

# Session 8: Aortic Aneurysmal Disorders

## 1. A proximal aortic dimension of >40mm is usually abnormal and abnormal aortas require CT or MRI imaging

- Age, sex and body surface area (BSA) affect aortic size
- In older, male, larger patients an aorta of >40mm can be normal
- In younger, female, smaller patients an aorta of <40mm can be dilated
- In gray cases, ask about family history (FHx) and look for syndromic features
- When in doubt, remeasure in 2-3 years

## 2. Younger patients with dilated aortas need a diagnostic assessment for a genetic cause (not just Marfan's Syndrome)

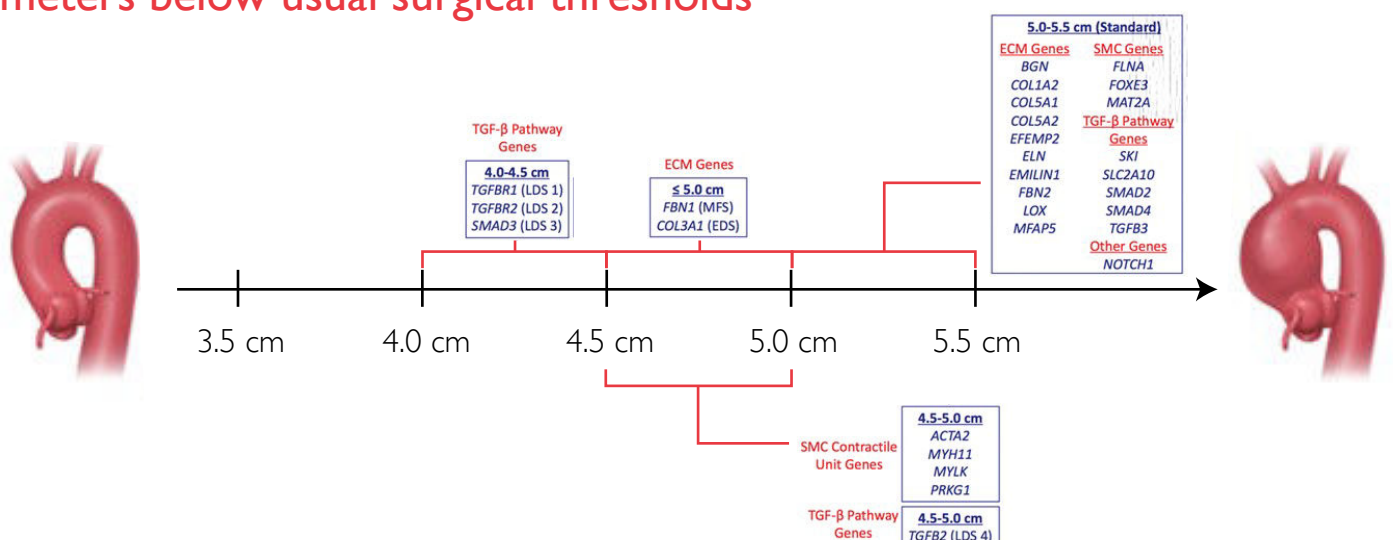
- Think genetic aortopathy if:
  - Onset is below age 50
  - Onset after age 50 and there is family history
  - There is a bicuspid aortic valve
  - There are extravascular features
  - There are unusual vascular phenomena

## 3. All patients with suspected genetic aortopathy (including bicuspid aortic valve [BAV]) should be informed of the need for family screening and receive a comprehensive care management plan

## 4. Timing of surgery depends on aortic size and other factors

- Depends on:
  - Aortic size
  - Genetics
  - Family history
  - Rate of aortic growth
  - Status of aortic valve
  - Comorbidities affecting surgical risk

## 5. Some patients require repair at aortic diameters below usual surgical thresholds



LDS, Loeys Dietz syndrome, MFS Marfan syndrome, EDS vascular Ehlers Danlos syndrome, ECM extracellular matrix, SMC smooth muscle cells

Brownstein AJ 2017

