

Endovascular Aneurysm Repair Duplex Follow-up

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DISCLOSURE

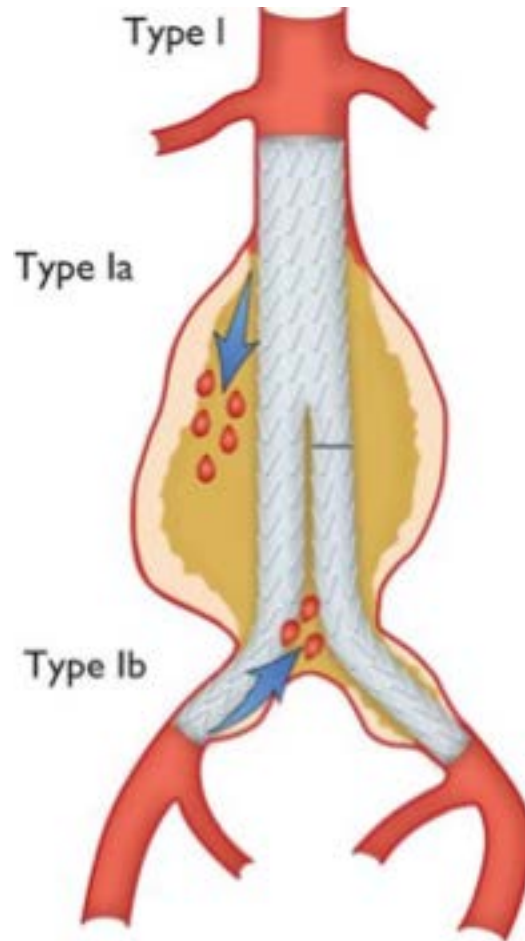
Jim Brown, RVT

- No relevant financial relationship reported

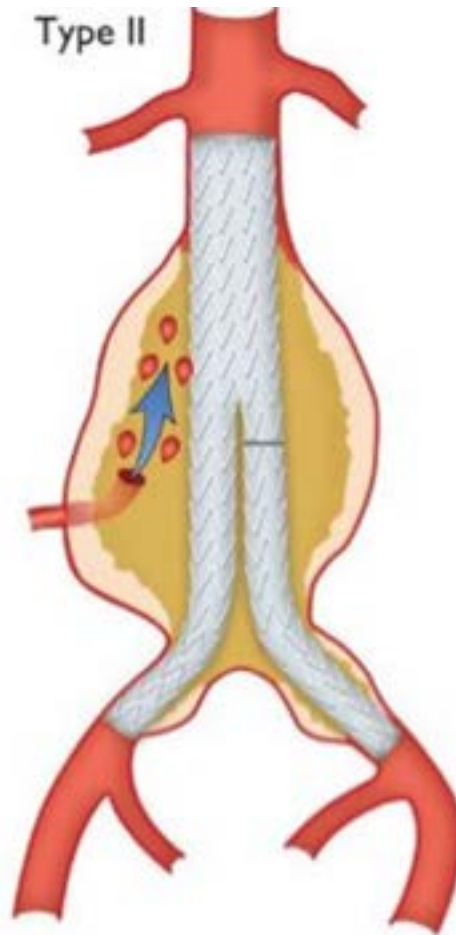
Clinical Indications

- 84 year old female
- Status post abdominal aortic aneurysm repair with endograft on 1/14/2016
- Patient developed Type 1A and Type 2B endoleak.
- The Type 1A endoleak was repaired with a Palmaz stent with resolution in May 2016.
- Patient reports mild abdominal pain

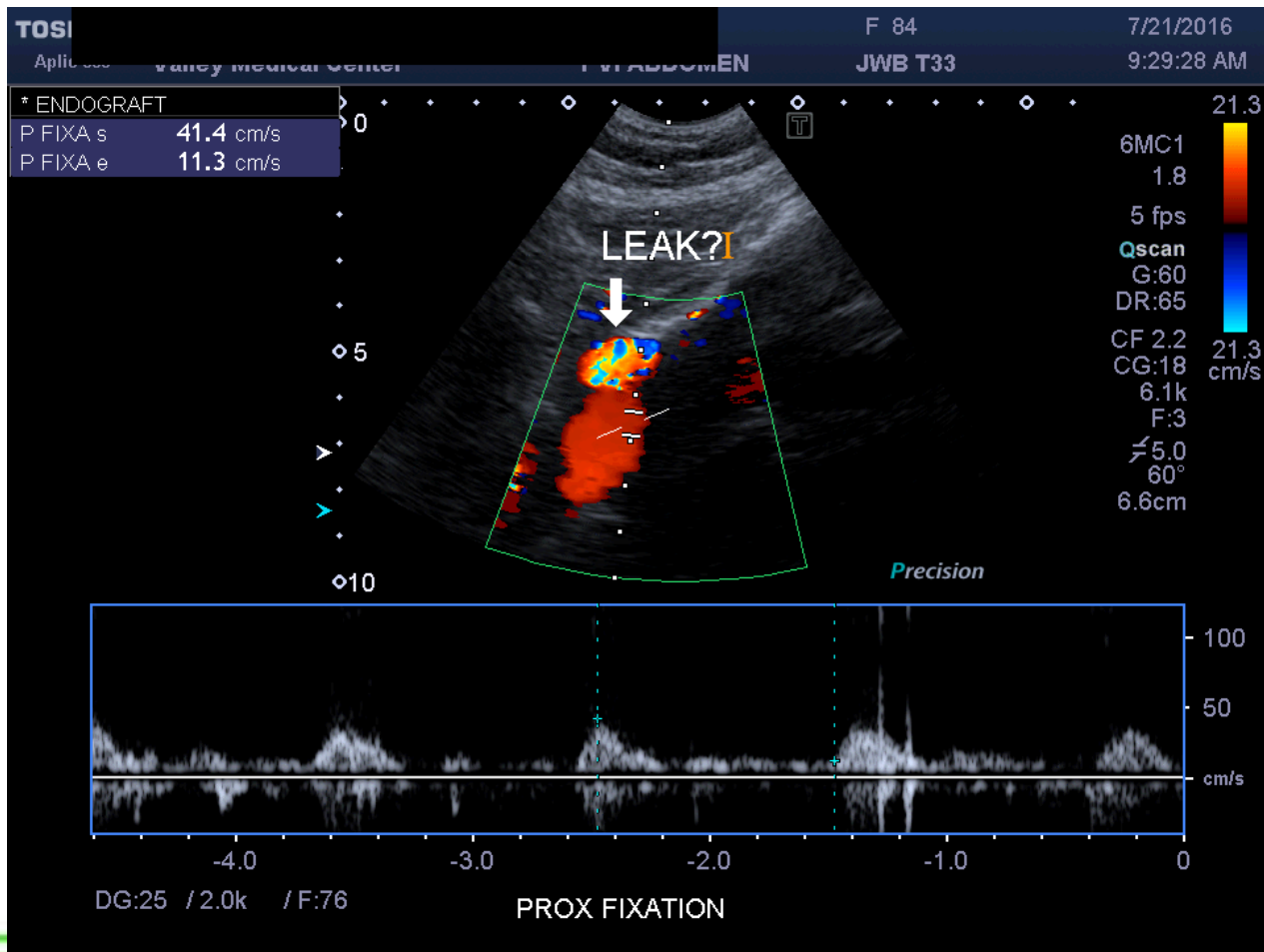
Type 1 Endoleak



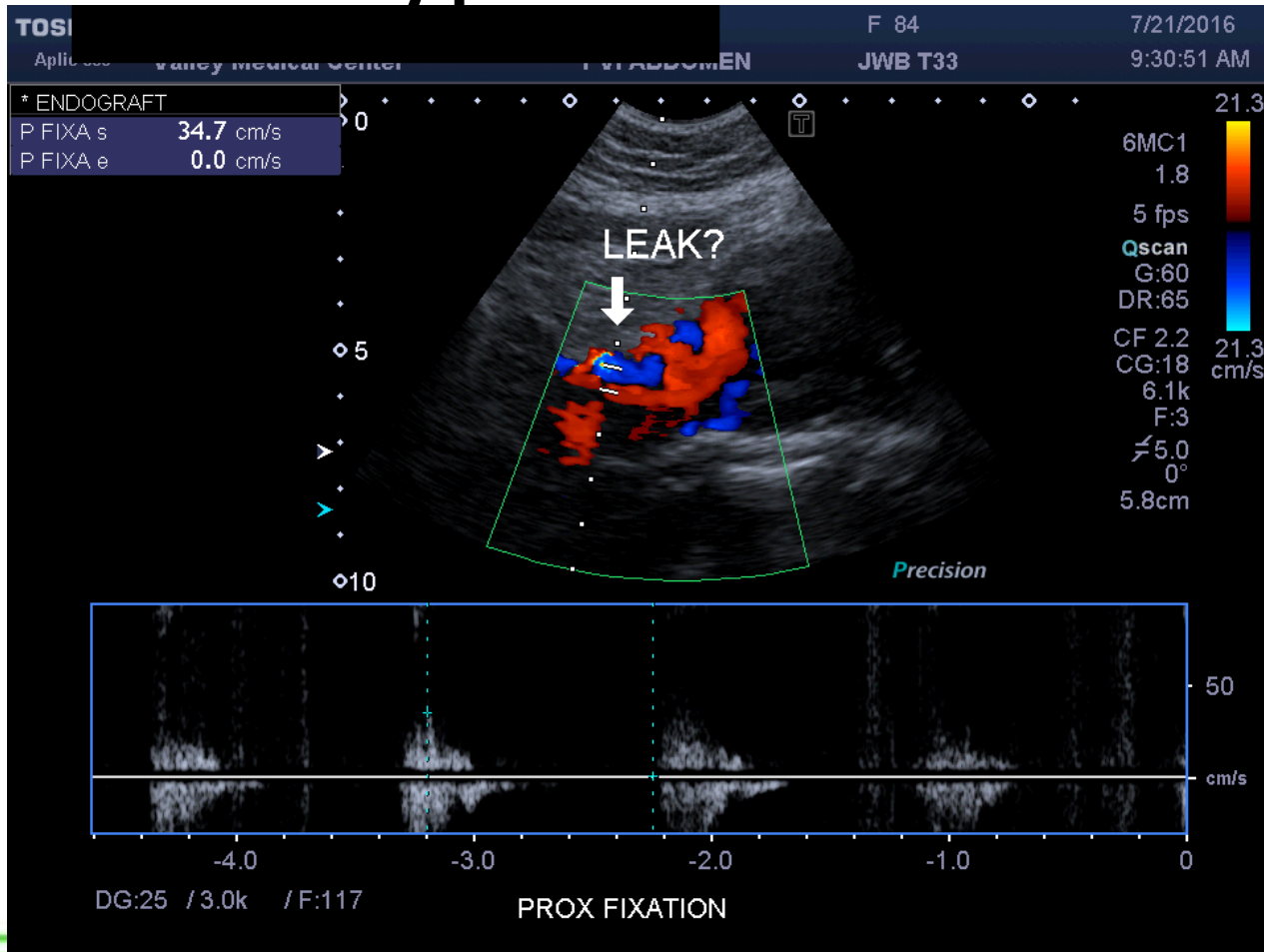
Type 2 Endoleak



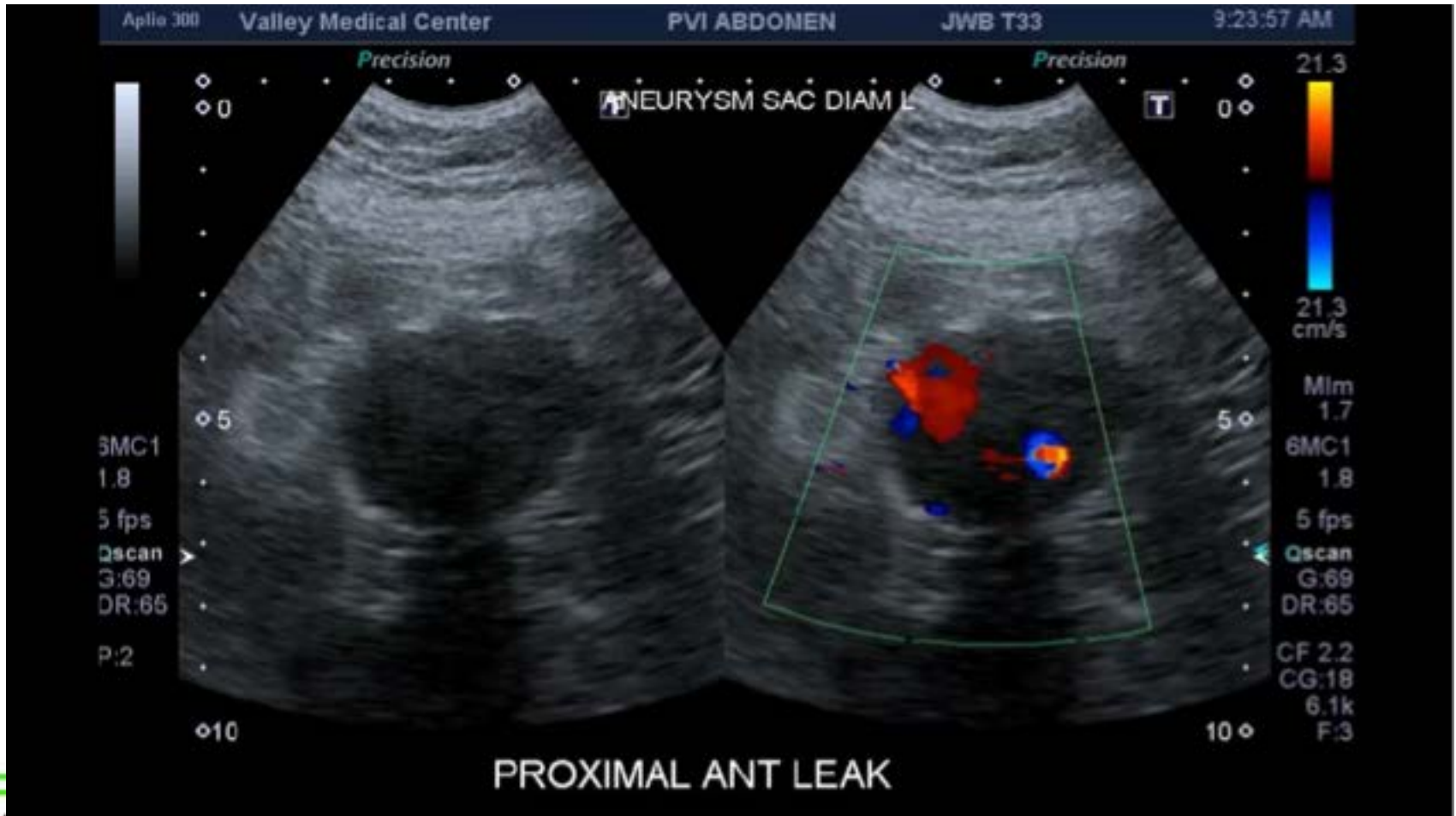
Possible Endoleak



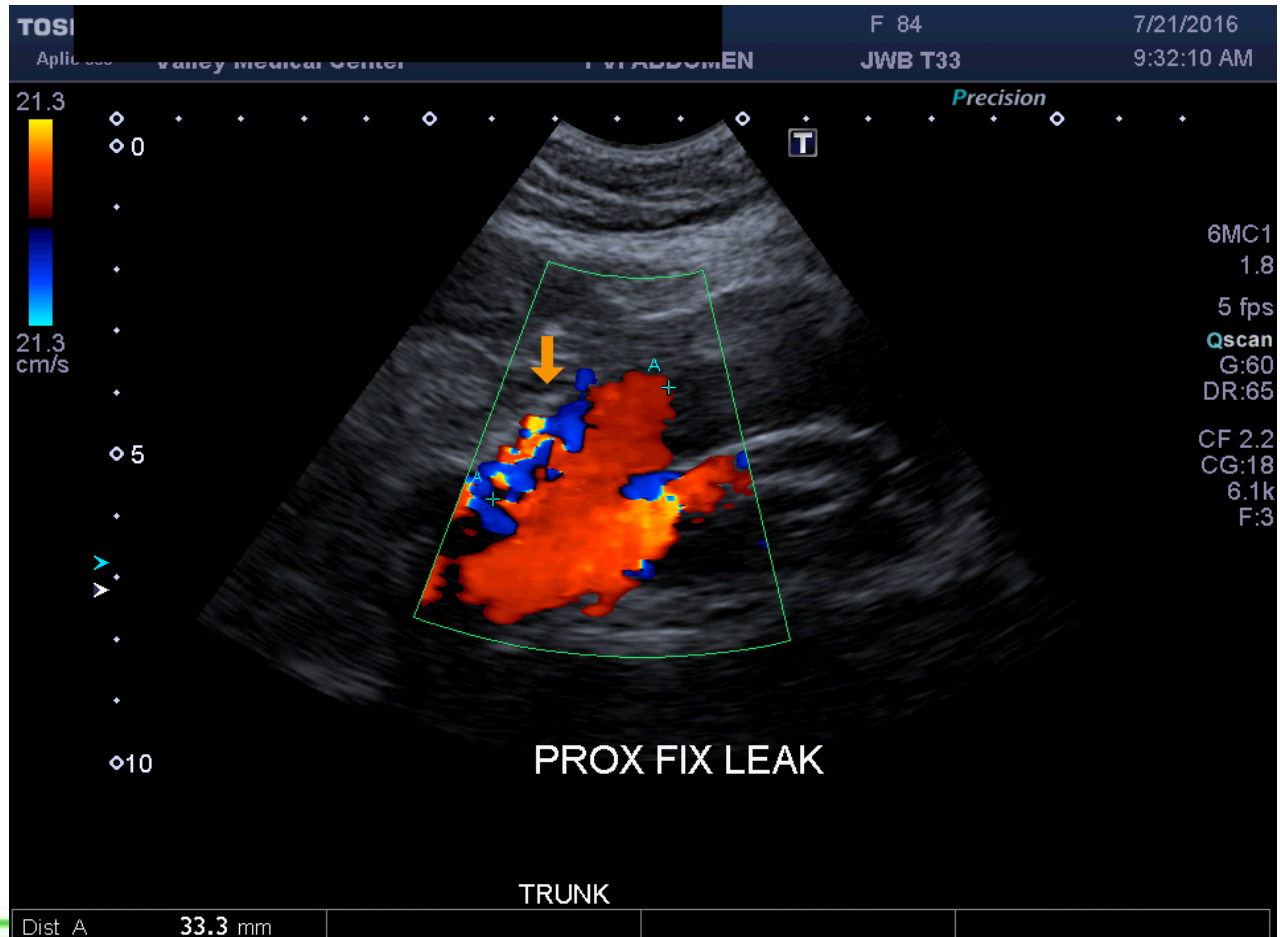
What Type of Endoleak?



Endograft Cine Loop



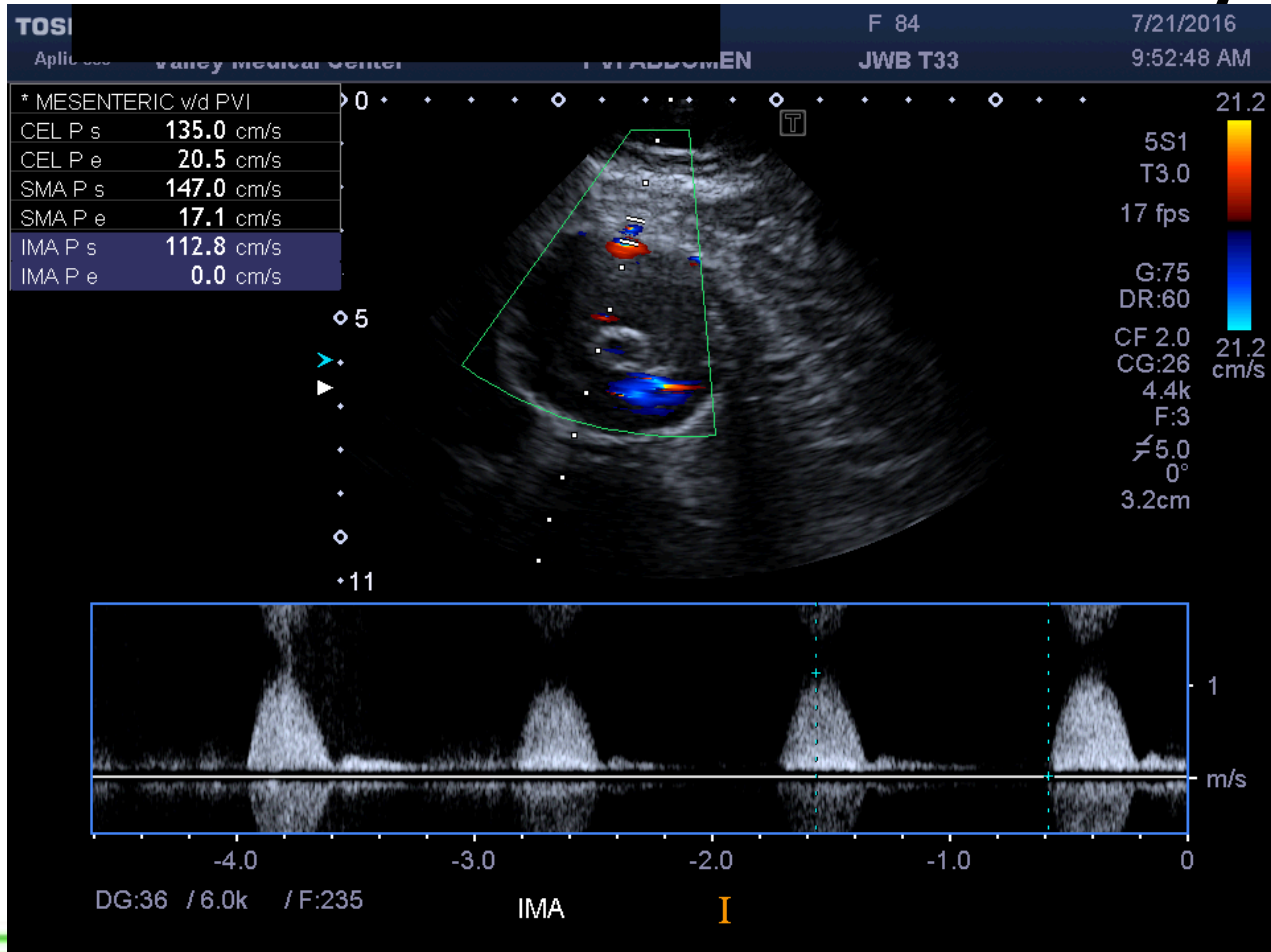
Proximal Fixation Leak Size



Long Axis Cine Loop



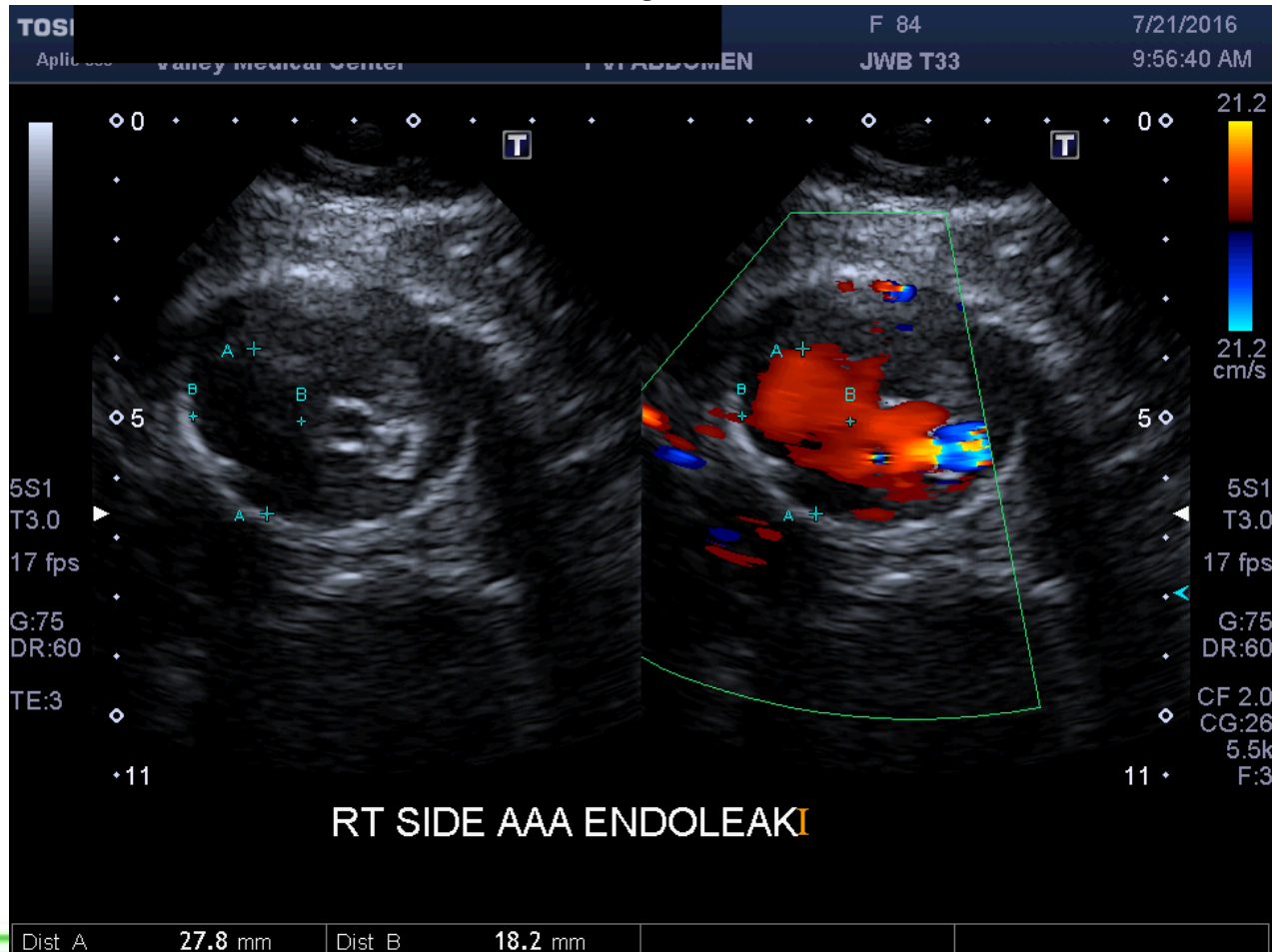
Inferior Mesenteric Artery



Endoleak Cine Loop



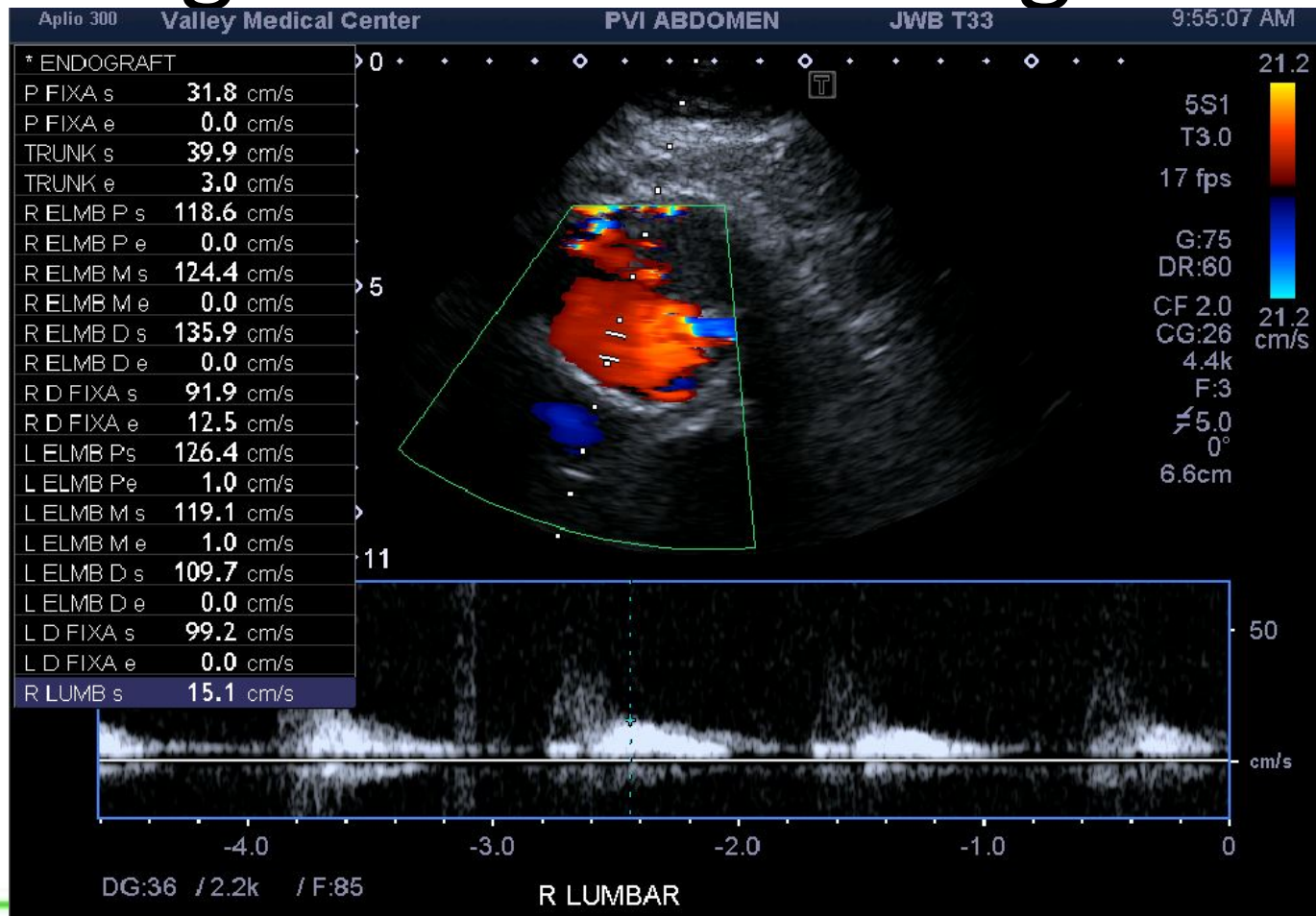
Endoleak Cine Loop Mid-Distal Aorta



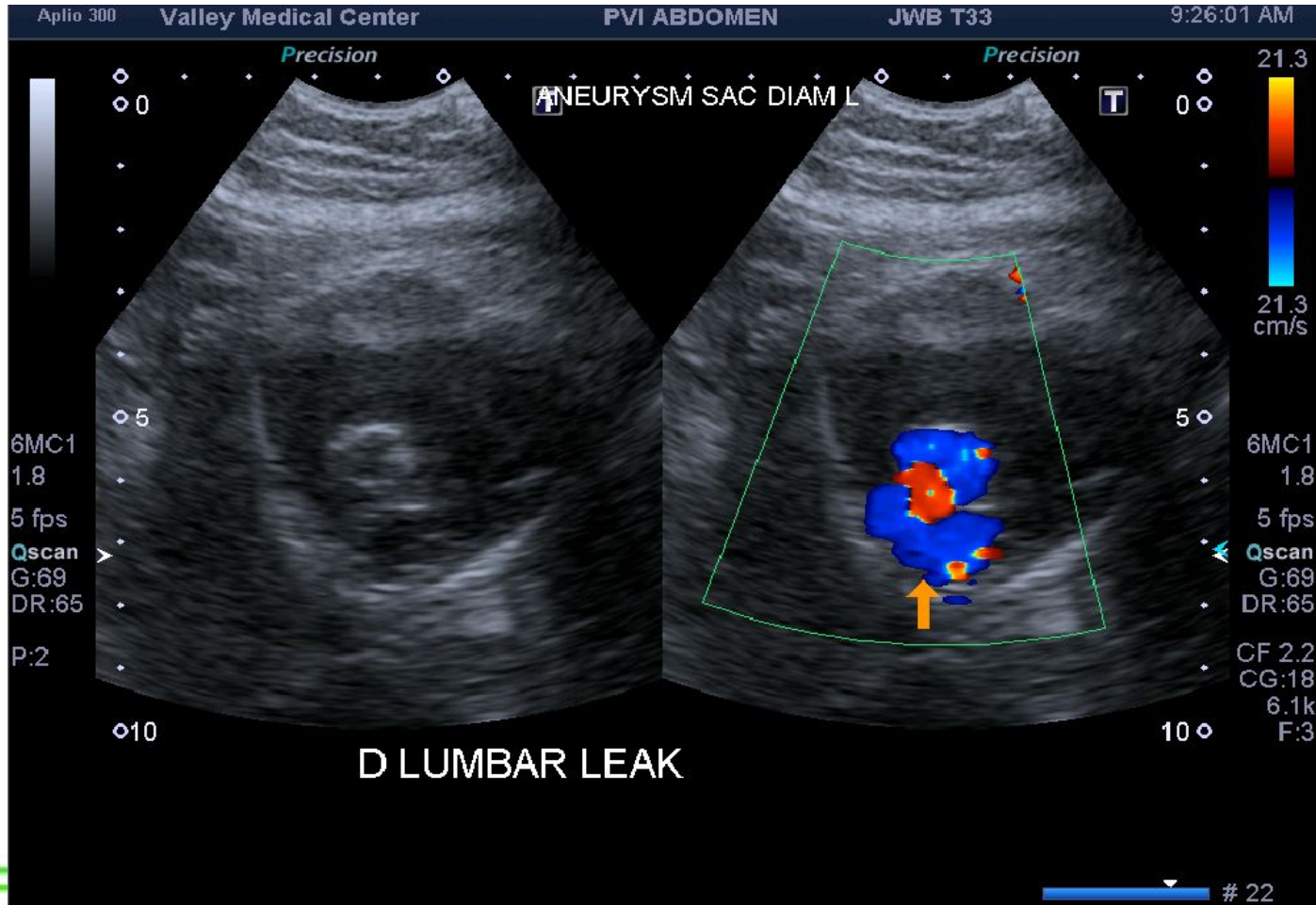
Color filling of Aneurysm



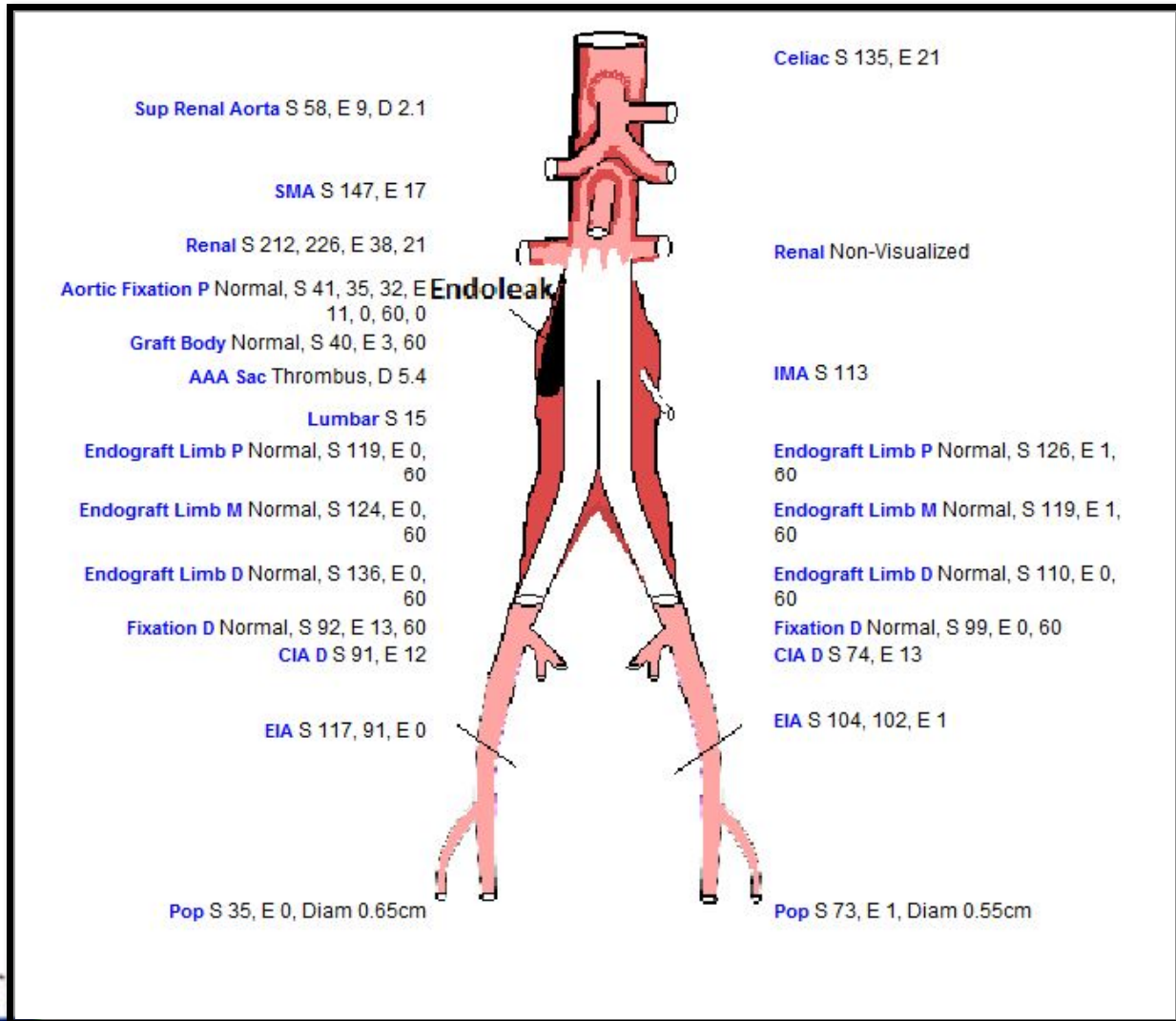
Right Lumbar feeding?



Cross Section of Endoleak



Drawing



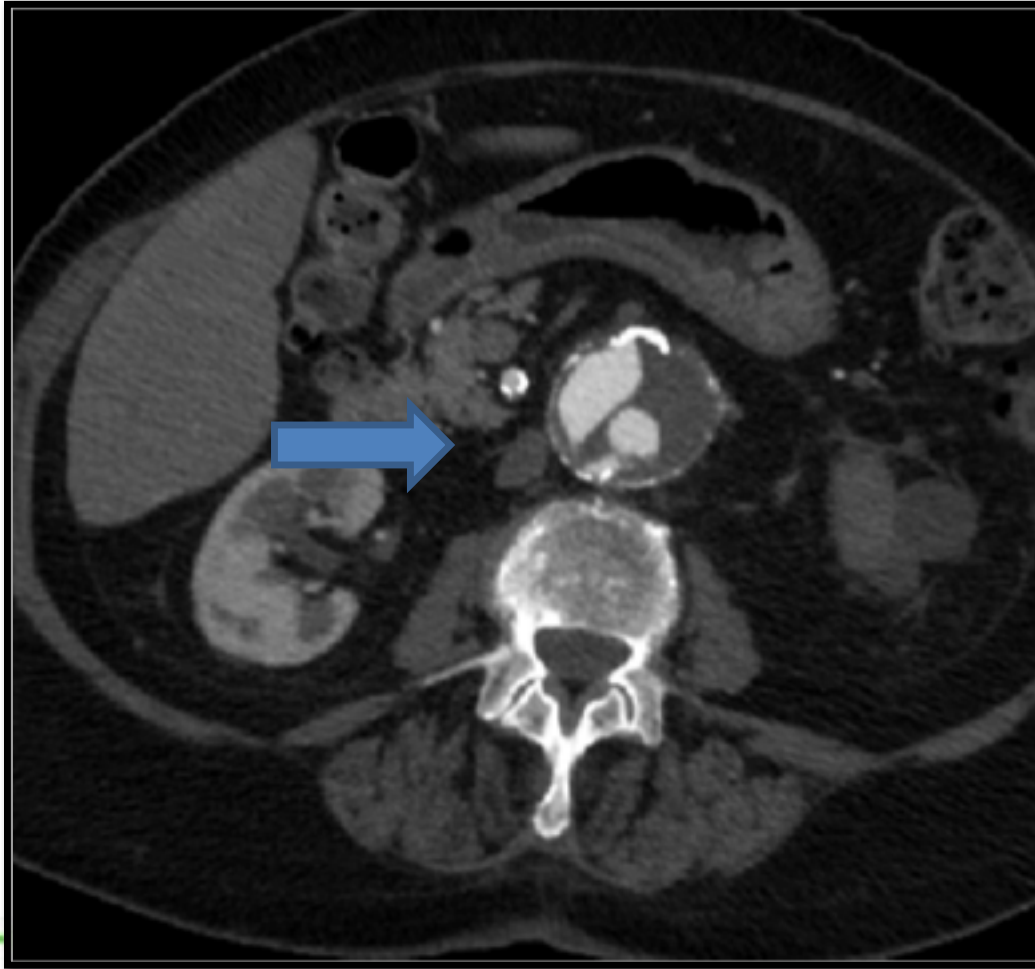
Preliminary Report

- Aortic endograft: patent
- Evidence of endoleak (Type 2B) with color filling proximal aneurysmal sac and right side of aneurysm sac measuring approximately 2.8 X 1.8 X 3.3 cm
- Proximal aortic graft fixation: appears within normal limits, however Type 1 endoleak cannot be ruled out secondary to color filling from active Type 2 endoleak, likely from the inferior mesenteric artery

Reading MD Conclusion

- Exam shows Type 2B endoleak with color filling of proximal aneurysmal sac.
- Type I endoleak not visualized but unable to be ruled out secondary to active color filling.
- Aneurysm sac diameter is 5.4 cm.
- These findings correlate with the patient's history and referring indication.

Endoleak seen on CTA



Endoleak seen on CTA



Endoleak seen on CTA



CTA Abdomen Pelvis (Angiogram)

IMPRESSION:

- Fairly large type 2b endoleak involving the inferior mesenteric artery as well as the second and fourth lumbar arteries appears unchanged.
- Aneurysm sac diameter is also unchanged.

CTA Abdomen Pelvis (Angiogram)

IMPRESSION, Cont.:

- A type I endoleak is felt to be unlikely but is difficult to exclude due to the large amount of dense calcified plaque at the superior margin of the opacified and oblique and junction of the metallic struts of the proximal stent graft.
- The aneurysm sac size of 5.5 cm transversely by 5.4 cm AP is unchanged compared to the prior examinations.

Questions?

