

# The Society of Thoracic Surgeons

Adult Cardiac Surgery Database

Monthly Webinar

April 1, 2026



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# Agenda

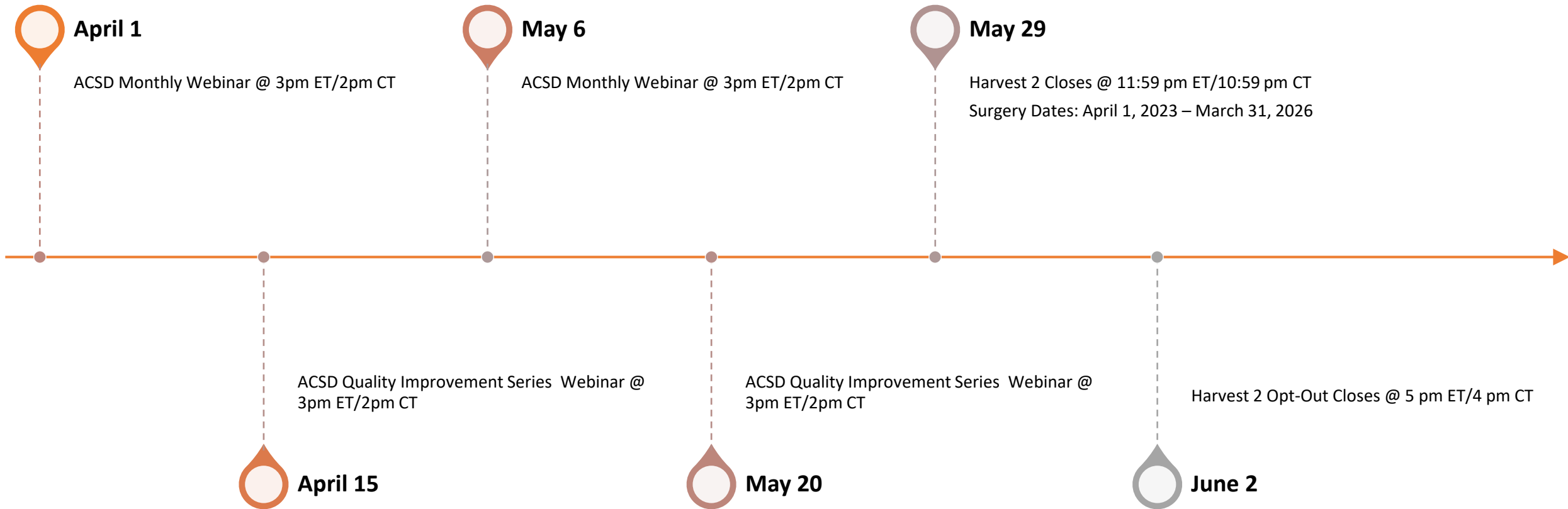
Welcome and Introductions

STS Updates

Clinical Education-Aorta Session #3  
Presenting Symptoms

Q&A

# Important Dates-Timeline



# AQO 2026 – New Orleans

- September 30-October 2, 2026
- Intermacs & Pedimacs-Live Virtual Forum-September 24
- CHSD & GTSD Sessions-September 30-October 1
- ACSD Sessions-October 1-October 2 (half day-breakout discussions)
- [AQO 2026 Session Proposal Form | STS](#)
- Deadline for proposal submission Friday, April 3.
- [AQO 2026 Abstract Submission Form | STS](#)
- Deadline for abstract submission Friday, June 12.



An anatomical illustration of the human heart and aorta. The heart is shown in a frontal view, with the aorta extending downwards from the base. The aorta is depicted as a large, thick-walled vessel. The heart's chambers and major vessels are shown in various colors: red for oxygenated blood, blue for deoxygenated blood, and yellow for the pericardium. The background is a solid grey color.

# Aorta Session #3

## Presenting Symptoms and Primary Indication

*Melinda Offer, RN, MSN*

# Presenting Symptoms

Presenting Symptom: Presentation (4710)	<input type="checkbox"/> Pain <input type="checkbox"/> CHF <input type="checkbox"/> Cardiac Arrest <input type="checkbox"/> Syncope <input type="checkbox"/> Infection <input type="checkbox"/> Asymptomatic
	<input type="checkbox"/> Injury related to Surgical Complication <input type="checkbox"/> Neuro Deficit
	<input type="checkbox"/> Other <input type="checkbox"/> Unknown
	<input type="checkbox"/> Stroke <input type="checkbox"/> Limb numbness <input type="checkbox"/> Paralysis <input type="checkbox"/> Hoarseness (acute vocal cord dysfunction)

Long Name: Aorta Presentation

Definition: Indicate the clinical presentation

Intent/Clarification: This is intended to define the presenting symptoms that lead to the diagnosis and operative intervention.

## Key Points:

- Intent is to choose the presenting symptoms that lead to the diagnosis and operative intervention on the aorta.
- This is a select one choice
- There is no specific hierarchy, and the primary presenting symptom should be indicated by the surgeon.

# Presenting Symptoms

Presenting Symptom: Presentation (4710)	<input type="checkbox"/> Pain	<input type="checkbox"/> CHF	<input type="checkbox"/> Cardiac Arrest	<input type="checkbox"/> Syncope	<input type="checkbox"/> Infection	<input type="checkbox"/> Asymptomatic
	<input type="checkbox"/> Injury related to Surgical Complication	<input type="checkbox"/> Neuro Deficit	<input type="checkbox"/> Other	<input type="checkbox"/> Unknown		

## Choices on DCF

- **Pain** – Pain was the primary presenting symptom that led to the diagnosis and operative intervention on the aorta.
- **CHF** – CHF was the primary presenting symptom that led to the diagnosis and operative intervention on the aorta.
- **Cardiac Arrest** – Cardiac Arrest was the primary presenting symptom that led to the diagnosis and operative intervention on the aorta.
- **Syncope** – Syncope was the presenting symptom that led to the diagnosis and operative intervention on the aorta.
- **Infection** – Infection was the presenting symptom that led to the diagnosis and operative intervention on the aorta.

# Presenting Symptoms

Presenting Symptom: Presentation (4710)	<input type="checkbox"/> Pain	<input type="checkbox"/> CHF	<input type="checkbox"/> Cardiac Arrest	<input type="checkbox"/> Syncope	<input type="checkbox"/> Infection	<input type="checkbox"/> Asymptomatic
	<input checked="" type="checkbox"/> Injury related to Surgical Complication	<input checked="" type="checkbox"/> Neuro Deficit	<input type="checkbox"/> Other	<input type="checkbox"/> Unknown		

## Choices on DCF

- **Asymptomatic** – No symptoms that lead to the diagnosis and operative intervention on the aorta.
- **Injury Related to Surgical Complication** – Iatrogenic injury related to surgical or procedural complication that led to the diagnosis and operative intervention on the aorta. Includes catheter induced trauma. Do not include surgical induced aorta trauma that occurred during the index procedure.
- **Neuro Deficit** – Neuro deficit that leads to the diagnosis and operative intervention on the aorta.
- **Other** – The patient has other symptoms but did not match any of the choices listed above.
- **Unknown** - Unknown should be coded in the circumstance where no clinical documentation exists, and the patient cannot give history. If the patient is alone, intubated, and unable to give history; use the information from the patient's family if they become available.

# Presenting Symptom Neuro Deficit

Presenting Symptom: Presentation (4710)	<input type="checkbox"/> Pain <input type="checkbox"/> CHF <input type="checkbox"/> Cardiac Arrest <input type="checkbox"/> Syncope <input type="checkbox"/> Infection <input type="checkbox"/> Asymptomatic
	<input checked="" type="checkbox"/> Injury related to Surgical Complication <input checked="" type="checkbox"/> Neuro Deficit
	<input type="checkbox"/> Other <input type="checkbox"/> Unknown
	<input checked="" type="checkbox"/> Neuro Deficit
AortPresNeuroDef (4711)	<input type="checkbox"/> Stroke <input type="checkbox"/> Limb numbness <input type="checkbox"/> Paralysis <input type="checkbox"/> Hoarseness <input checked="" type="checkbox"/> acute vocal cord dysfunction

If Neuro deficit led to the diagnosis and operative intervention on the aorta, then choose the deficit.

## Key Points:

- Timeframe is from admission to OR entry.
- This is a select one choice.
- **Select the most severe neuro deficit.**

## Choices on DCF:

- **Stroke** – Patient presents with a stroke. Stroke is an acute episode of focal or global neurological dysfunction caused by brain or retinal vascular injury as a result of hemorrhage or infarction
- **Limb Numbness** – Patient presents with new onset limb numbness.
- **Paralysis** – Patient presents with new onset paralysis. Paralysis is a loss of purposeful movement. Loss of motor function may be complete, unilateral or bilateral confined to the lower extremities or present in all four extremities.
- **Hoarseness / Acute vocal cord dysfunction** – Neuro deficit that presents with new onset hoarseness, dysphagia, dysarthria and/or aspiration.

# Scenarios: Aorta Presentation

Patient presented with several months of shortness of breath on exertion. Patient denies any lower extremity edema.

Patient presented with headache, left eye vision loss and stroke.

Patient with a history of aneurysm that has been monitored with yearly CTs that now show an interval increase in size. History is also notable for prior MVA, back pain and HTN.

Patient with out of hospital syncopal event in which a bystander started CPR prior to EMS arrival. Patient achieved ROSC after EMS arrived.

## Choices:

- Pain
- CHF
- Cardiac Arrest
- Syncope
- Infection
- Asymptomatic
- Injury related to Surgical Complication
- Neuro Deficit
- Other
- Unknown

**Other Symptoms**

**Neuro Deficit**

**Asymptomatic**

**Cardiac Arrest**

# Scenarios: Aorta Presentation

## Choices:

Pain  CHF  Cardiac Arrest  Syncope  Infection  Asymptomatic  
 Injury related to Surgical Complication  Neuro Deficit  
 Other  Unknown

The patient presented with sepsis and jaundice and was found to have positive blood cultures that grew Streptococcus. He was found to have severe AR in echo, and a CT showed a bicuspid AV with a 47 mm root aneurysm and an ascending aorta of 43 mm.

**Infection**

We had a CABG patient who had a dissection of the aortic root after removal of the vent. The dissection extended into the noncoronary sinus. Went on circ arrest and replaced the ascending aorta.

**Asymptomatic**

Patient was having a TAVR. The TAVR valve embolized in the distal ascending aorta. A decision was made to take the patient to the OR and retrieve the embolized TVT valve.

**Injury r/to Surgical Complication**

# Primary Indication for Aorta Intervention

**Long Name:** Aorta Primary indication

**Definition:** Indicate the primary indication for intervention

**Intent/Clarification:** The intent is to determine the specific condition, diagnosis, or pathology that prompted the patient's entry to the operating room for surgical intervention.

## DCF Choices:

Primary Indication: <i>PrimIndic (4712)</i>	<input type="checkbox"/> Aneurysm <input type="checkbox"/> Dissection <input type="checkbox"/> Other
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## Key Points:

- This is a select one choice.
- There is no specific hierarchy, and the primary presenting symptom should be indicated by the surgeon.

# Primary Indication for Aorta Intervention - Aneurysm

- ❑ An aortic aneurysm is a balloon-like bulge in the wall of your aorta.
- ❑ Involves all 3 layers of the aorta wall

- **Aorta Root aneurysm**

- Dilated Root,
- Sinus of Valsalva Aneurysm (SOV Aneurysm)
- Aortic Sinus Aneurysm

- **Thoracic Aorta Aneurysm (TAA)**

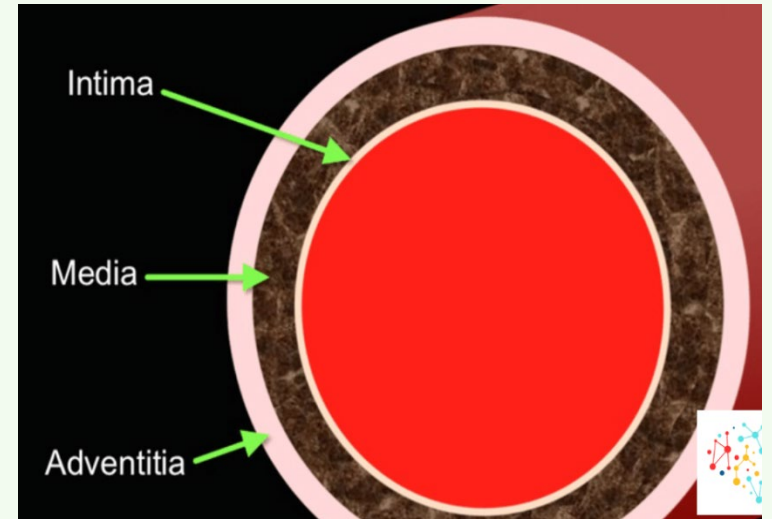
- Ascending Aorta Aneurysm
- Aortic Arch Aneurysm
- Descending Aorta Aneurysm

- **Abdominal Aorta Aneurysm (AAA)**

- Suprarenal Abdominal Aneurysm – starts at Zone 6 (diaphragm)
- Infrarenal Abdominal Aneurysm – starts at Zone 8 (renal arteries)

- **Aneurysm etiology on DCF also includes Pseudoaneurysms (PSA) of the root or aorta**

A pseudoaneurysm, also called a false aneurysm, occurs when an artery is injured and blood escapes through the vessel wall but is contained by surrounding tissue, forming a localized hematoma. Unlike a true aneurysm, which involves all three layers of the arterial wall, a pseudoaneurysm only involves one or two layers. The bulge often appears as a pulsatile mass near the site of the injury.



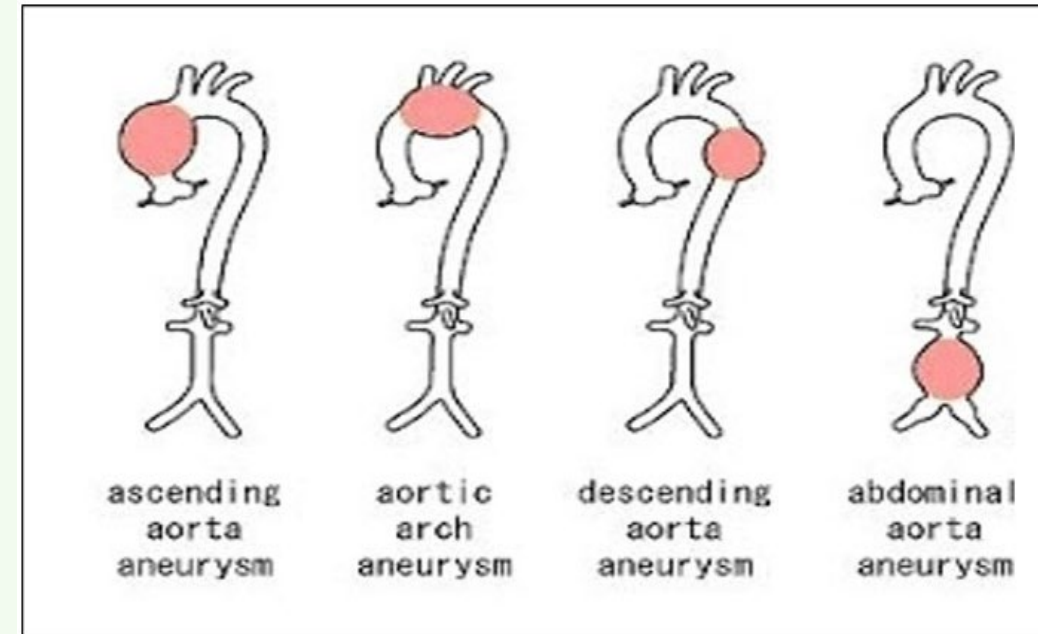
# Primary Indication for Aorta Intervention - Aneurysm

The causes of an aortic aneurysm can include:

- Atherosclerosis
- Inflammation of the arteries.
- Inherited conditions, especially those that affect connective tissue
- Injury to an aorta
- Infections, such as syphilis

Note:

- A growing aortic aneurysm can also lead to an aortic dissection or tear in your aorta wall. The dissection allows blood to leak in between the walls of your aorta causing a narrowing of your aorta. The narrowed aorta reduces or blocks blood flow from your heart to other areas. The pressure of blood building up in your aorta wall can also cause the aneurysm to rupture.



# Primary Indication for Aorta Intervention – Aneurysm Etiology

**Long Name:** Aneurysm – Etiology

**Definition:** Indicate the aneurysm etiology

**Intent/Clarification:** There is no hierarchy, choose the primary etiology documented in the medical record. Primary etiology may also be identified at the time of the surgical procedure.

## DCF Choices:

- **Atherosclerosis** - An arteriosclerotic aortic aneurysm is an aneurysm that forms due to the weakening of the aortic wall in cases of advanced atherosclerosis.
- **Infection** – Aorta Aneurysm because of a primary infection of native aorta.
- **Inflammatory** – Aorta Aneurysm as a result of an autoimmune disease or a vasculitis that caused the aortic aneurysm. The most common inflammatory diseases are Takayasu Arteritis, Giant Cell Arteritis, Large-vessel Vasculitis, Behcet disease, Cogan syndrome, Sarcoidosis, Systemic Lupus Erythematosus, Rheumatoid Arthritis, HLA-B27-associated spondyloarthropathies, Isolated Idiopathic Aortitis, Inflammatory Aortic Aneurysm, Chronic Peri-aortitis and Syphilis.

# Primary Indication for Aorta Intervention – Aneurysm Etiology

## DCF Choices Continued:

- **Connective Tissue/Syndromic Disorder** - Includes Marfans syndrome, Loeys Dietz syndrome, and Ehlers-Danlos syndrome, Osteogenesis imperfecta, Shprintzen-Goldberg Syndrome, Arterial Tortuosity Syndrome, Cystic Medial Degeneration ( CMD) and Update May 2022 Myxomatous Degeneration.
- **Ulcerative Plaque/Penetrating Ulcer** – Ulcerated Plaque in the aorta is a form of atherosclerotic plaque that erodes the inner lining (intima) creating a small ulcer. It is called a Penetrating Ulcer when the erosion penetrates deeper into the aortic wall. This leads to a weakening of the aorta wall that can cause an aneurysm or a dissection.
- **Pseudoaneurysm** - Is an outpouching that does not involve all layers of the aortic wall.
- **Mycotic** – Mycotic aneurysm is caused by microbial invasion of the arterial wall. This condition usually arises when bacteria from another site invades the aorta and weakens the vessel, resulting in the formation of an aneurysm. Less than 3% of all aortic aneurysms are mycotic. The predominant causative organisms include *Staphylococcus aureus*, *Salmonella*, and *Pseudomonas aeruginosa*

# Primary Indication for Aorta Intervention – Aneurysm Etiology

## DCF Choices Continued:

- **Traumatic transection** – Aorta aneurysm develops because of a traumatic aortic transection.
- **Intercostal visceral patch** – An intercostal patch aneurysm was defined as a pseudoaneurysm along the intercostal patch anastomotic suture line. Intercostal patch aneurysms are a complication of the sparing of intercostal arteries during thoracic aneurysm repair.
- **Anastomotic site** - Aorta aneurysm at the site of an anastomotic site other than intercostal visceral patch.
- **Aortic Valve Morphology** – Aorta Aneurysm caused by variants of aortic valve morphology – bicuspid, unicuspid, quadricuspid. Update August 2023 - Either true or functioning bicuspid aortic valve can contribute to aneurysm formation.
- **Chronic Dissection** - Chronic Aorta Dissection can weaken the aorta resulting in aneurysm
- **Unknown/Other** – Aorta aneurysm etiology is not included in the above choices and can include documentation of systemic hypertension, degenerative aneurysm, and post stenotic dilatation related aneurysm.

# Primary Indication for Aorta Intervention – Aneurysm Type

Long Name: Aneurysm

Definition: Indicate the aneurysm type Aneurysms are classified as:

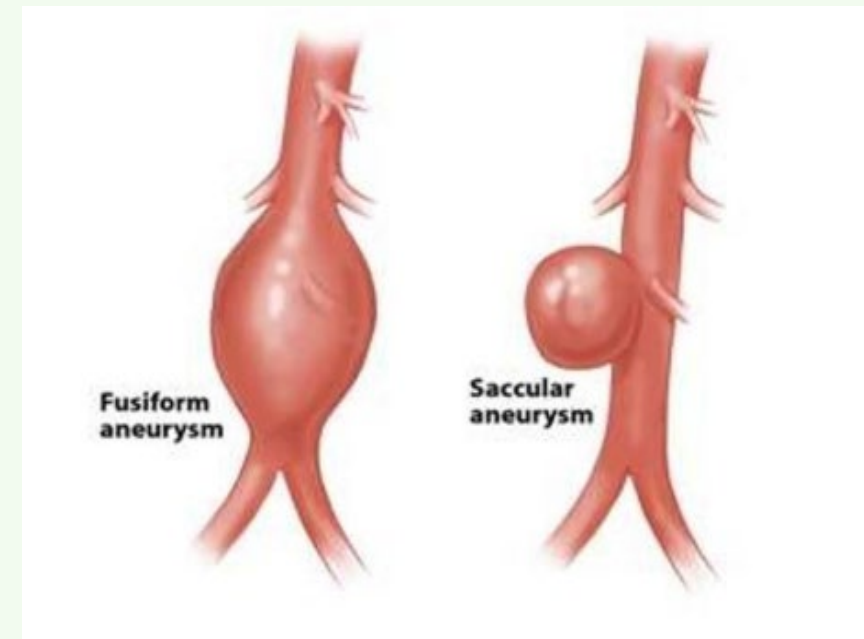
Type:  Fusiform  Saccular  Unknown  
AnType (4725)

## DCF Choices:

- **Fusiform aneurysm** is a diffuse dilation of all layers of the aortic wall involving an extended segment
- **Saccular aneurysm** is a focal dilation of all layers of the aorta
- **Unknown**

FAQ Nov 2020 - If there is no documentation whether the aneurysm is fusiform or saccular we can assume it is fusiform?

Answer – Code as unknown. Although most aneurysms tend to be fusiform there needs to be documentation in the medical record indicating the type.



# Primary Indication for Aorta Intervention – Aneurysm Rupture

**Long Name:** Aneurysm - Rupture

**Definition:** Indicate whether the aneurysm ruptured

**Intent/Clarification:** Aneurysm rupture is a complete breakdown in the integrity of the aortic wall and if not “contained” will result in exsanguination.

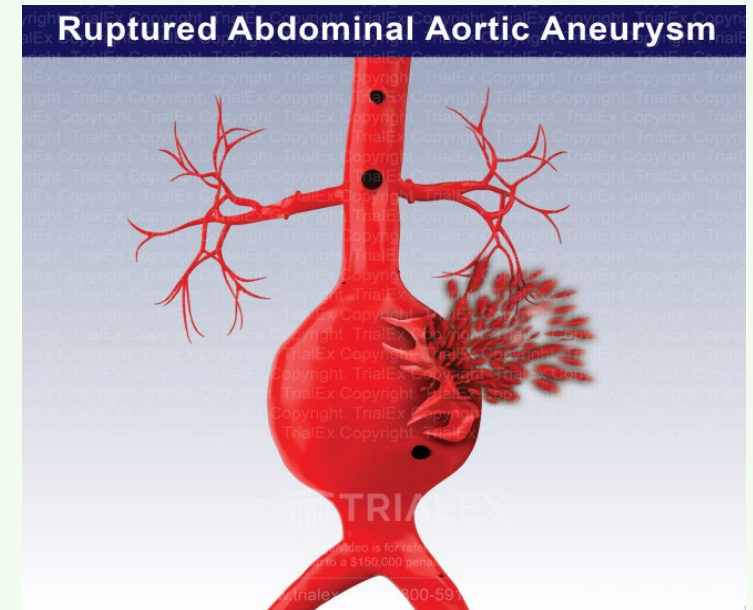
**Long Name:** Aneurysm - Rupture – Contained

**Definition:** Indicate whether the rupture was contained

**Intent/Clarification:** Contained rupture is a complete breakdown in the integrity of the aortic wall but is being “contained” by some clot or another structure. It is an unstable situation. When seen on CT scan, it is almost always “contained” as frank rupture is usually fatal.

## DCF Choices for this Parent / Child Field:

Rupture:  Yes  No (If Yes →) Contained rupture:  Yes  No  
AnRupt (4730) AnRuptCon (4735)



# Primary Indication for Aorta Intervention – Aneurysm Rupture

## Key Points:

- When an aortic aneurysm ruptures, blood bursts through the weakened wall of the aorta
- The overall mortality rate, including those who make it to surgery, ranges from 80% to 90%. Without emergency surgery, a ruptured aortic aneurysm is almost universally fatal.
- The hallmark symptom is sudden, extremely severe pain. People often describe it as a ripping or tearing sensation that comes on without warning. Where you feel it depends on where along the aorta the rupture occurs.
- Types of Rupture
  - **Frank aorta rupture** is a complete tear of the aortic wall, causing severe internal bleeding. This condition is life-threatening and that requires immediate emergency surgery.
  - **Contained aorta rupture** refers to a situation where a rupture of the aorta occurs but is limited by surrounding tissues, preventing massive hemorrhage potentially allowing for more stable emergency

# Primary Indication for Aorta Intervention – Aneurysm Location

**Long Name:** Aneurysm

**Definition:** Indicate the location of the maximum diameter of the aneurysm.

**Intent/Clarification:** The intent is to identify the location of the maximum diameter of the aneurysm that is being operated on.

## Key Points:

- STJ is the sinotubular junction and identifies the boundary between the aortic root and the ascending aorta
- This field includes the aortic root and the aorta.
- There is no specific hierarchy. Choose the primary zone of maximum diameter indicated by the surgeon.
- If the aneurysm spans more than one zone, code the most proximal zone with the largest diameter.

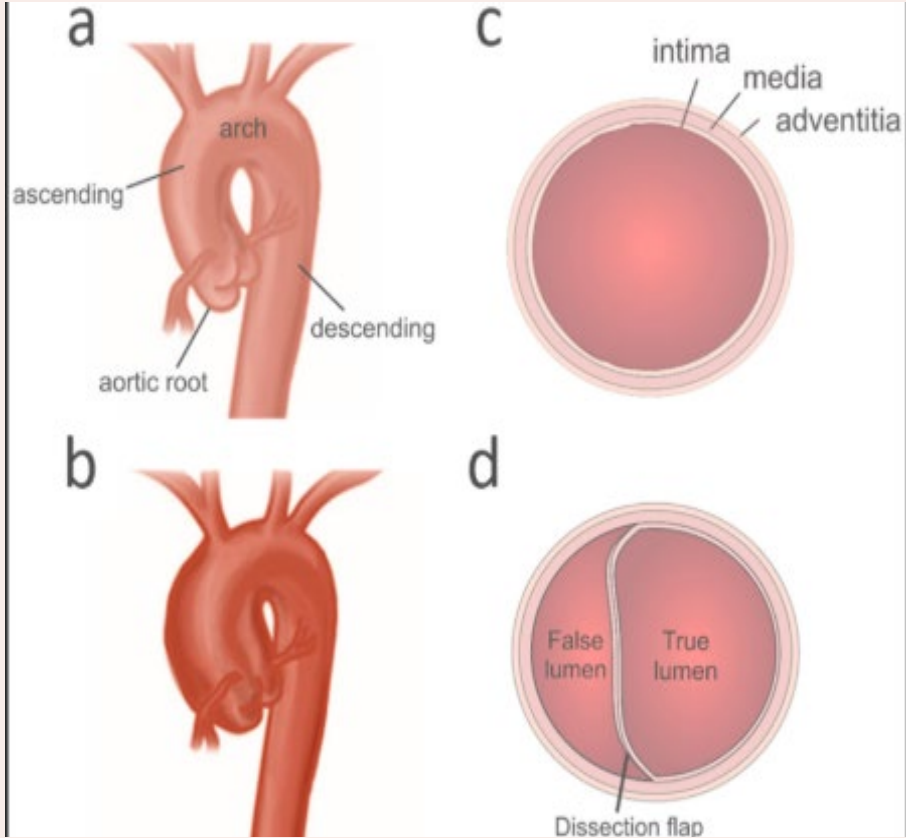
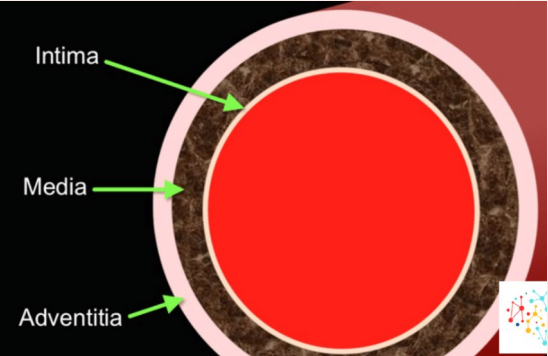
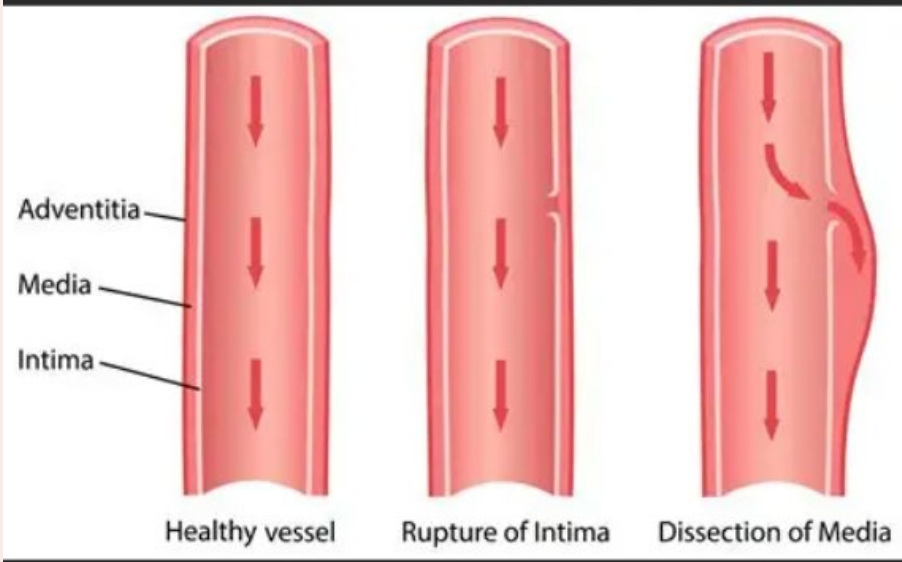
## DCF Choices:

Location of  
Maximum  
Diameter:

Below STJ  STJ-midascending  Midascending to distal ascending  
 Zone 1  Zone 2  Zone 3  Zone 4  Zone 5  Zone 6  Zone 7  Zone 8  Zone 9  Zone 10  Zone 11

# Primary Indication for Aorta Intervention - Dissection

An aortic dissection is a tear happens in the inner layer (intima) of the aorta. Blood escapes through the tear. This causes the inner and middle layers of the artery to split creating a dissection flap and false lumen.



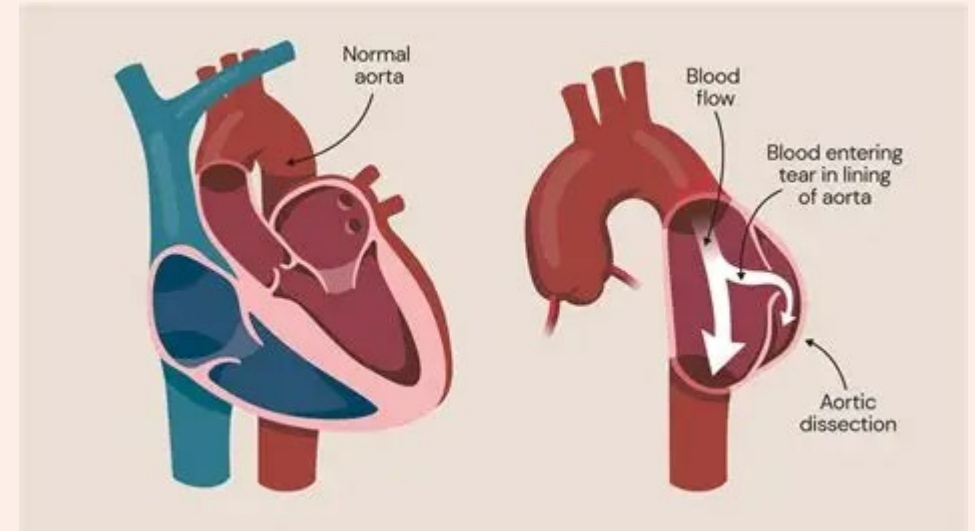
# Primary Indication for Aorta Intervention - Dissection

## Symptoms of aortic dissection may include:

- Sudden severe chest or upper back pain. The pain may feel like something is tearing or ripping.
- Loss of consciousness
- Shortness of breath
- Symptoms of a stroke
- Leg pain, trouble walking, paralysis

## What are some of the causes an aortic dissection?

- Hypertension that is not under control
- Aortic aneurysm
- Connective tissue diseases, such as Marfan's syndrome, Ehlers-Danlos syndrome
- Chest injury or trauma, such as from a car accident
- Strenuous activities, such as heavy weightlifting



# Aorta Session # 4 will discuss the remaining Dissection Fields

	Timing: <input type="checkbox"/> Hyperacute (<24 hrs) <input type="checkbox"/> Acute (24hrs-<2weeks) <input type="checkbox"/> Subacute (2weeks --<90 days) <input type="checkbox"/> Chronic (90 days or more) DisTiming (4745) <input type="checkbox"/> Acute on Chronic <input type="checkbox"/> Unknown
	Dissection onset date known <input type="checkbox"/> Yes <input type="checkbox"/> No (If Yes →) Date of onset: _/ _/ _- - - - DisOnsetDtKnown (4746) DisOnsetDt (4747)
	Primary tear location: <input type="checkbox"/> Below STJ <input type="checkbox"/> STJ-midascending <input type="checkbox"/> Midascending to distal ascending DisTearLoc (4750) <input type="checkbox"/> Zone 1 <input type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 3 <input type="checkbox"/> Zone 4 <input type="checkbox"/> Zone 5 <input type="checkbox"/> Zone 6 <input type="checkbox"/> Zone 7 <input type="checkbox"/> Zone 8 <input type="checkbox"/> Zone 9 <input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11
	Proximal Dissection Extent Known: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown DisRetExt (4760)
	(If Yes →) Most Proximal Dissection Location: <input type="checkbox"/> Below STJ <input type="checkbox"/> STJ-midascending <input type="checkbox"/> Midascending to distal ascending DisRetLoc (4765) <input type="checkbox"/> Zone 1 <input type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 3 <input type="checkbox"/> Zone 4
	Distal Dissection Extent Known: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown DisExt (4775)
if Dissection →	(If Yes →) Distal Dissection Extension Location: <input type="checkbox"/> Below STJ <input type="checkbox"/> STJ-midascending <input type="checkbox"/> Midascending to distal ascending DisExtLoc (4780) <input type="checkbox"/> Zone 1 <input type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 3 <input type="checkbox"/> Zone 4 <input type="checkbox"/> Zone 5 <input type="checkbox"/> Zone 6 <input type="checkbox"/> Zone 7 <input type="checkbox"/> Zone 8 <input type="checkbox"/> Zone 9 <input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11
	Stanford Classification: <input type="checkbox"/> Type A <input type="checkbox"/> Type B <input type="checkbox"/> Unknown <input type="checkbox"/> Other StanfordClass (4781)
	Retrograde dissection caused by Aortic Stent Graft (Post TEVAR): <input type="checkbox"/> Yes <input type="checkbox"/> No DisPostTEVAR (4782)
	Patient within 30 days post TAVR <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown PtLess30PostTAVR (4783)
	Patient within 30 days Post Other Cath Procedure <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown PtLess30PostOthCath (4784)
	Malperfusion: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown DisMal (4785)
	Malperfusion Type: (select all that apply): DisMalType (4786) <input type="checkbox"/> Coronary <input type="checkbox"/> Superior Mesenteric <input type="checkbox"/> Right Subclavia <input type="checkbox"/> Renal, left
	Lower Extremity Motor Function: <input type="checkbox"/> No deficit <input type="checkbox"/> Weakness <input type="checkbox"/> Paralysis <input type="checkbox"/> Unknown DisLowMotFun (4836)
	Lower Extremity Sensory Deficit: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown DisLowSenDef (4837)
	Rupture: <input type="checkbox"/> Yes <input type="checkbox"/> No DisRupt (4840)
	(If Yes →) Contained rupture: <input type="checkbox"/> Yes <input type="checkbox"/> No DisRuptCon (4845)
	Rupture Location: <input type="checkbox"/> Below STJ <input type="checkbox"/> STJ-midascending <input type="checkbox"/> Midascending to distal ascending DisRuptLoc (4850) <input type="checkbox"/> Zone 1 <input type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 3 <input type="checkbox"/> Zone 4 <input type="checkbox"/> Zone 5 <input type="checkbox"/> Zone 6 <input type="checkbox"/> Zone 7 <input type="checkbox"/> Zone 8 <input type="checkbox"/> Zone 9 <input type="checkbox"/> Zone 10 <input type="checkbox"/> Zone 11

To be continued...

# Primary Indication for Aorta Intervention – Other Indication

**Long Name:** Aorta Primary Indication - Other

**Definition:** Indicate the patient's primary indication for Aorta surgery other than Aneurysm or Dissection

## Intent/Clarification / DCF Choices:

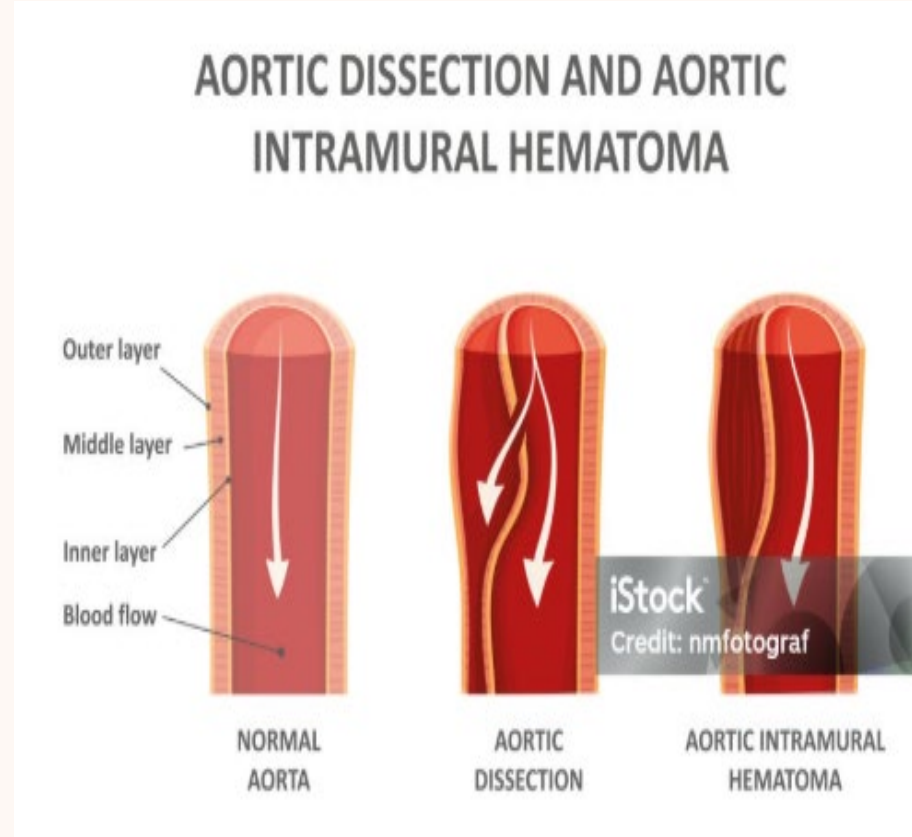
(If Other →) PrimIndicOther (4851)	<input type="checkbox"/> Valvular Dysfunction	<input type="checkbox"/> Stenosis/Obstruction	<input type="checkbox"/> Intramural Hematoma	<input type="checkbox"/> Coarctation	<input type="checkbox"/> Endoleak	<input type="checkbox"/> Infection
	<input type="checkbox"/> Injury related to Surgical Complication/Perforation	<input type="checkbox"/> Trauma				

- **Valvular Dysfunction** - Valvular dysfunction that leads to an aorta procedure. Dysfunction may be structural and/or non-structural failure. Dysfunction may be of prosthesis, a progressive native disease process, or an acute event process that disrupts valve function and creates either clinically compromising insufficiency/regurgitation or valve orifice narrowing.
- **Stenosis/Obstruction** - Stenosis or obstruction in the aorta that leads to an aorta procedure. Includes porcelain aorta, severe atherosclerosis of aorta, aorta thrombus, aorta mass or tumor

# Primary Indication for Aorta Intervention – Other Indication

## Intent/Clarification / DCF Choices Continued:

- **Intramural Hematoma** – IMH is a condition characterized by blood leaking through the innermost layer of the aortic wall and flowing between the inner and outer walls. This leakage does not occur due to a tear / dissection in the aorta wall. There is blood in the wall of the aorta, but no dissection flap is visualized.
- **Coarctation Aortic** – Coarctation is a narrowing of the aorta and usually a congenital issue.
  - Note if this is a Congenital coarctation repair, then capture this as an aorta procedure, not in the Congenital fields.
  - ACSD only captures the congenital fields when there is no other mechanism on the DCF to capture the procedure since many of the congenital fields will remove a case from isolation.



# Primary Indication for Aorta Intervention – Other Indication

## Intent/Clarification / DCF Choices Continued:

- **Endoleak** – Endoleak is a persistent blood flow in the aneurysm sac through and around the endovascular seal and is the most common complication after endovascular aneurysm repair.
- **Infection** - Infection that leads to an aorta procedure.
- **Injury related to surgical complication/perforation** – The intent is to capture intra- op surgical trauma to the aorta during the current procedure.
- **Trauma** - Aortic trauma will include:
  - blunt trauma (i.e., blunt aortic injury in motor vehicle accident)
  - penetrating trauma (i.e., gunshot, stabbing, etc.)
  - iatrogenic trauma (i.e., endovascular catheter induced perforation or dissection).



# Scenarios Aorta Primary Indication

## Choices:

Primary Indication:  
PrimIndic (4717)

Aneurysm  Dissection  Other

Patient with HTN and an ascending aortic aneurysm is brought into surgery for aorta replacement. During the procedure, a chronic dissection and mild aortic atherosclerosis was found.

**Aneurysm**

Patient with a functionally bicuspid aortic valve with severe stenosis and an aortic aneurysm is brought in for surgical repair of the aortic valve and ascending replacement.

**Aneurysm**

Patient presented with chest pain and Chest CT noted an intramural hematoma with no other notable findings.

**Other**

SEQ 4851- Primary Indication Other = Intramural Hematoma

Patient presented to the ED with acute chest pain and Chest CT noted a tear in the inner lining of the aorta that starts in zone 0. This extends both into the arch and down to the aortic root.

**Dissection**

# Scenarios Aorta Primary Indication

## Choices:

Primary Indication: PrimIndic (4717)	<input type="checkbox"/> Aneurysm <input type="checkbox"/> Dissection <input type="checkbox"/> Other
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Planned case is an open ascending and arch thrombectomy via full sternotomy with a short circulatory arrest

**Other**

This patient is having a descending TEVAR for a penetrating aortic ulcer (PAU) in the descending aorta. There is regional dilatation of the descending aorta.

**Aneurysm**

I have a patient who came in for a TAVR and had an annular rupture and was brought emergently to the OR. The patient had a tear in the aortic root and needed an aortic root replacement along with Valve replacement and CABG x1.

**Other**

# Scenarios Aorta Primary Indication Other

## Choices:

Valvular Dysfunction  Stenosis/Obstruction  Intramural Hematoma  Coarctation  Endoleak  Infection  
 Injury related to Surgical Complication/Perforation  Trauma

- Patient had an extremely heavily calcified/porcelain ascending aorta requiring ascending aorta replacement.
- Patient presented with chest pain and Chest CT noted an intramural hematoma with no other notable findings.
- Patient who had an open repair of aortic coarctation with resection and interposition graft via left posterolateral thoracotomy.

**Stenosis / Obstruction**

**Intramural Hematoma**

**Coarctation**

# Scenarios Aorta Primary Indication Other

## Choices:

(If Other →) PrimIndicOther (4851)	<input type="checkbox"/> Valvular Dysfunction	<input type="checkbox"/> Stenosis/Obstruction	<input type="checkbox"/> Intramural Hematoma	<input type="checkbox"/> Coarctation	<input type="checkbox"/> Endoleak	<input type="checkbox"/> Infection
	<input type="checkbox"/> Injury related to Surgical Complication/Perforation		<input type="checkbox"/> Trauma			

Patient is having a Ross procedure. Patient has Severe Aortic Insufficiency due to bicuspid valve. The surgeon also replaces a portion of the ascending aorta to reinforce the Ross.

**Valve Dysfunction**

The patient had ascending aortic graft replacement done for aortic mass. Mass was found to be thrombus.

**Stenosis / Obstruction**

Primary repair of aortic arch injury under CPB. Removal of foreign body, left internal jugular Permacath from aortic arch. Patient was undergoing a left Permacath placement via the neck today. He had stroke-like symptoms and was found to have the Permacath in the aortic arch. He was taken emergently to the OR.

**Trauma**

# Scenarios Aorta Primary Indication Other

## Choices:

(If Other →) PrimIndicOther (4851)	<input type="checkbox"/> Valvular Dysfunction	<input checked="" type="checkbox"/> Stenosis/Obstruction	<input type="checkbox"/> Intramural Hematoma	<input type="checkbox"/> Coarctation	<input checked="" type="checkbox"/> Endoleak	<input checked="" type="checkbox"/> Infection
		<input checked="" type="checkbox"/> Injury related to Surgical Complication/Perforation			<input type="checkbox"/> Trauma	

The patient had an infected TEVAR graft that was removed and was bypassed by an extra-anatomic bypass.

**Infection**

Patient came in for a TAVR and had an annular rupture and was brought emergently to the OR. The patient had a tear in the aortic root and needed an aortic root replacement along with Valve replacement.

**Trauma**

During a CABG, the ascending aorta suffers an iatrogenic Type A dissection necessitating a replacement of the ascending aorta with hemiarch.

**Injury r/t Surgical Complication**

# Aneurysm Etiology

## Choices:

Etiology:  
AnEtiology (4720)

- Atherosclerosis
- Infection
- Inflammatory
- Connective Tissue/Syndromic Disorder
- Ulcerative Plaque/Penetrating Ulcer
- Pseudoaneurysm
- Mycotic
- Traumatic transection
- Intercostal visceral patch
- Anastomotic site
- Aortic Valve Morphology
- Chronic Dissection
- Unknown

Patient with HTN and an ascending aortic aneurysm is brought into surgery for aorta replacement. During the procedure, a chronic dissection and mild aortic atherosclerosis was found.

**Chronic Dissection**

Patient with HTN, functionally bicuspid aortic valve and an ascending aortic aneurysm is brought into surgery for AVR and aorta replacement. Pathology report shows mild atherosclerosis of the aortic tissue.

**Aortic Valve Morphology**

Patient with systemic HTN and an ascending aortic aneurysm is brought into surgery for aorta replacement. Pathology report shows myxomatous degeneration of the aortic tissue.

**Connective tissue/syndromic disorder**

# Aneurysm Etiology

## Choices:

Etiology:	<input type="checkbox"/> Atherosclerosis	<input type="checkbox"/> Infection	<input type="checkbox"/> Inflammatory	<input type="checkbox"/> Connective Tissue/Syndromic Disorder	
AnEtiology (4720)	<input type="checkbox"/> Ulcerative Plaque/Penetrating Ulcer	<input type="checkbox"/> Pseudoaneurysm	<input type="checkbox"/> Mycotic	<input type="checkbox"/> Traumatic transection	
	<input type="checkbox"/> Intercostal visceral patch	<input type="checkbox"/> Anastomotic site	<input checked="" type="checkbox"/> Aortic Valve Morphology	<input checked="" type="checkbox"/> Chronic Dissection	<input type="checkbox"/> Unknown

This patient is having a descending TEVAR for a penetrating aortic ulcer (PAU) in the descending aorta. There is regional dilatation of the descending aorta.

**Ulcerative Plaque / PAU**

Aortic root repair - Aorta with cystic medial degeneration. Negative for aortitis. No genetic studies.

**Connective Tissue / Syndromic Disorder**

The patient presented with sepsis. He was found to have severe AR in echo, and a CT showed a bicuspid AV with a 47 mm root aneurysm and an ascending aorta of 43 mm which needed repair.

**Aortic Valve Morphology**

# Aneurysm Etiology

## Choices:

- Etiology:  
AnEtiology (4720)
- Atherosclerosis
  - Infection
  - Inflammatory
  - Connective Tissue/Syndromic Disorder
  - Ulcerative Plaque/Penetrating Ulcer
  - Pseudoaneurysm
  - Mycotic
  - Traumatic transection
  - Intercostal visceral patch
  - Anastomotic site
  - Aortic Valve Morphology
  - Chronic Dissection
  - Unknown

Patient has Giant Cell Arteritis and an ascending aortic aneurysm that needs to be replaced.

**Inflammatory**

Patient with Ehlers-Danlos syndrome presents for ascending aortic aneurysm repair

**Connective Tissue / Syndromic Disorder**

Patient had an AVR/ Ascending aortic aneurysm repair in 2022. He now developed an ascending aortic graft pseudoaneurysm with space-occupying mass involving the right anterior mediastinum.

**Pseudoaneurysm**

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Any Questions



# Open Discussion

Please use the  
raise-hand  
function.

Please use the  
Q&A Function.

We will answer as  
many questions as  
possible.

We encourage  
your feedback and  
want to hear from  
you!

# We Need You!

If you have implemented a QI project at your  
site, we want to hear about your work!

Please reach out to

Nancy Honeycutt @ [nhoneycutt@sts.org](mailto:nhoneycutt@sts.org).



# Thank You for Joining!

Reminder: Our next ACSD QI Series Webinar will be held on  
Wednesday, April 15, 2026, at 3pm ET/2pm CT.

