



**THE OHIO STATE UNIVERSITY**

WEXNER MEDICAL CENTER

## **Management of Type A Dissection At 30 Weeks Gestation- A Staged Approach**

- **I have nothing to disclose.**

## Introduction

- **DeBakey Type II (Stanford Type A) aortic dissection** in a 30-week pregnant patient is a life-threatening emergency
- Maternal survival is the strongest determinant of fetal survival
- Current evidence consistently emphasizes that **maternal stabilization & definitive aortic repair must guide decision-making.**
  - Emergency repair with fetus in utero?
  - Cesarean followed by aortic repair?



**A 36-year-old G7P3 female at 30 weeks' gestation presented to an outside hospital with chest pain radiating to the jaw, shortness of breath, and nausea.**

- She was initially treated for hypertensive urgency with subsequent resolution of symptoms
- On day 4 of OSH admission, she developed recurrent chest pain

**➔ A transthoracic echocardiogram was performed, demonstrating an ascending aortic dissection flap extending from the aortic root into the proximal arch**

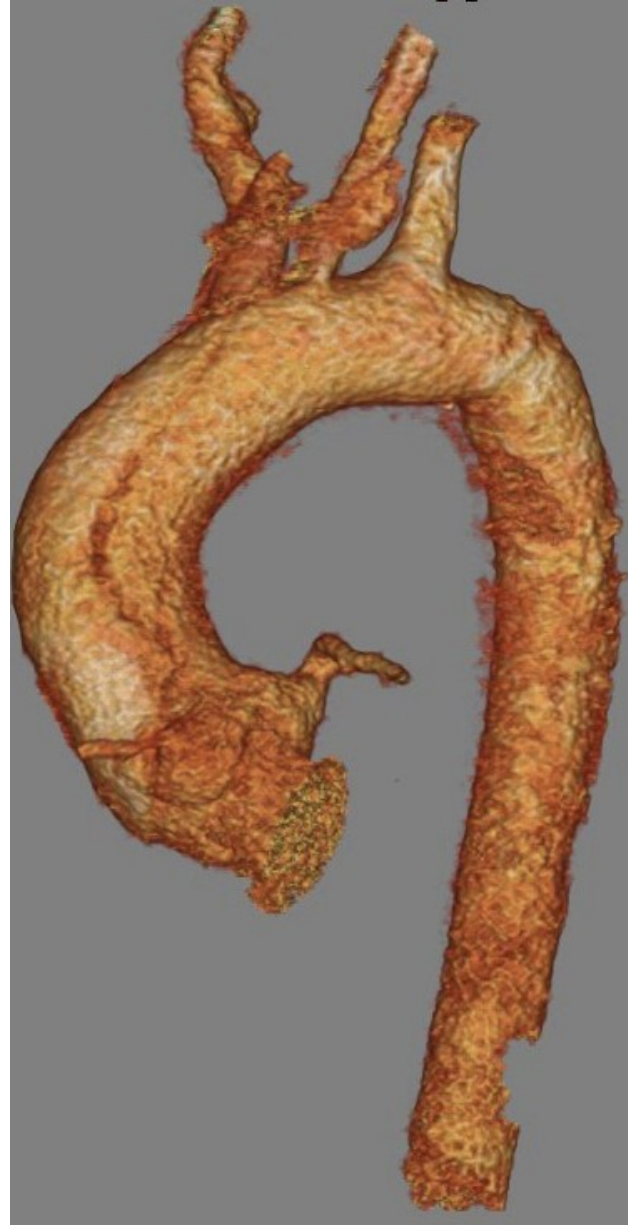
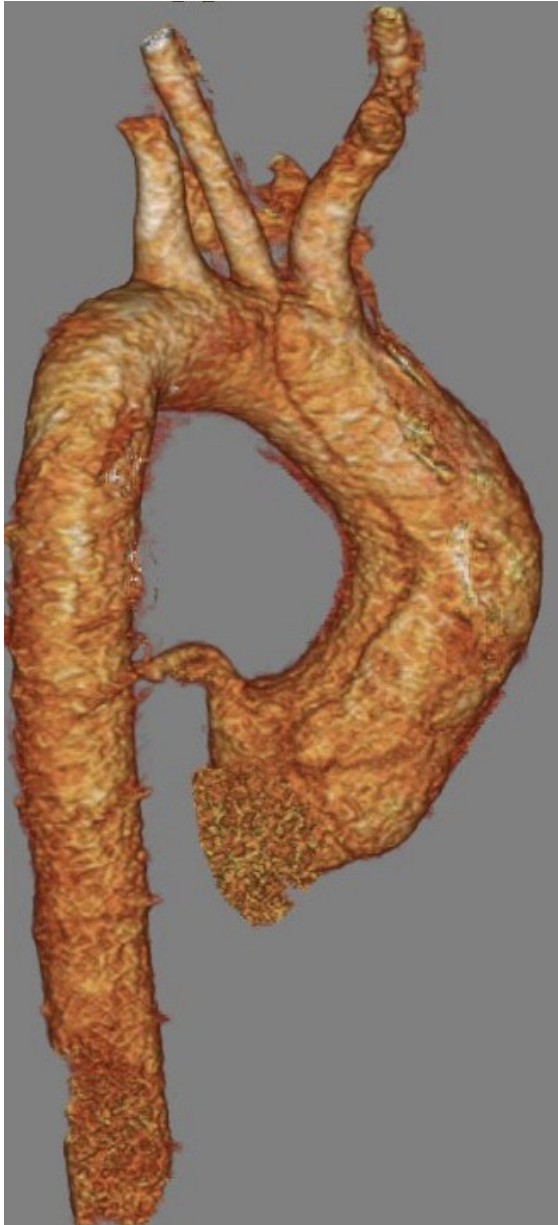


## On Arrival to Our Institution – CTA



- Multidisciplinary discussion held between cardiac surgery, maternal fetal medicine and cardiac anesthesia





# HPI (cont)

- Decision made to proceed with emergent caesarean section, laparotomy diagram to further evaluate extent of dissection
- Caesarean section performed, with abdominal drain placed in RUQ  
→ T10-T11, no WMA, no distal extension
- Intervention performed: performed laparotomy, ligated the artery on day 1
- She was then closely monitored post-procedure resuscitation, remained stable with plan to return to OR on post-operative day 1

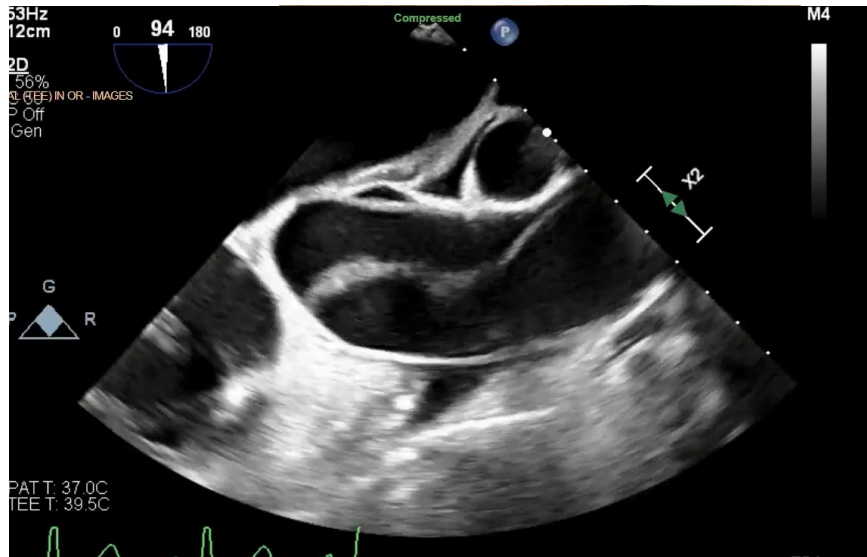


# Cardiac Surgery Operative Course

- Procedure: Aortic repair
- Pre-operative: demonstrated mild AI, distal extension into the descending thorax



# Ascending Aorta → Arch — Long Axis View

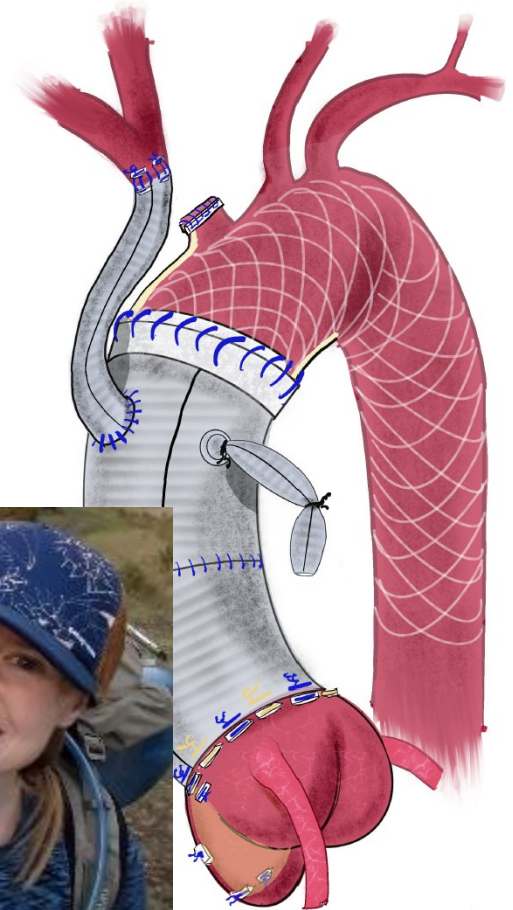


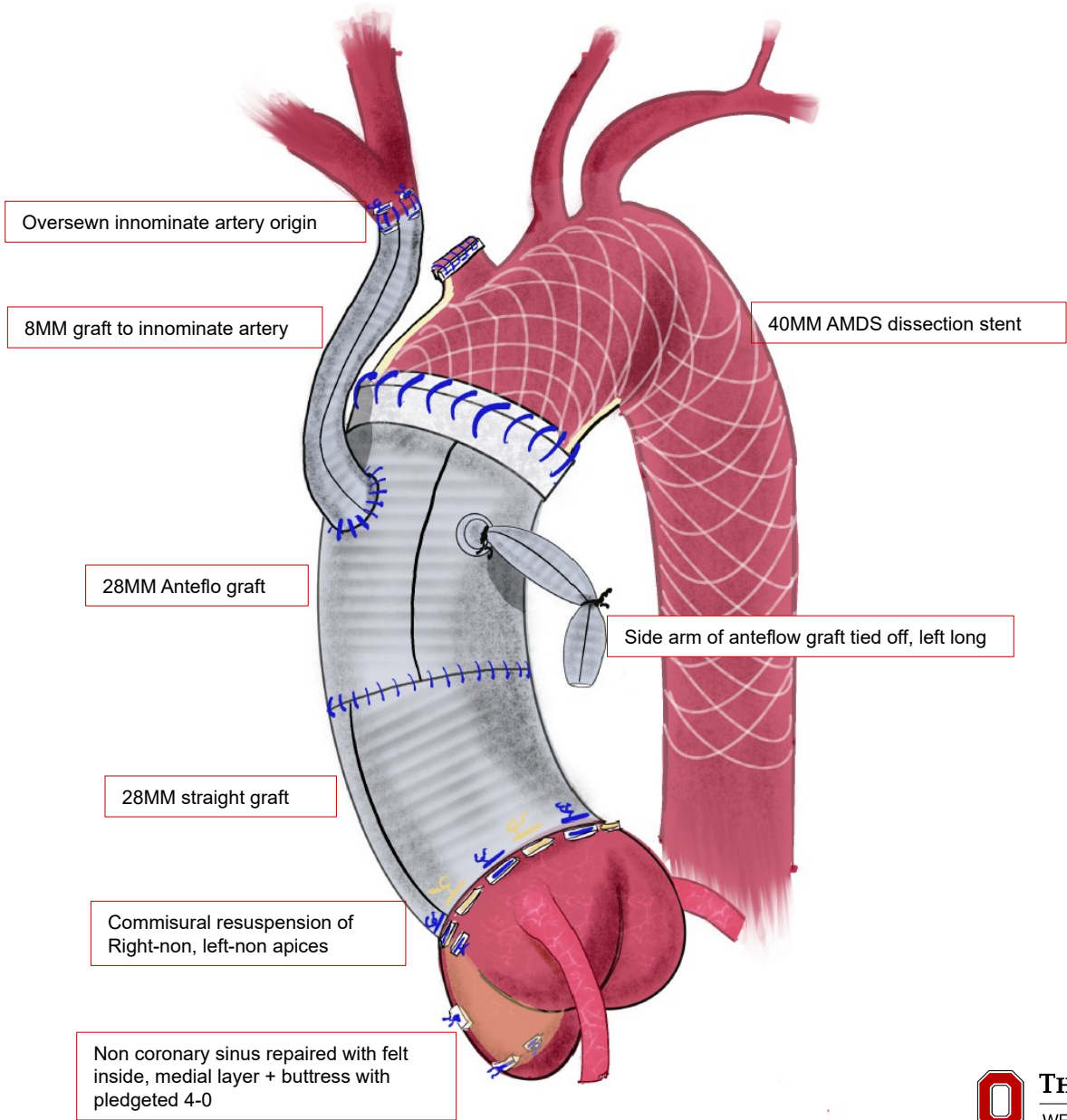
# Descending Thoracic Aorta



# Operative Course

- Right axillary artery cannulation, arrest
- Innominate artery cannulation for
- Hypothermic circulatory arrest with ACP. The
- 40 mm AMD is placed and
- deployed - 2 to the AM
- sewing cuff, the artery was
- debranched.
- CPB time 233 minutes, ischemic time 158 minutes, HCA time 90 minutes (73 minutes ACP)

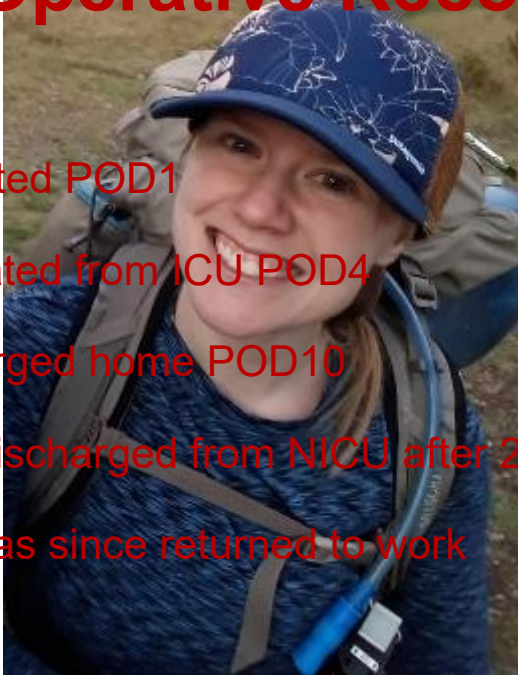






# Post-Operative Recovery

- Extubated POD1
- Graduated from ICU POD4
- Discharged home POD10
- Baby discharged from NICU after 2 months
- Mom has since returned to work



## Summary



Type A dissection during pregnancy is a rare but life-threatening emergency requiring prompt management



Multidisciplinary planning is integral to management



Staged repair may be considered in stable patients



# Thank you!

- **Questions?**