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Can chronic aortic dissection and preeclampsia coexist?

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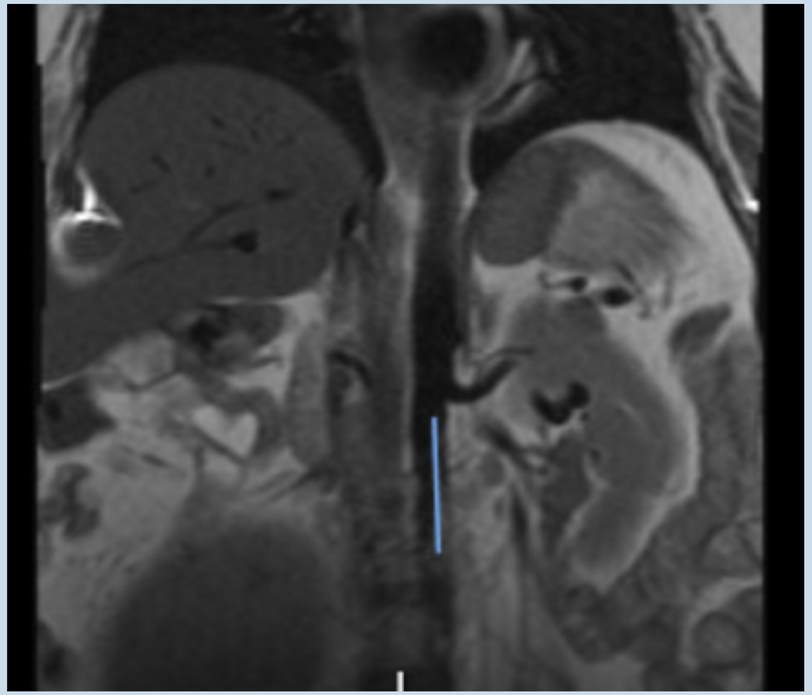
- Spontaneous aortic dissection is the most common fatal aortic condition
- In pregnancy, it manifests mostly during the third trimester due to the hyperdynamic state and hormonal effects on vasculature.[1]

CASE PRESENTATION

37-year-old primipara with a history of:

- uncontrolled Type 2 Diabetes, chronic hypertension
- **incidentally diagnosed aortic dissection**

Presented at 33+4 weeks with a blood pressure of 174/89 and was diagnosed with Pre-Eclampsia with severe features.



IMAGING

- Cardiac echocardiogram showed no valvular abnormalities EF 55-59%, aortic root 2.4 cm, ascending aorta 2.5 cm.
- Magnetic resonance angiography showed chronic short segment dissections within the infrarenal abdominal aorta most prominent a 5.3cm long dissection flap (unchanged from 2018).

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ANESTHESIA MANAGEMENT

- The patient was delivered in the cardiac OR in case of aortic rupture.
- Tight BP control was maintained with labetalol, cardene and esmolol drips.
- Low dose Combined Spinal-Epidural (CSE) was placed to avoid reflex tachycardia: 0.75% (9.75mg), Duramorph (0.15 mg) and fentanyl (10 mcg).
- Monitors included: arterial line and EV 1000.

CONCLUSION

- The patient was recovered in the cardiac ICU, and was discharged home on day 6, on Hydralazine and Labetalol with a target BP below 140/80.
- This case illustrates an unusual presentation of a **stable aortic dissection of unknown origin in a parturient**, carefully managed intraoperatively in order to keep it from extending to a type B dissection requiring immediate surgery; which led to a 34-week successful CD.

REFERENCES

Kinney- Ham et al. Acute Aortic Dissection in Third Trimester Pregnancy without Risk Factors. *WestJEM*. 2011