

THORACIC REFERRAL GUIDE

EMERGENT

ACUTE AORTIC SYNDROME:	SYMPTOMS:	SIGNS:
Dissections	Chest or back pain	Pulse difference
Intramural hematoma	Syncope	New onset murmur
Penetrating aortic ulcers	Weakness or Numbness	Hypertension or shock
Aortic rupture	Stroke	
	Paraplegia	

THORACIC AORTIC DISSECTIONS

Type A: any involvement of ascending to innominate artery **Type B:** any involvement of aorta distal to innominate artery

Acute: < 2 weeks Subacute: 2 - 6 weeks Chronic: > 6 weeks

Diagnosis:

- •CT angio "triple rule-out" protocol (preferred study)
- MRI
- Echo (trans-esophageal)

Management:

Acute Type A: usually emergent surgery

Acute Type B: medical management with BP control unless complicated (has signs of malperfusion or rupture), then immediate surgery (usually endovascular, but open if endovascular impossible)

Chronic type A and B: treat as descending aneurysm.

Medical management of blood pressure:

First line therapy beta-blockers (esmolol or labetalol) followed by vasodilators if the above does not work. Do not start vasodilators first due to reflex tachycardia. Goal is to decrease dP/dt. Systolic BP should be less than 120 and heart rate should be less than 80. Controlling pain with narcotics is also important adjunct.

Malperfusion:

- Coronary elevated troponins
- •Renal elevated creatinine
- Mesenteric elevated hepatic enzymes, amylase, lipase, lactate
- Extremities absent or diminished pulse
- Spinal Cord paraparesis, paraplegia

INTRAMURAL HEMATOMA

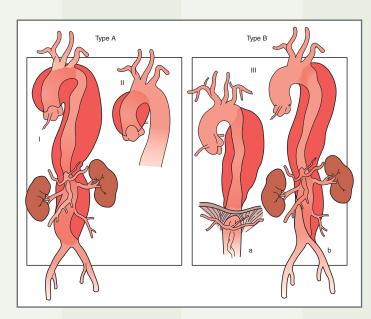
- Treat as dissection
- Emergent surgery for Type A
- Medical management for non-complicated acute Type B or surgery for complicated acute Type B

PENETRATING AORTIC ULCERS

Asymptomatic: surgery if more than 1 cm deep and 2 cm wide Symptomatic (pain): any size

RUPTURED DISSECTION OR ANEURYSM

Immediate surgery



Stanford's classification of aortic dissection



ELECTIVE

THORACIC AORTIC ANEURYSMS

Ascending Criteria for Surgical Intervention

With symptoms: any size Without symptoms:

- •5.5 cm in general
- 5.0 cm if bicuspid aortic valve or moderate to severe aortic stenosis or insufficiency
- 4.5 cm if other cardiac disease requiring surgery
- •4.0-4.5 cm if has history of connective tissue disorder or family history of aneurysm or dissection
- *If in a small patient, intervene at smaller sizes.

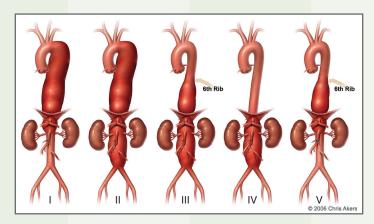
Descending Criteria for Surgical Intervention

With symptoms: any size Without symptoms: 5.5 cm

Thoracoabdominal Criteria for Surgical Intervention

With symptoms: any size Without symptoms: 5.5 cm

*Size threshold lower when more than 0.5 cm increase in size over 1 year.



Crawford's thoracoabdominal aneurysm classification system

FOR MORE INFORMATION, PLEASE CALL:

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Reference:

Hiratzka LF *et al.* Circulation. 2010 Apr 6;121(13):e266-369