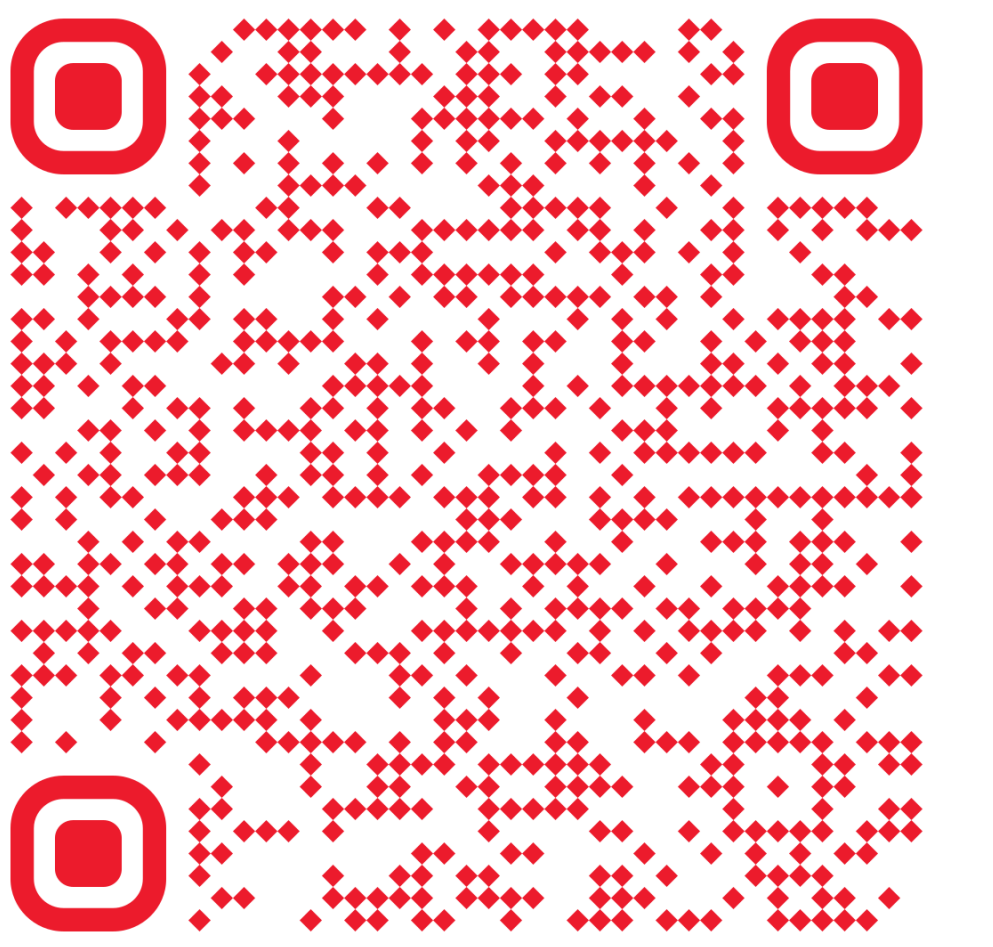


Aortic Root Aneurysm in a Parturient with Loeys-Dietz Syndrome

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Background: Loeys-Dietz Syndrome (LDS) is an autosomal dominant connective tissue disorder causing weakened vascular adventitia including aortic aneurysms and dissections, as well as increased risk of uterine rupture.

Presentation:

- A 35 yo G5P1031 female patient with known family history of Loeys-Dietz secondary to a pathogenic variant in the gene coding for TGFbR1 presented at 38 weeks for scheduled repeat cesarean delivery

History:

- Followed by cardiology and placed on losartan prior to pregnancy
- Pre-pregnancy aortic diameter was 3.7 cm (2019), after delivery aortic diameter increased to 4.0 cm

Intrapartum Course:

- Monitored throughout second pregnancy with aortic root diameter at the sinus of Valsalva remained stable at 4.1 cm with a normal LVEF of 65% on metoprolol
- Given the degree of dilation, she was recommended for repeat cesarean delivery

Intraoperative Management:

Anesthetic Selection:

- Dural Puncture Epidural Analgesia:
 - Dosed slowly over 30 minutes to attain T4 surgical level
- Goal: Avoid swings in blood pressure

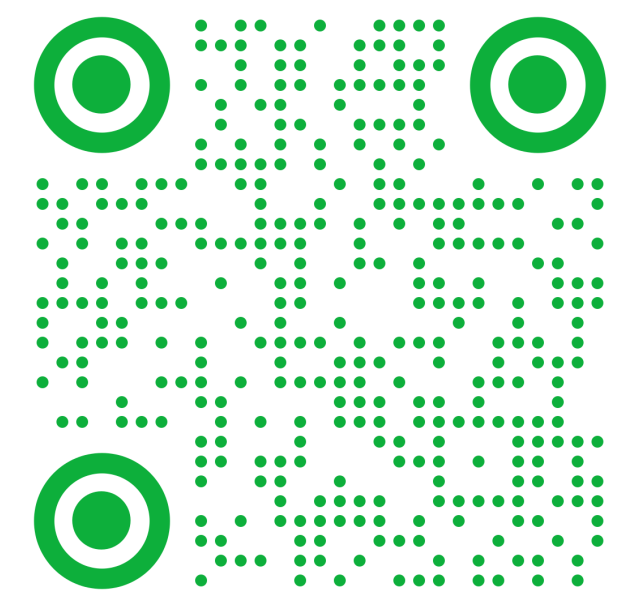
Maintenance of Hemodynamics:

- Patient became tachycardic to HR in the 120s despite normotension
 - Treated with esmolol boluses
- Goal: Decrease HR to decrease risk of aortic dissection, perfuse coronaries

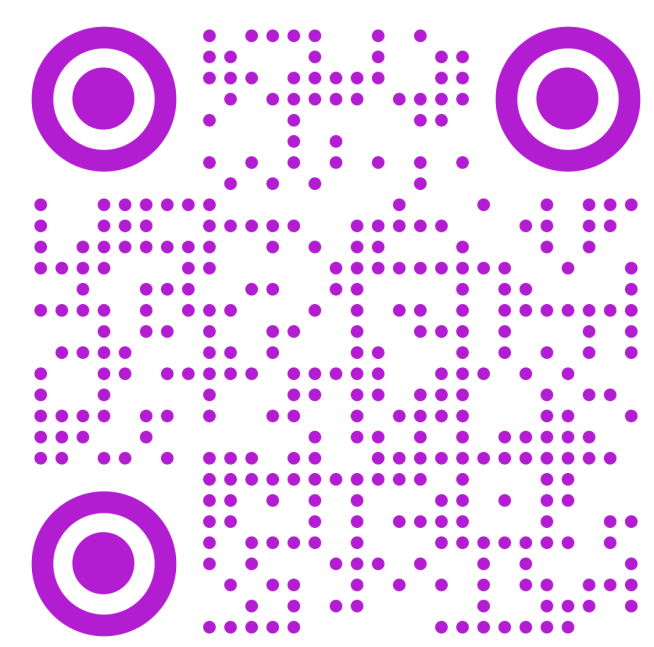
Post-Operative Care:

- Watch blood pressures, heart rate on telemetry for 24 hours post-operatively
- Goal: Plan for 6-week post-partum ECHO.
- *Patient was lost to follow-up and failed to return*

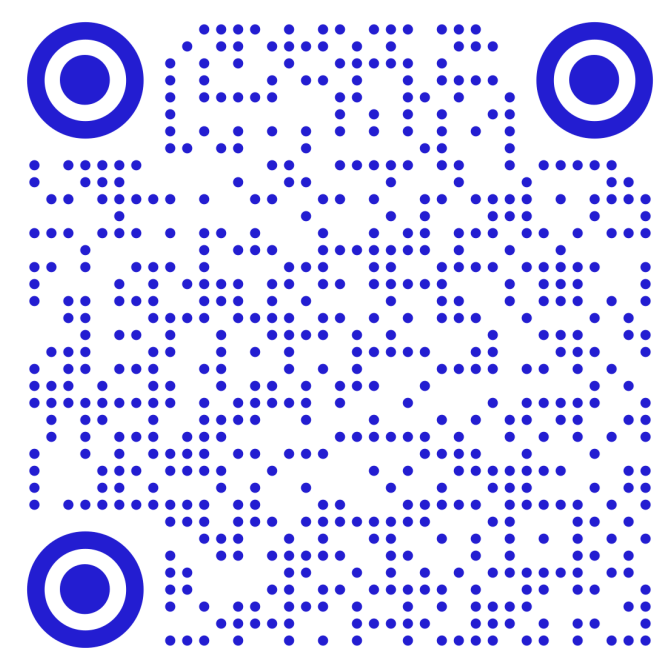
Learning Points:



LDS is a rare but important condition, requiring thorough multi-disciplinary care prior to, during, and after pregnancy



Recognizing women with predisposition to aortic dissection, counseling them before conception, and monitoring the aorta throughout pregnancy may lessen the risk of the rare complications of aortic dissection and uterine rupture, and therefore improve outcomes



Management guidelines must be inferred from other aortic pathologies



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