

SNS COLLEGE OF ALLIED HEALTH SCIENCE
Affiliated to The Tamil Nadu Dr. M.G.R Medical University, Chennai



DEPARTMENT OF CARDIAC TECHNOLOGY

COURSE NAME : CARDIAC CATHETERIZATION LABORATORY - ADVANCED

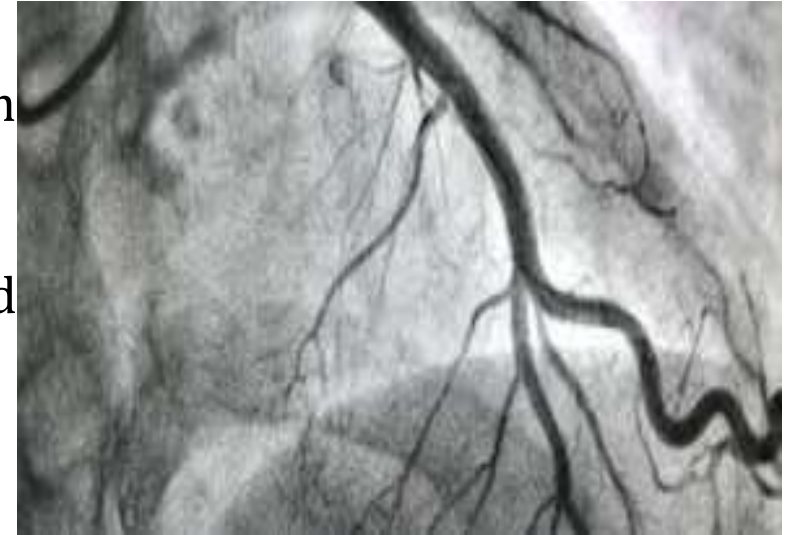
UNIT : 1

TOPICS : INTRODUCTION TO AORTIC ANGIOGRAPHY

FACULTY NAME : Ms. HARSHITHA S

Introduction to Angiography

- Angiography is an imaging technique to visualize blood vessels
- Contrast medium is injected into the vascular system
- X-ray imaging with fluoroscopy is used
- Helps diagnose vascular diseases



What is Aortic Angiography?



Imaging of the **aorta** using contrast media

Evaluates anatomy and pathology of the aorta

Performed using fluoroscopy and digital subtraction angiography (DSA)

Can be divided into:

Thoracic aortic angiography

Abdominal aortic angiography

Anatomy of the Aorta

Ascending

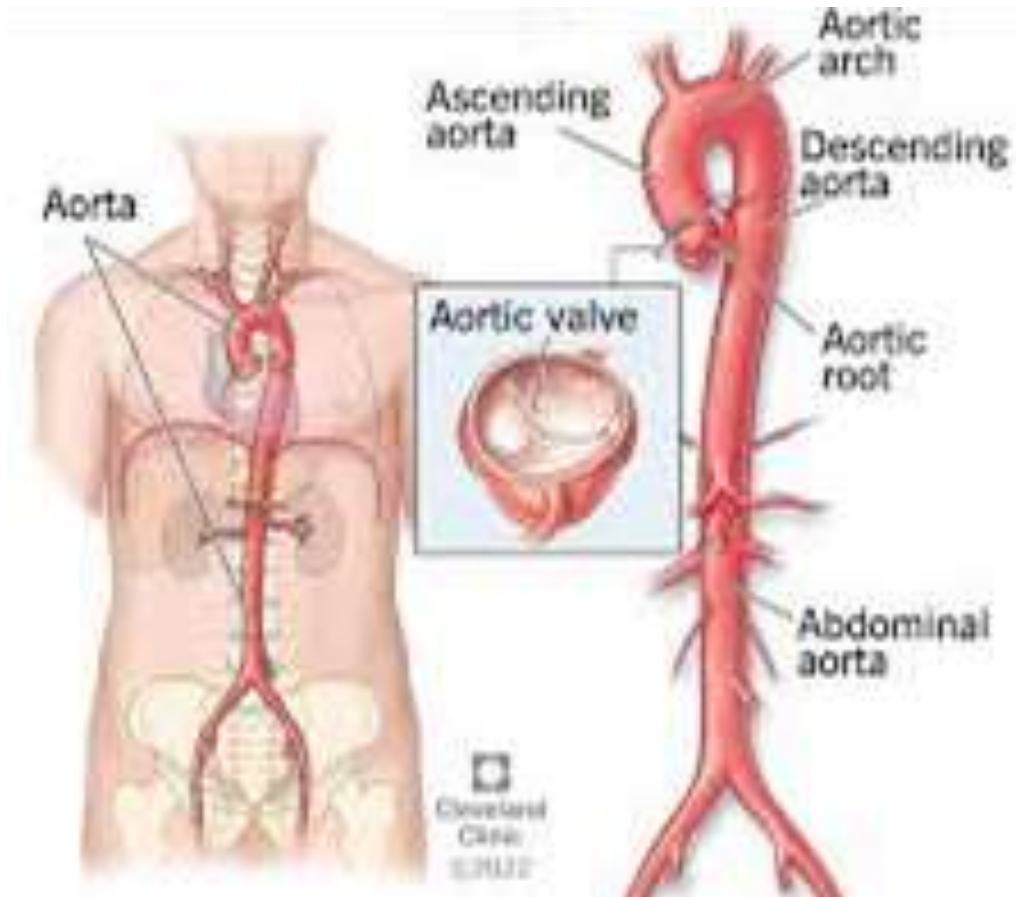
Aortic

Descending

thoracic

Abdominal

Major branches supply vital organs



Indications of Aortic Angiography

Aneurysm

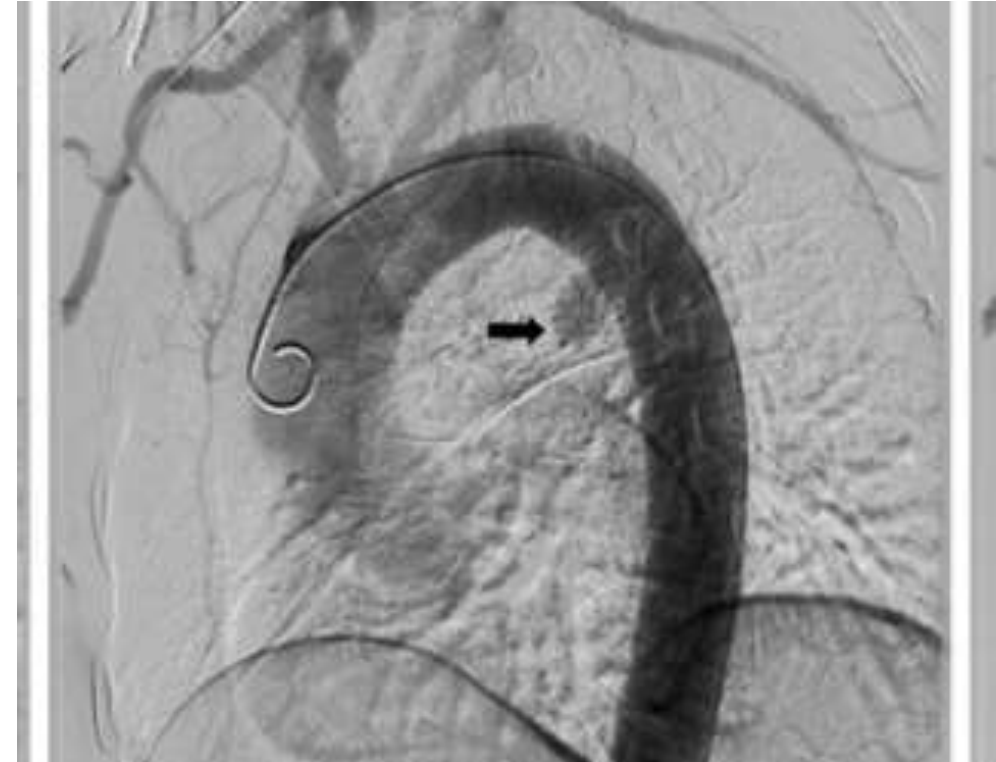
Aortic dissection

Atherosclerosis

Congenital anomalies

Trauma

Evaluation before vascular surgery



Contraindications

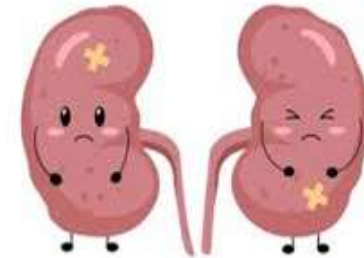
Severe renal failure (relative)

Contrast allergy

Uncontrolled infection

Pregnancy (relative)

Unstable patient condition



Contrast Used

- Iodinated contrast agents
- Non-ionic contrast preferred
- CO₂ may be used in selected abdominal cases
- Dose adjusted based on patient condition



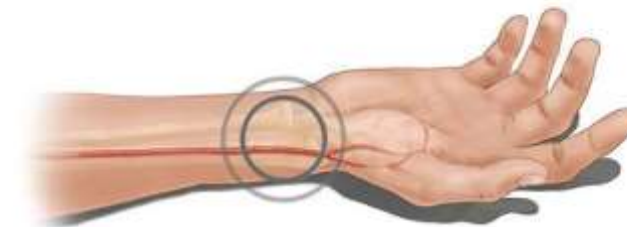
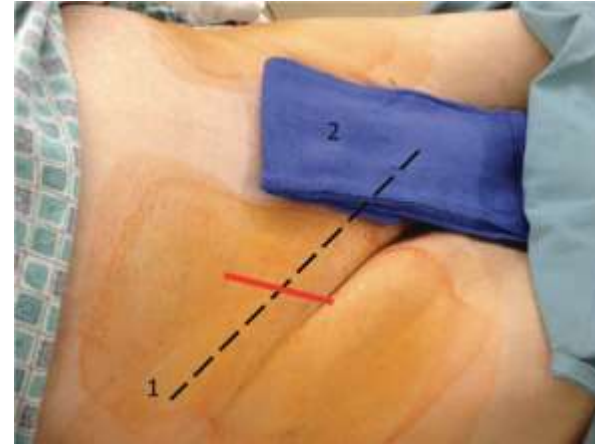
Equipment Required - common

- Angiography suite
- Fluoroscopy unit
- Catheters and guidewires
- Contrast injector
- Monitoring equipment (ECG, BP, SpO₂)
- Sterile trays



Vascular Access Sites

- Femoral artery (most common)
- Radial artery (less common)
- Brachial artery (selected cases)



Procedure Overview

- Patient preparation and
- Vascular
- Catheter advancement to aorta
- Contrast
- Image
- Post-procedure care



Reference

<https://medlineplus.gov/ency/article/003814.htm>

<https://sbrmc.adam.com/content.aspx?productid=117&pid=1&gid=003814>

THANK YOU