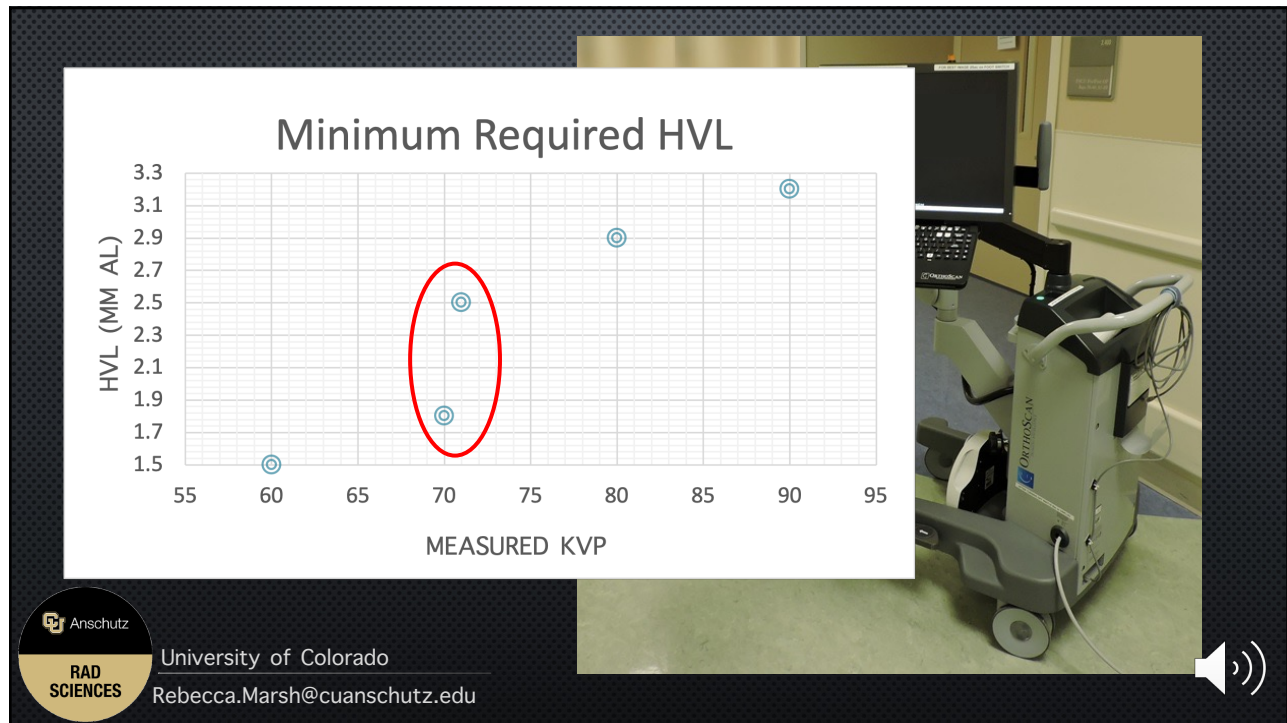
0.1 mAs
75 kVp



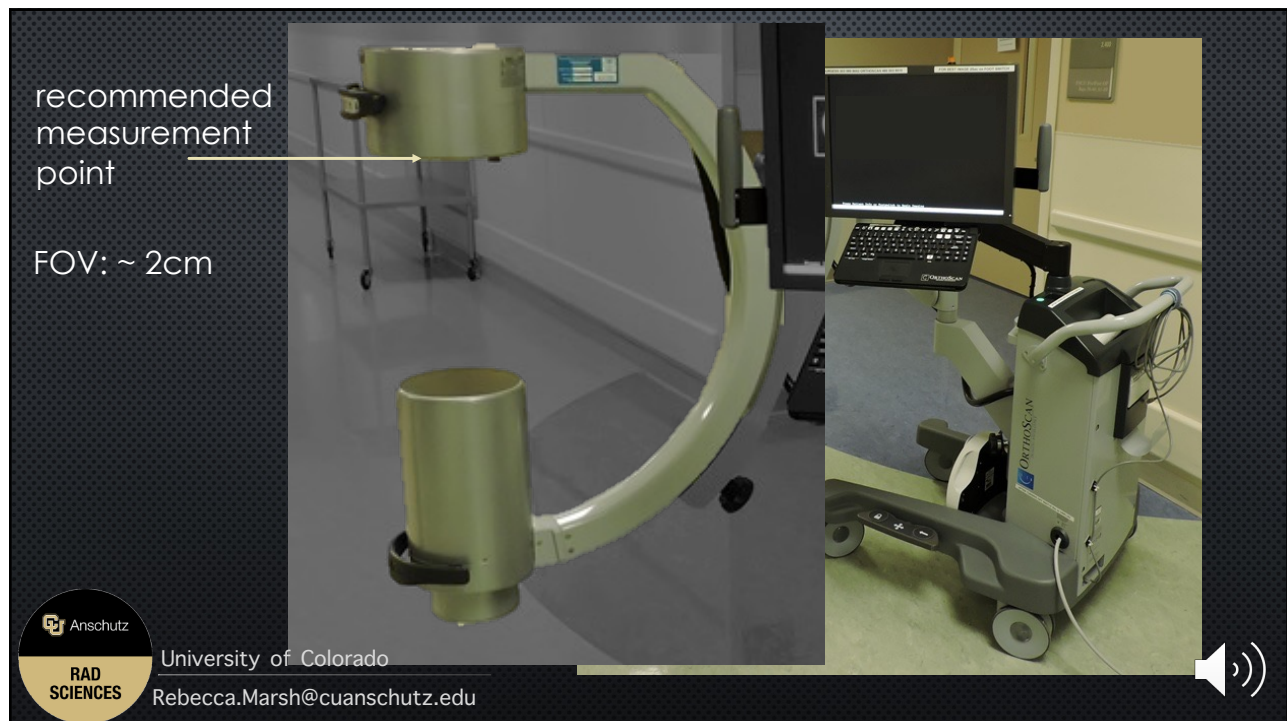
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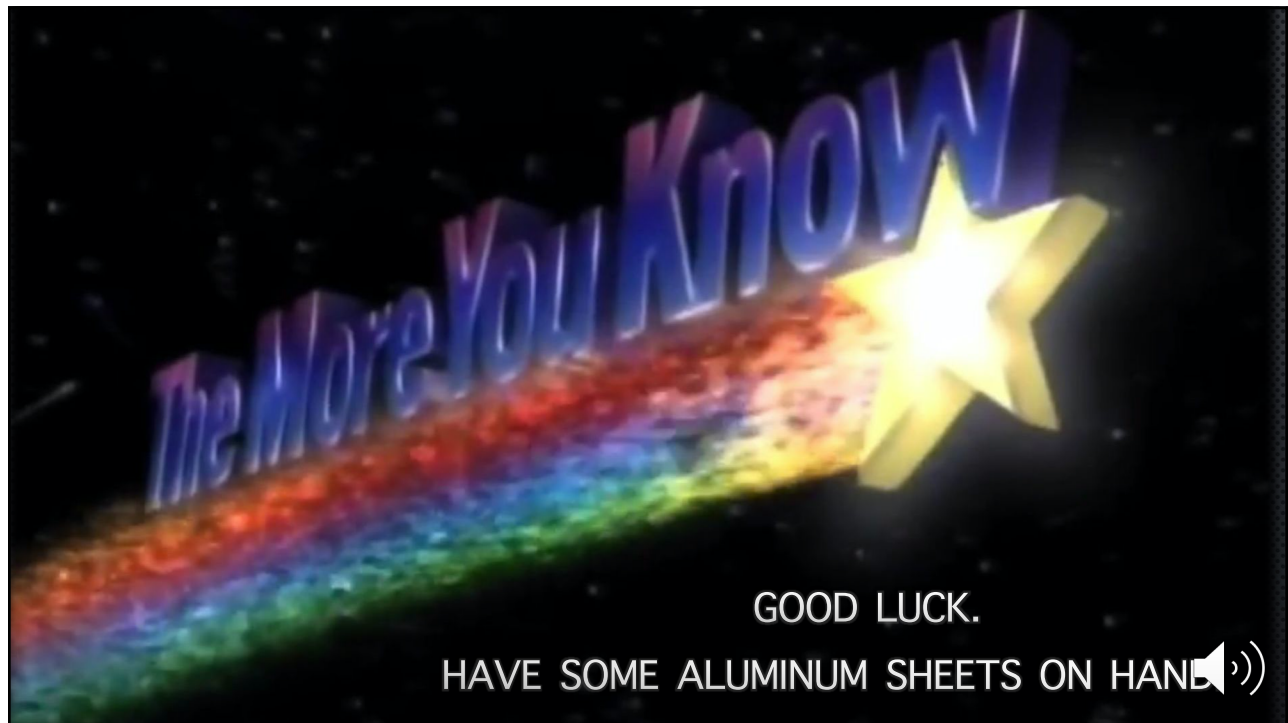
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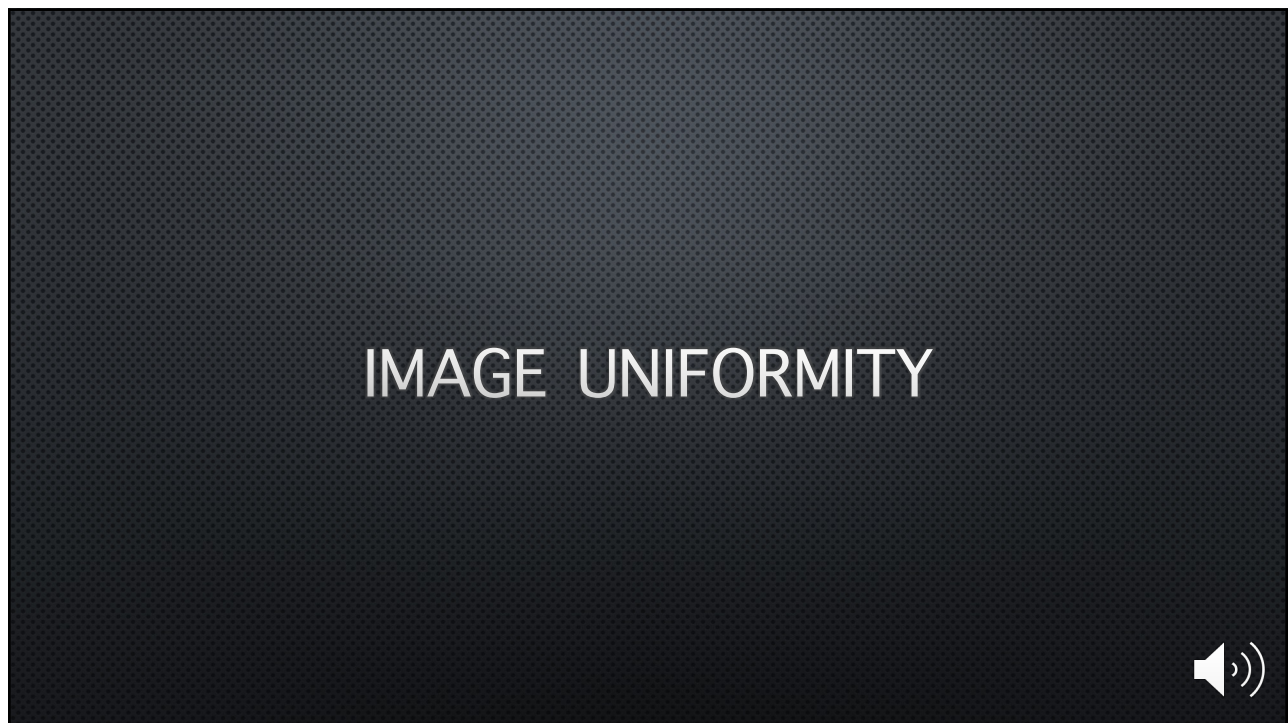
13



14



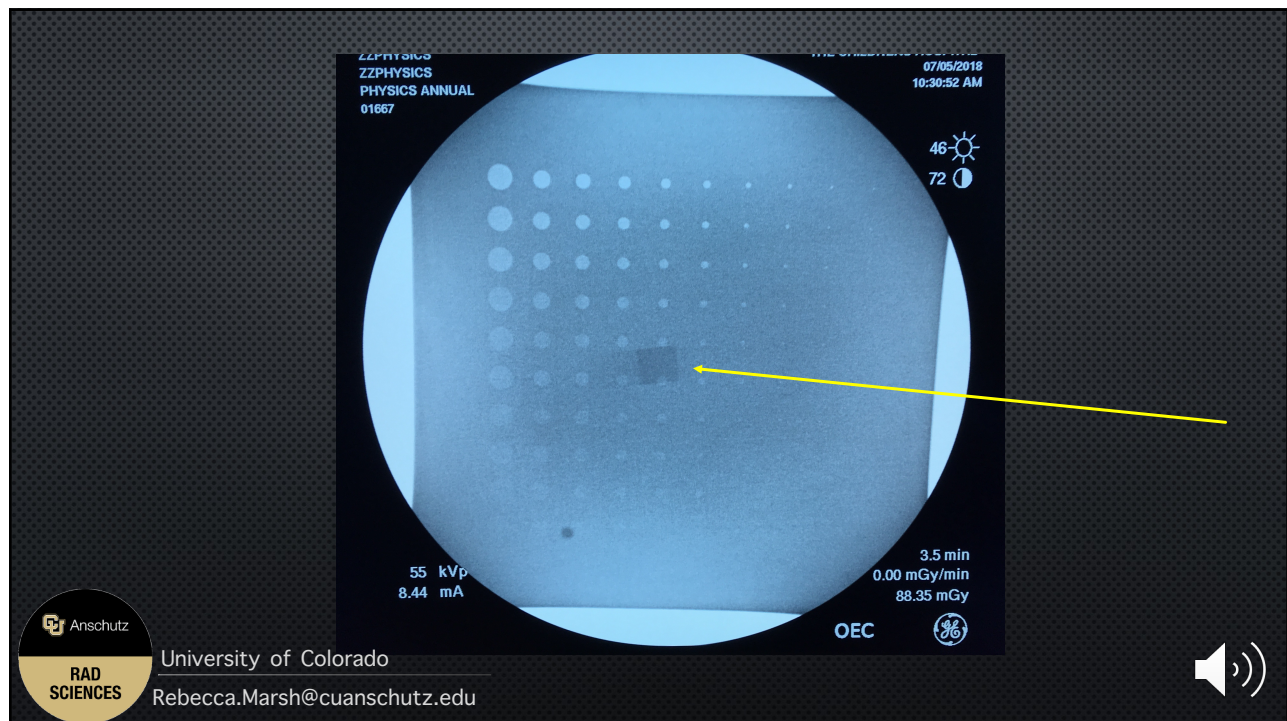
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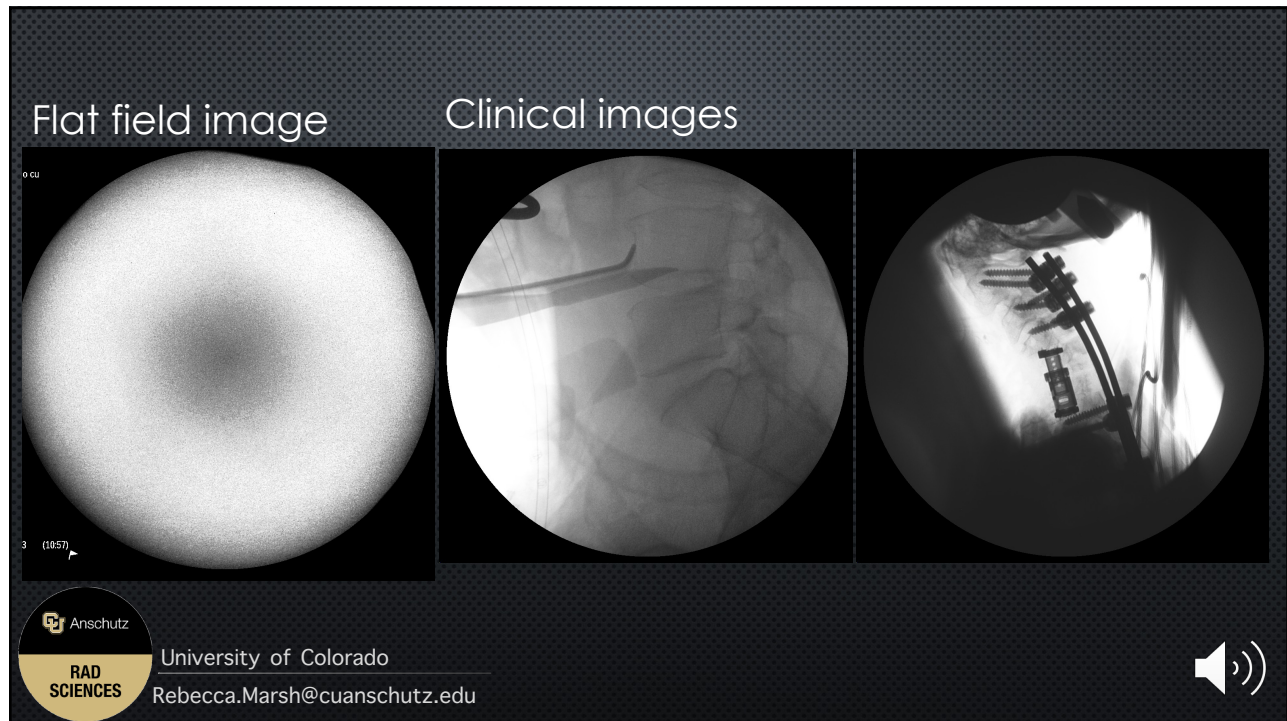
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17



18

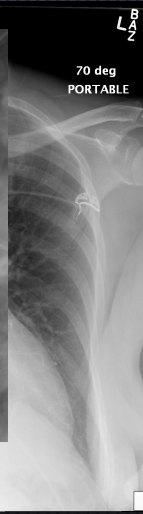
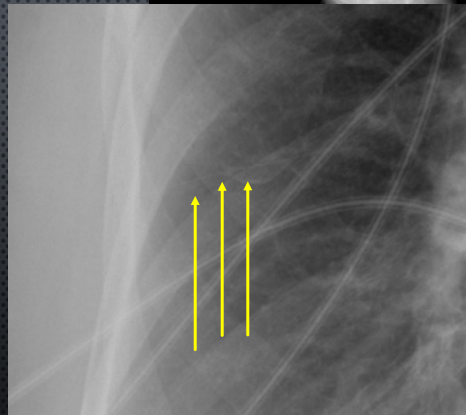
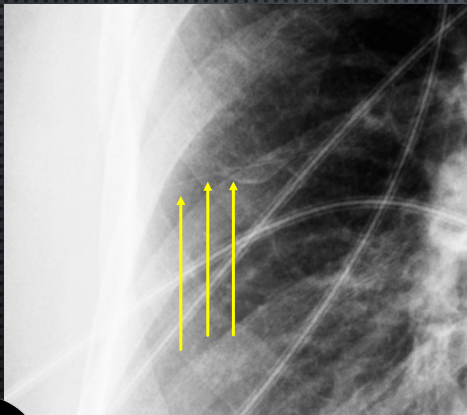


19



20

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21



22



23