

A Hybrid Approach to Proximal Common Carotid Artery Aneurysm

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Case

- BJ is a 77 year old female with a history of migraines and hypertension.
- She was initially seen for right arm tingling concerning for left hemispheric symptoms and CTA was obtained
- On further discussion with patient, symptoms consistent with her migraine history
- She was referred to our clinic for 3.2 cm common carotid artery aneurysm incidentally seen on CTA

Pre-operative CTA



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Pre-operative CTA



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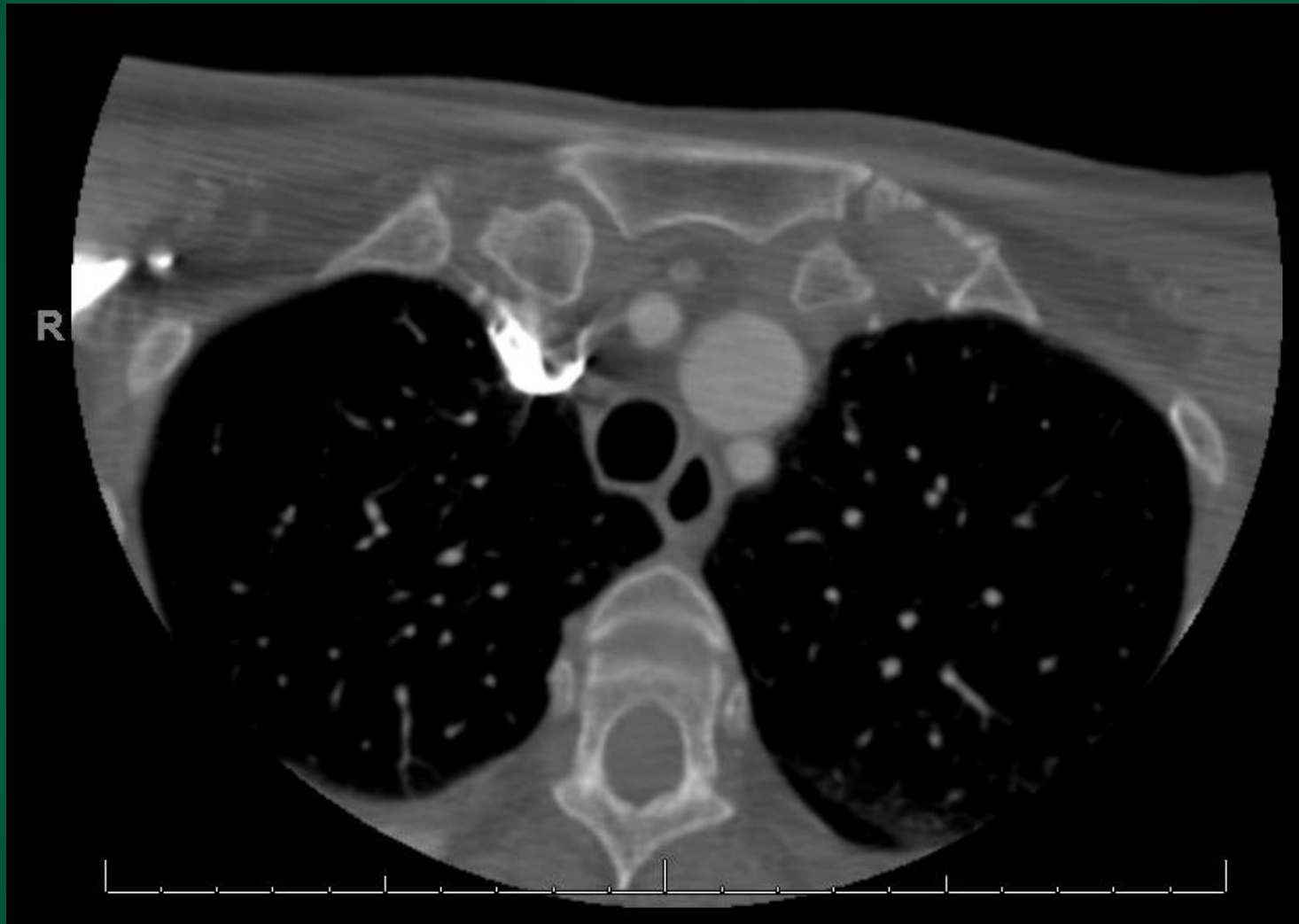
Pre-operative CTA



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Case Continued

- Repair recommended given medical management associated with a higher risk of stroke and mortality
- Open repair would require sternotomy
- The patient wanted to avoid a sternotomy if possible. Additionally, she was frail and it was felt recovery from a sternotomy would be difficult
- Hybrid approach to her problem was devised

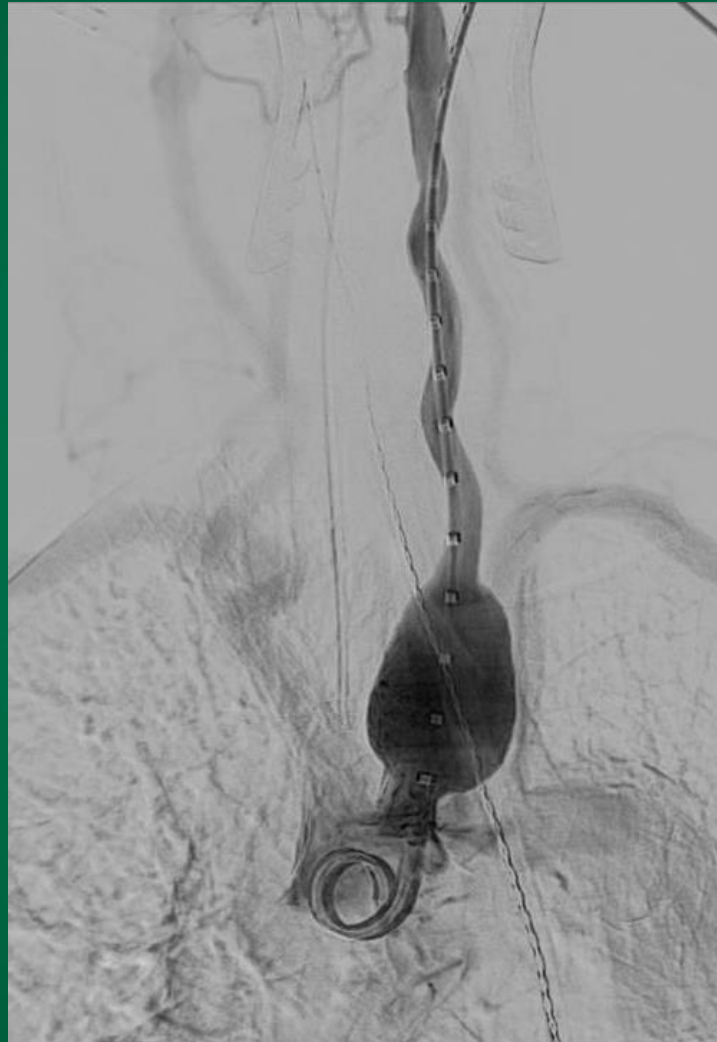
Intraoperative Images



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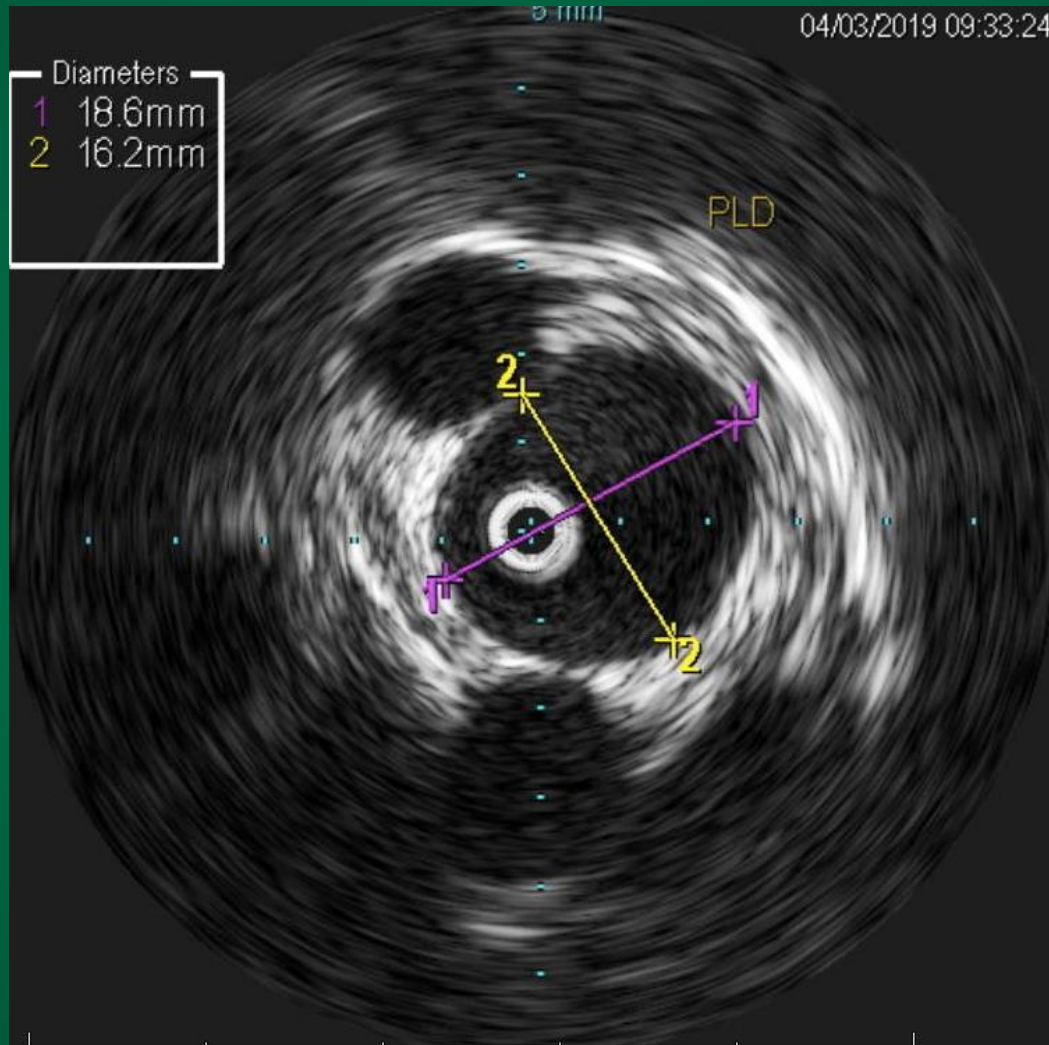
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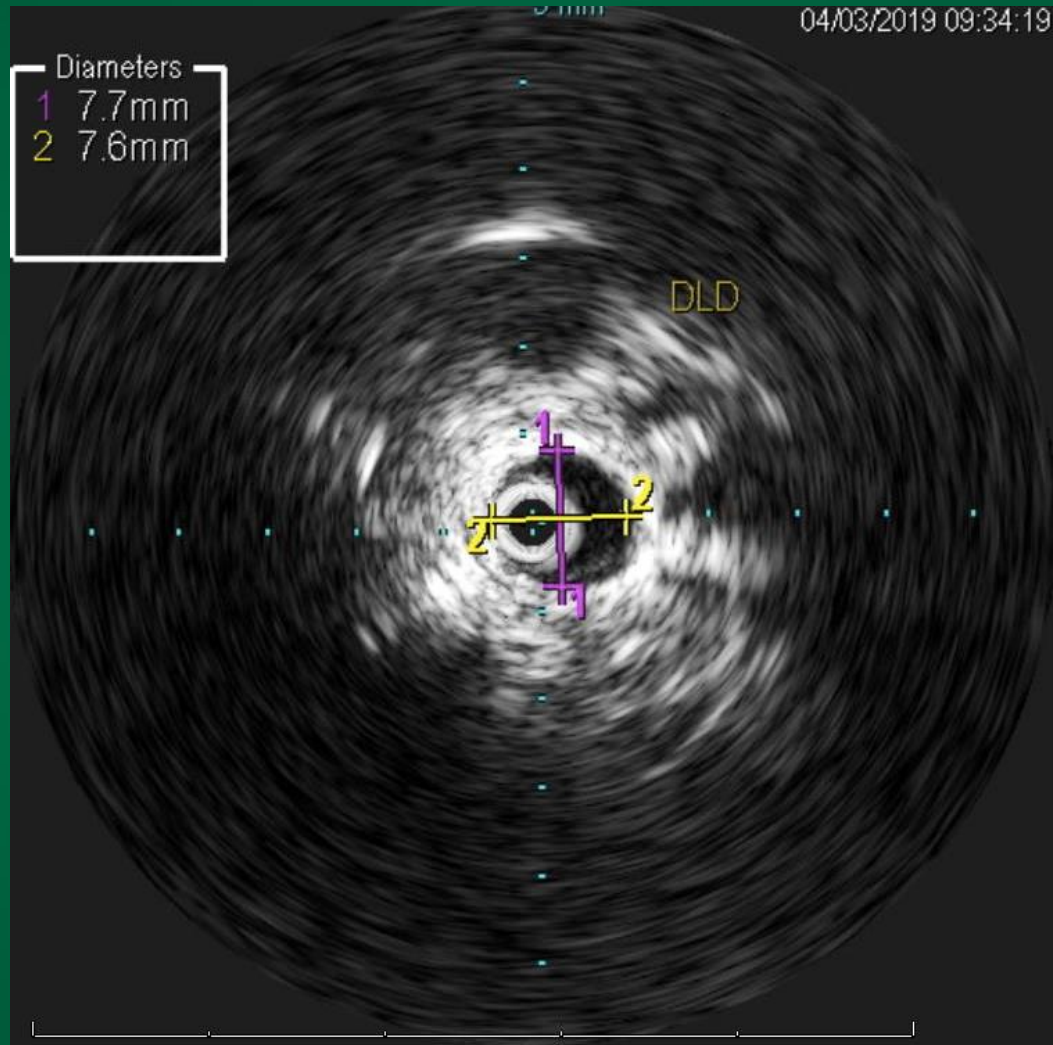
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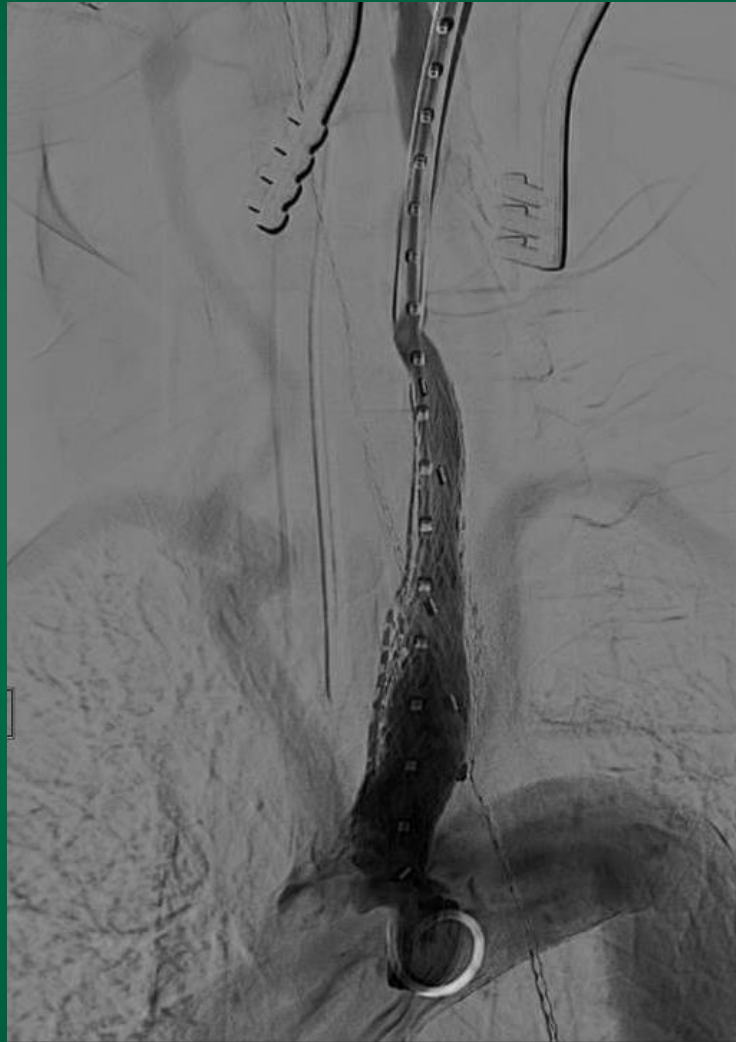
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Follow Up

- Discharged home on POD#1 with no complications
- Followed up in clinic at 1 month
- No neurological events
- CTA obtained showing exclusion of the aneurysm sac without endoleak

Postoperative CTA



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Discussion

- ECAA is a rare entity with an overall paucity of data
- Literature consists of case reports and case series
- Medical management tends to be associated with a high risk of morbidity and mortality
- Vast majority of repairs in literature describe open technique
- More recently there have been reports of endovascular and hybrid repairs with favorable short-term results

Conclusions

- No data on optimal approach to ECAA
- In general, repair favored over medical management
- Endovascular and hybrid approaches may be a reasonable alternative to open repair; particularly in high risk patients and high risk anatomy
- Further medium and long term data needed for these approaches