

The Ritter Guide to Acute Aortic Syndrome

A bedside guide to early recognition and clinical decision-making

RISK FACTORS

- Connective tissue disease: Marfan syndrome, Loeys-Dietz syndrome
- History of an aortic aneurysm
- Previous acute aortic syndrome
- Recent aortic manipulation
- Family History of aortic pathology

CLINICAL PEARLS

- Blood pressure differentials may be AAS, but up to 20% have BP differences from atherosclerosis.
- Pain may move from neck to groin as dissection extends.
- Ask about family history of aortic disease or sudden unexplained death.
- Pregnancy is a high-risk time for those with genetic disorders, especially those who are undiagnosed.

PAIN

- Abrupt onset
- Radiating or migrating
- Tearing or ripping
- "Absolute worst pain ever"

CONSIDER DISSECTION IN:

- Any patient with:
 - High risk pain
 - Risk factors
 - Or concerning physical exam findings.
- If any are present, consider the diagnosis. If none, diagnosis is unlikely.
- AAS can affect young and old; consider <50 if abrupt pain or high diastolic BP.

PHYSICAL EXAM

- Hypertension
- Murmur of aortic regurgitation
- Neurological deficit
- Pulse Deficit

D-DIMER

- Do not use D-dimer in high-risk patients.
- Sensitive 90-100%, Specific = 60%