

Minimally Invasive and Novel Therapeutics (M.I.N.T.)
September 13th- 15th 2023

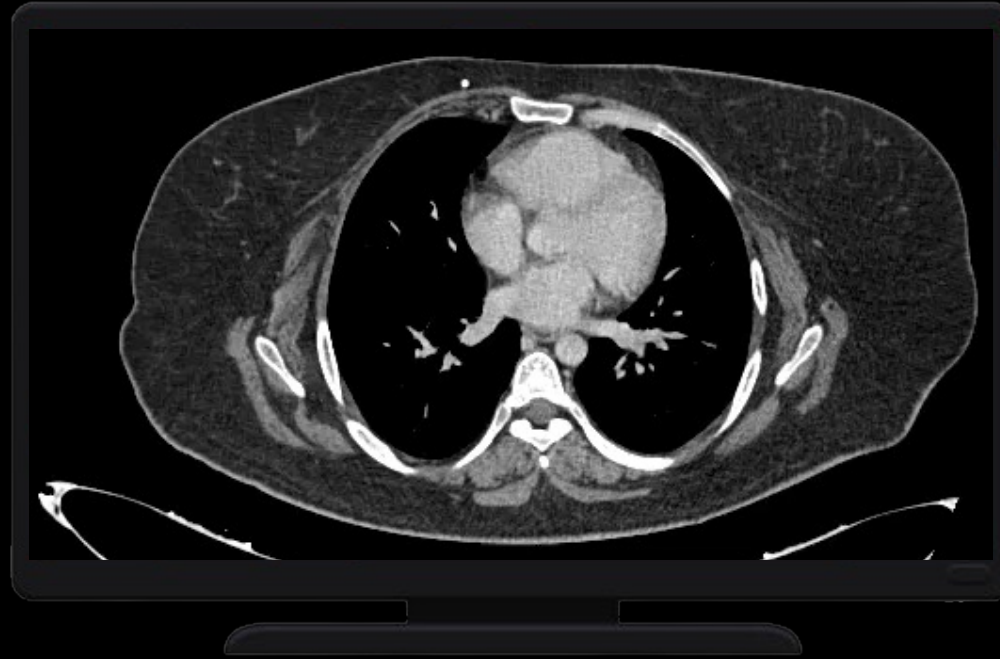
Imaging in Hernias: *Can It Change Your Management?*

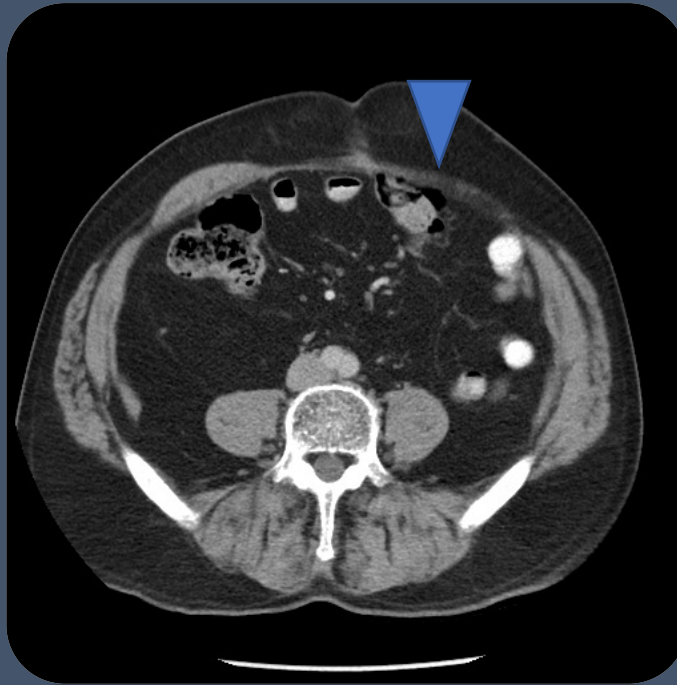
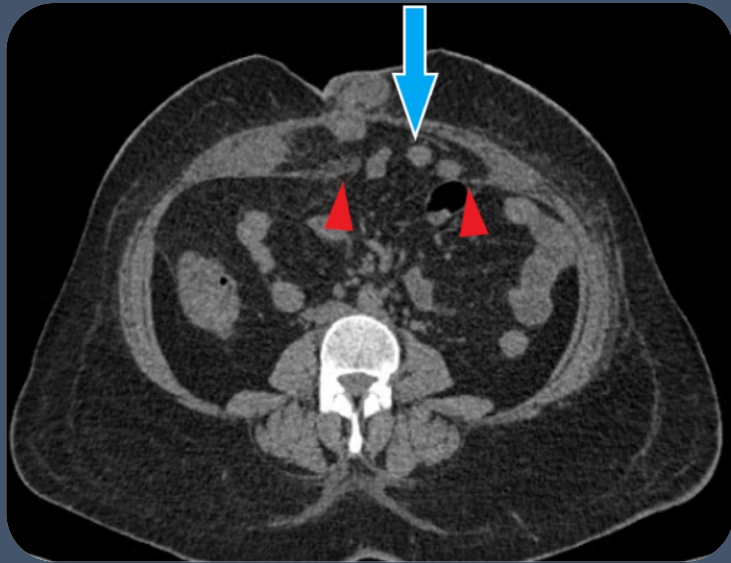
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Disclosures

- HerniaCAT Surgical Radiology
Partner
- Johnson & Johnson MedTech India
Lead, Professional Education

Dark topic!





The Premise

Clinical exam falls short when the hernias are large and the stakes are high.

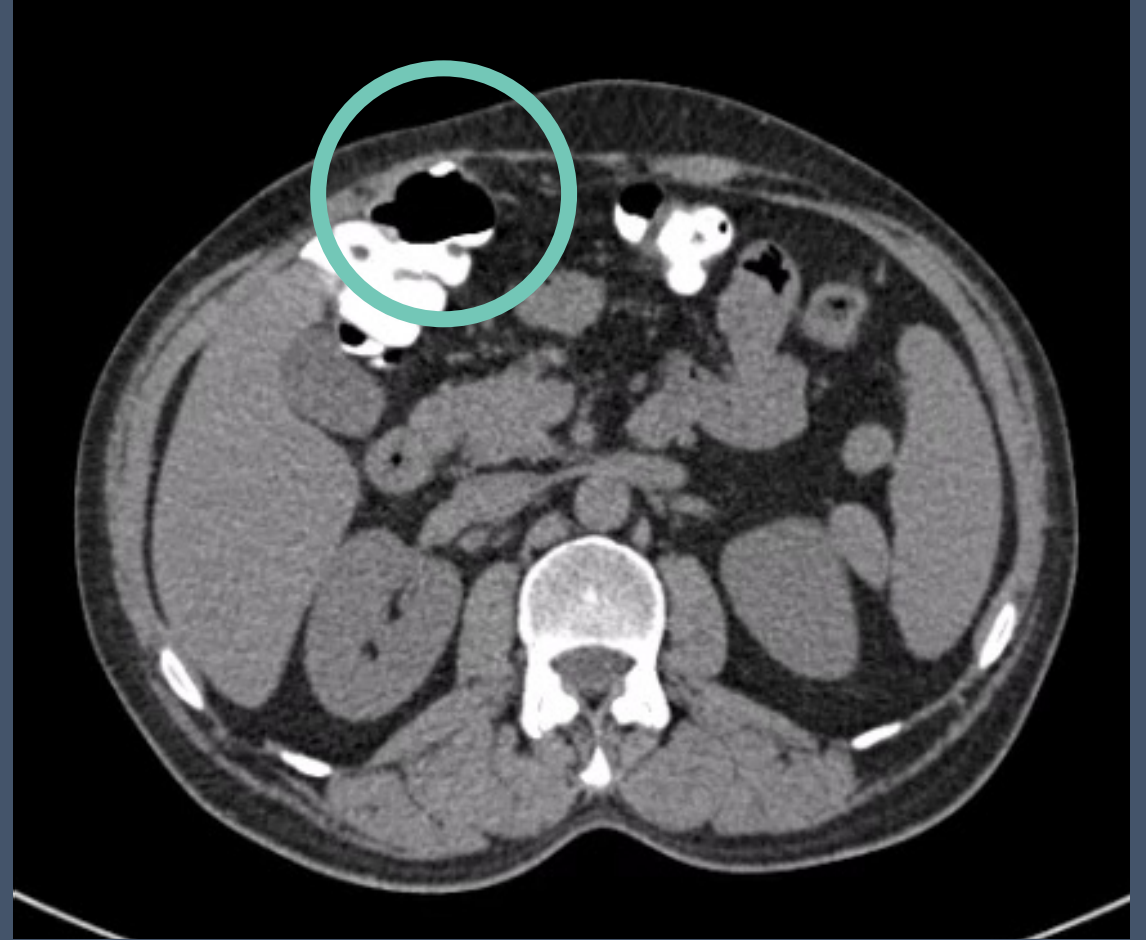
You can have A plan by reading a report. But you cannot think of Plan B, C or D.



What are we looking for?

Anything that can alter plans or worsen outcomes

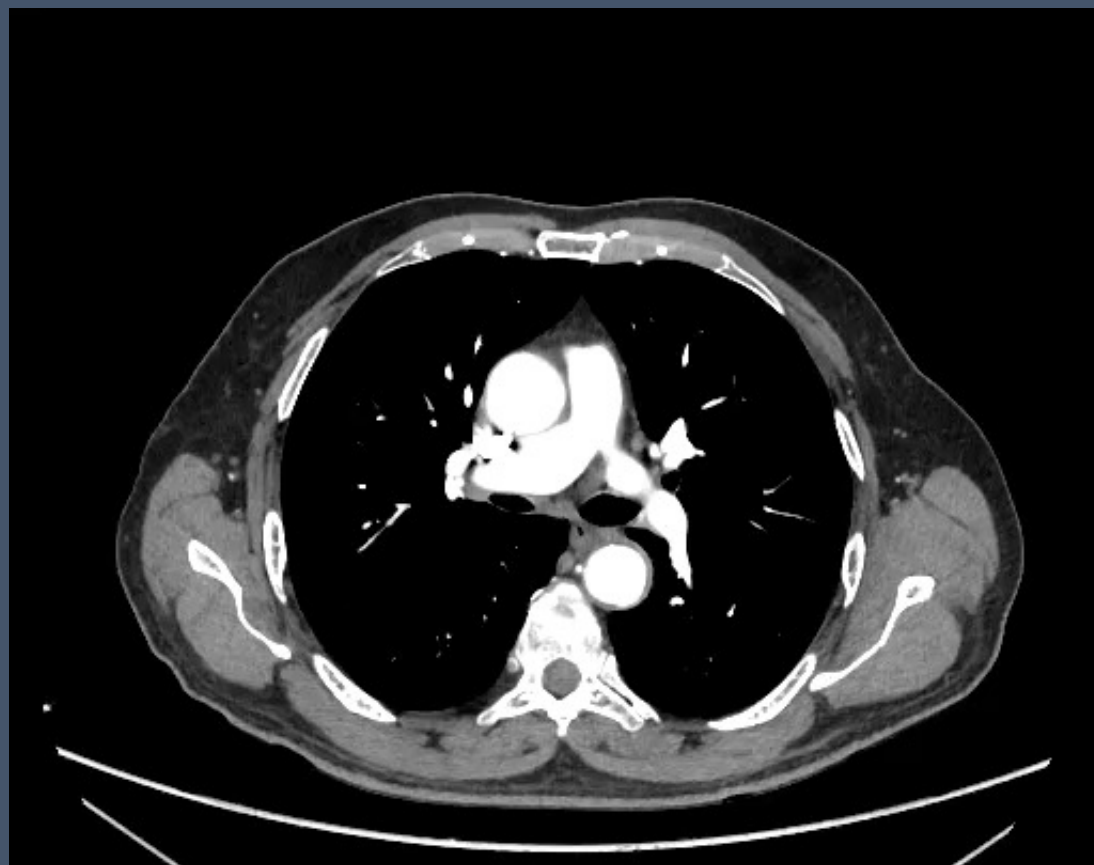
- Adhesions
- Missed defects
- Previous infection
- Tarnished mesh planes
- Missed intra-peritoneal pathologies



Easy EC fistula



Suspected EC fistula



Suspected EC fistula

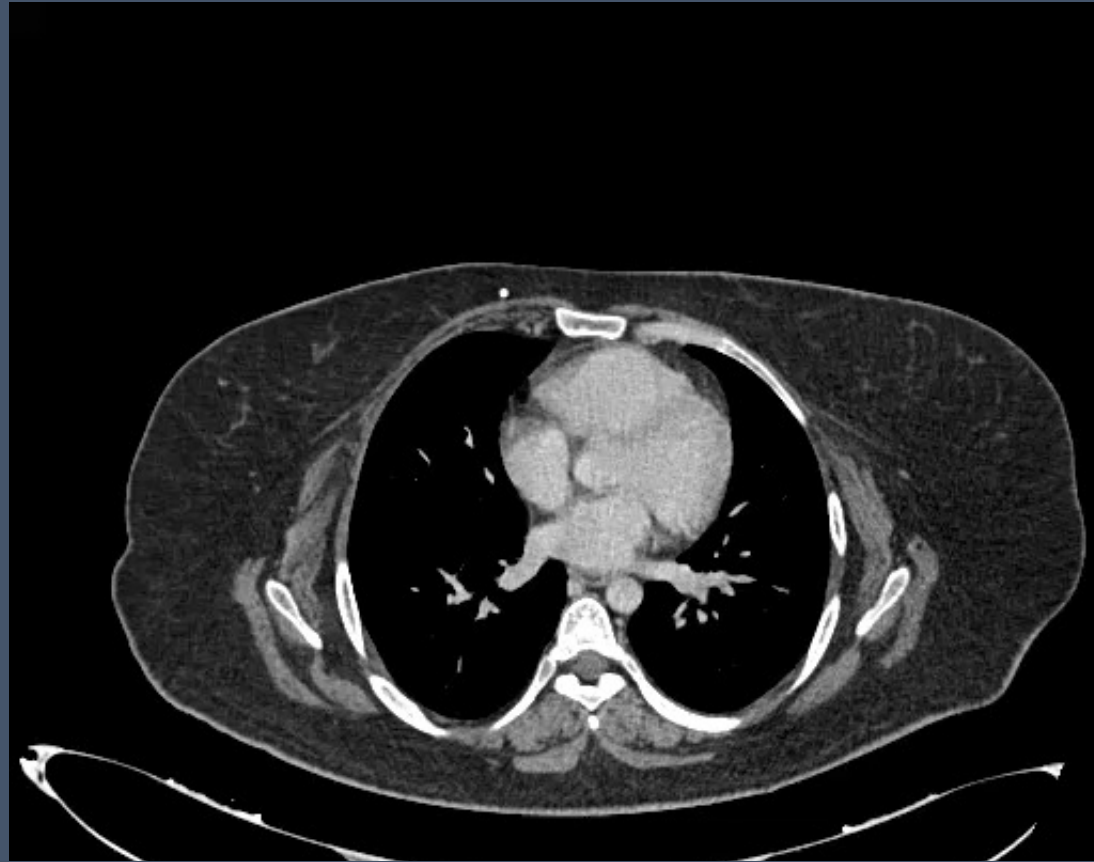


HARVARD
MEDICAL SCHOOL



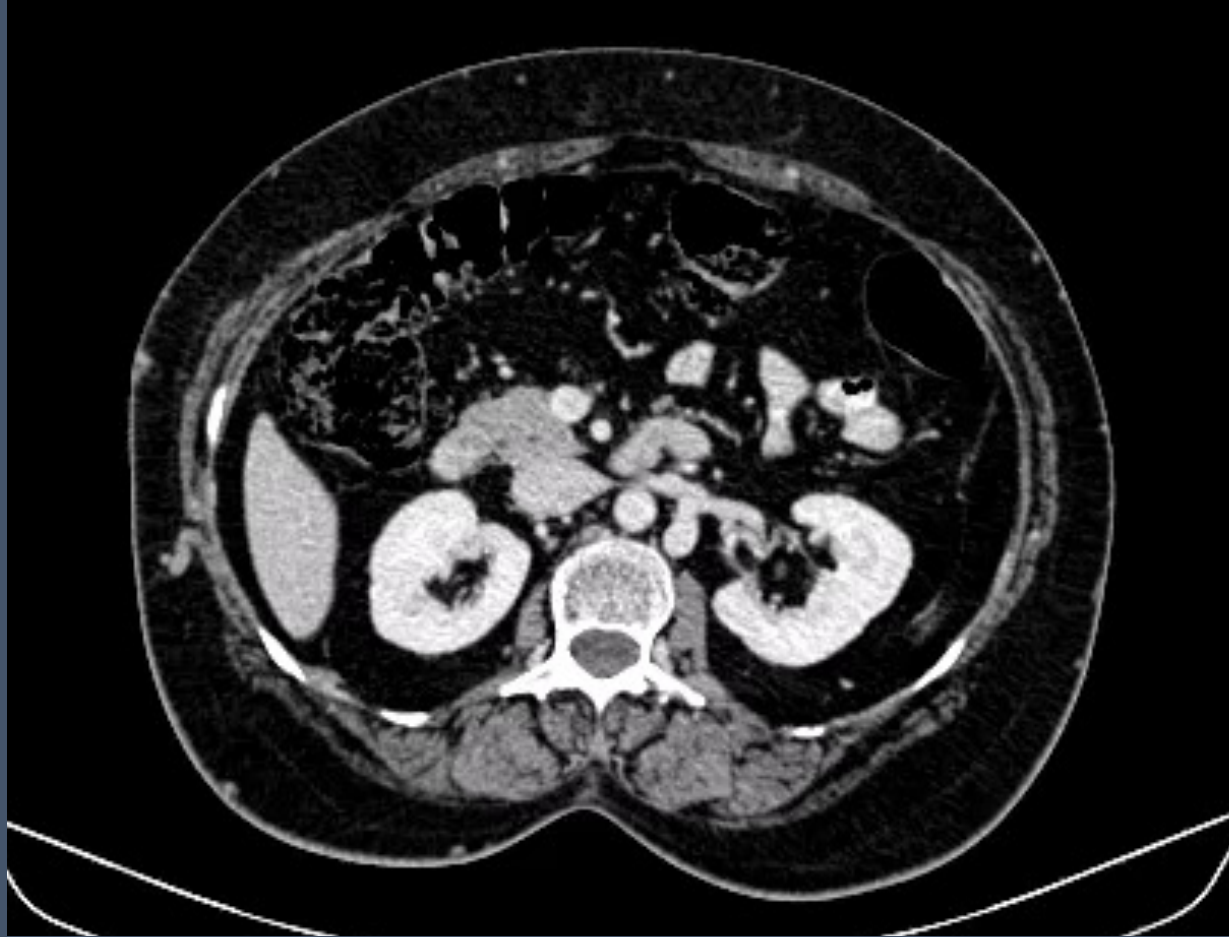


Suspected EC fistula



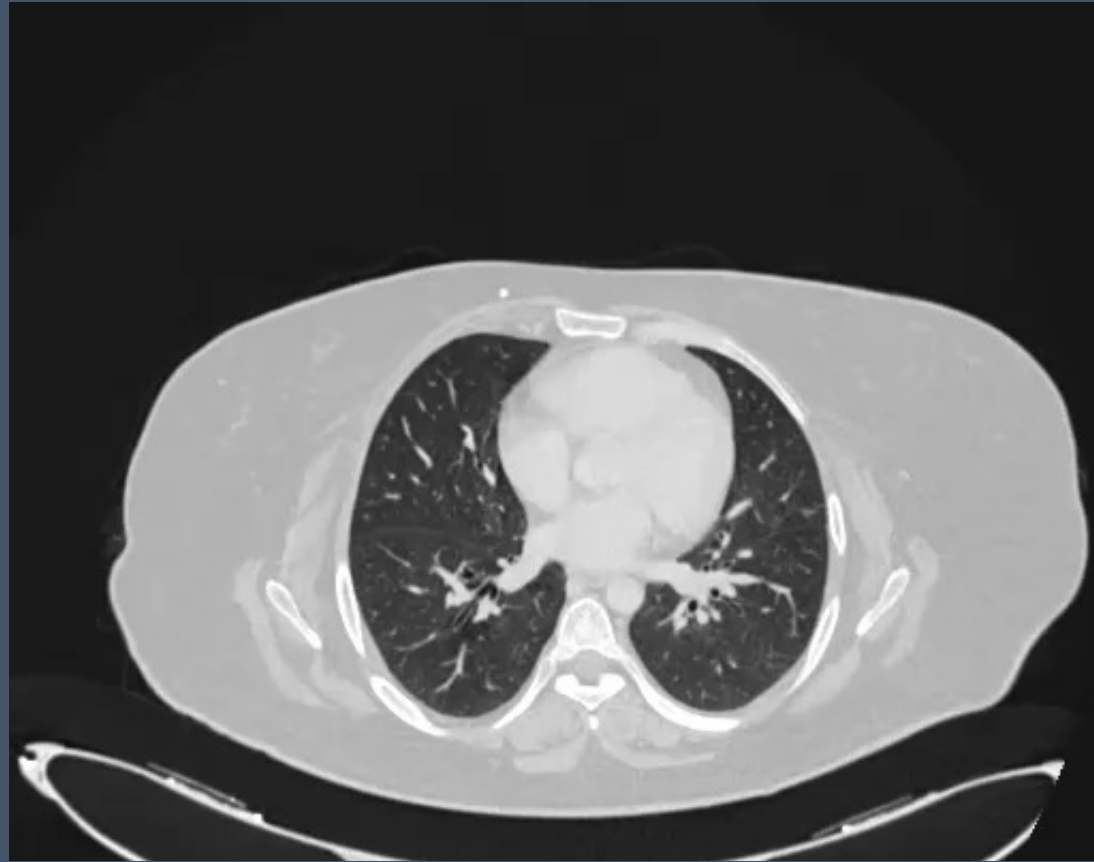
Mesh infection:
Rule Out Bowel Injury

Confirmed Mesh Infections



Confirmed Mesh Infections

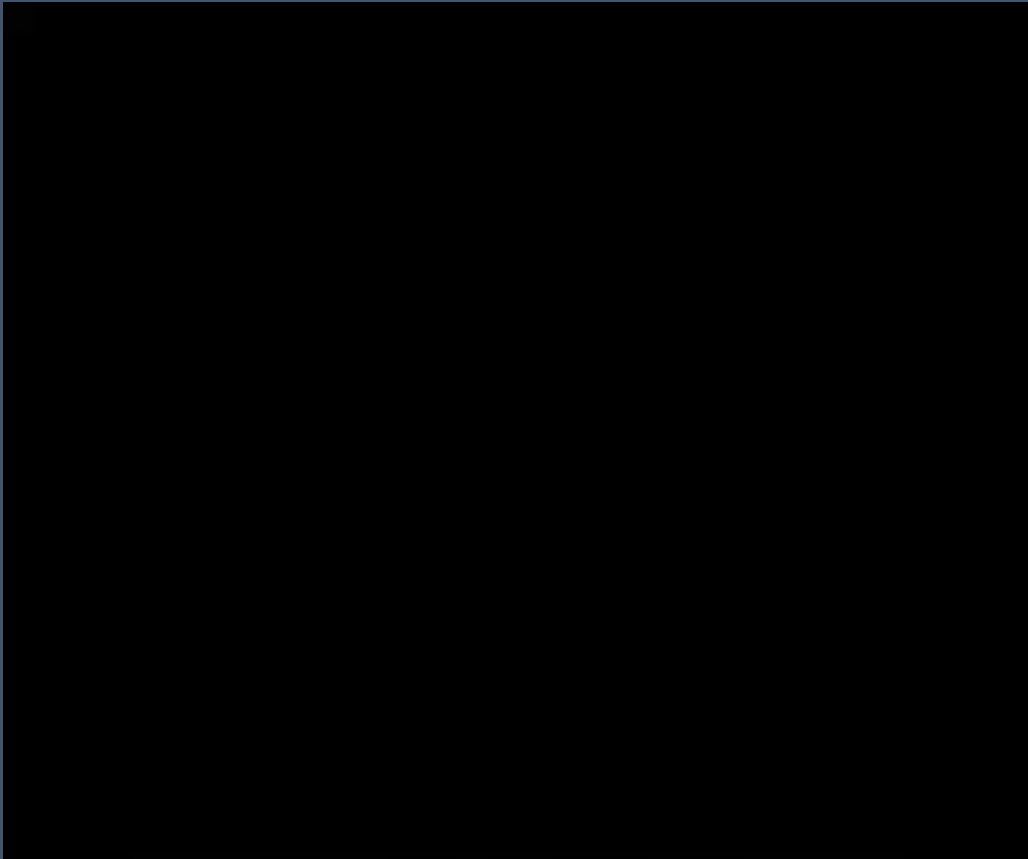




Mesh infection:
Rule Out Bowel Injury



How high does this hernia go?



How high does this hernia go?



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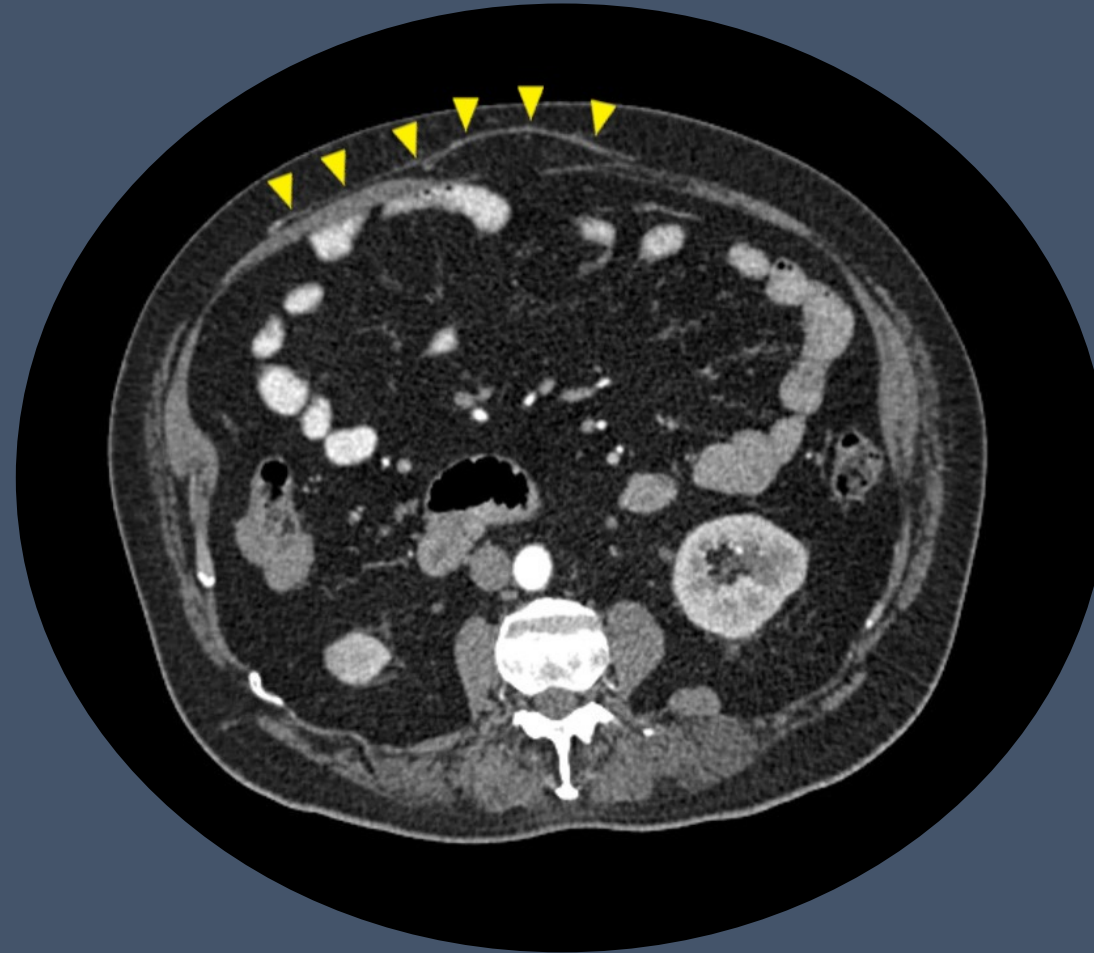
Visibility of common mesh types on CT imaging

Visible	Expanded PTFE mesh – thick, high density material (>1mm thick)	Thick contiguous radiopaque line	e.g, Dualmesh, Dualmesh Plus
Intermittently visible	Coated, thin PTFE mesh (<1mm thick)	Difficult to regularly identify. Correlation with operative report aides identification of subtle mesh appearance on imaging	e.g., Composix, Ventralex, Intramesh T1, Dulex
Indirectly visible	Coated polypropylene, polyester mesh	Isoattenuated – visibility determined by local tissue reaction to mesh coating rather than direct visualization of mesh	e.g.,Parietex composite, Proceed, Sepramesh, Intramesh W3, Dynamesh, TiMesh, BardMesh, Prolene
Poorly visible	Lightweight polypropylene mesh	Isoattenuated, low inflammatory response makes identification difficult	e.g., Ultrapro, Bypro, Physiomesh

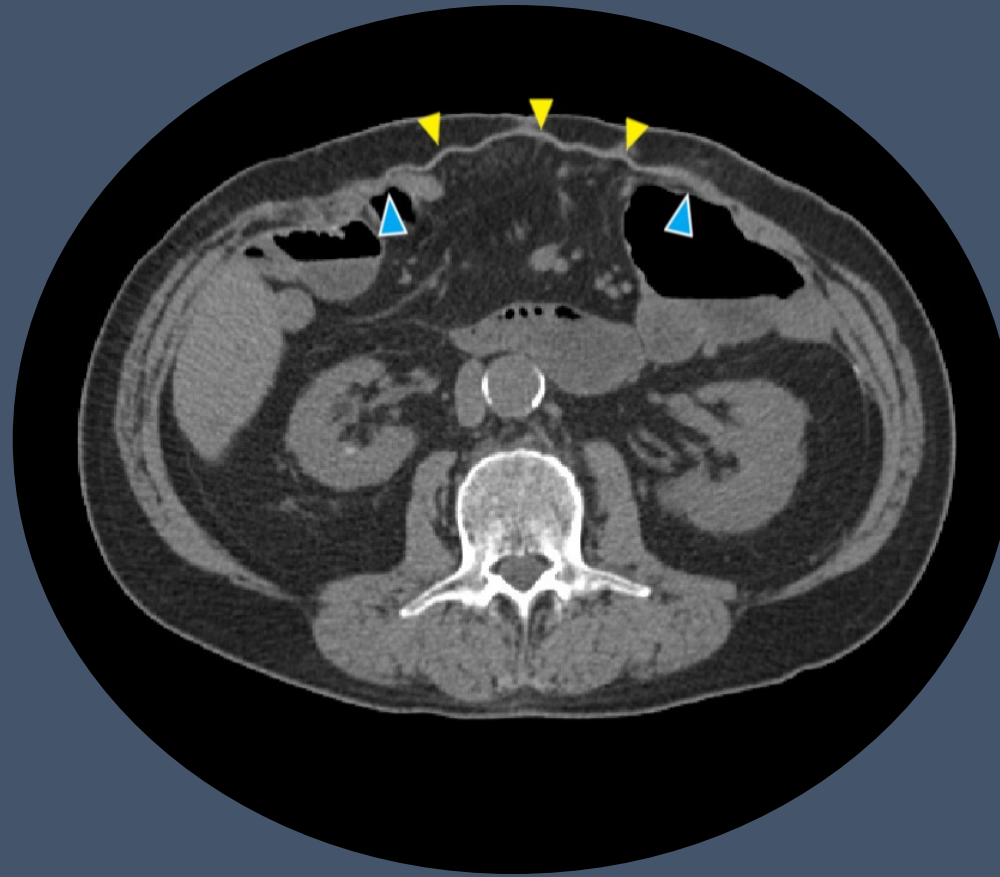
Adapted from: Juza RM, Pauli EM. Computed Tomography and Gross Anatomy of the Abdominal Wall (Including Planes for Mesh Hernia Repair). In: The SAGES Manual of Hernia Surgery. Springer International Publishing; 2019:143-156



Meshes are visible next to fat



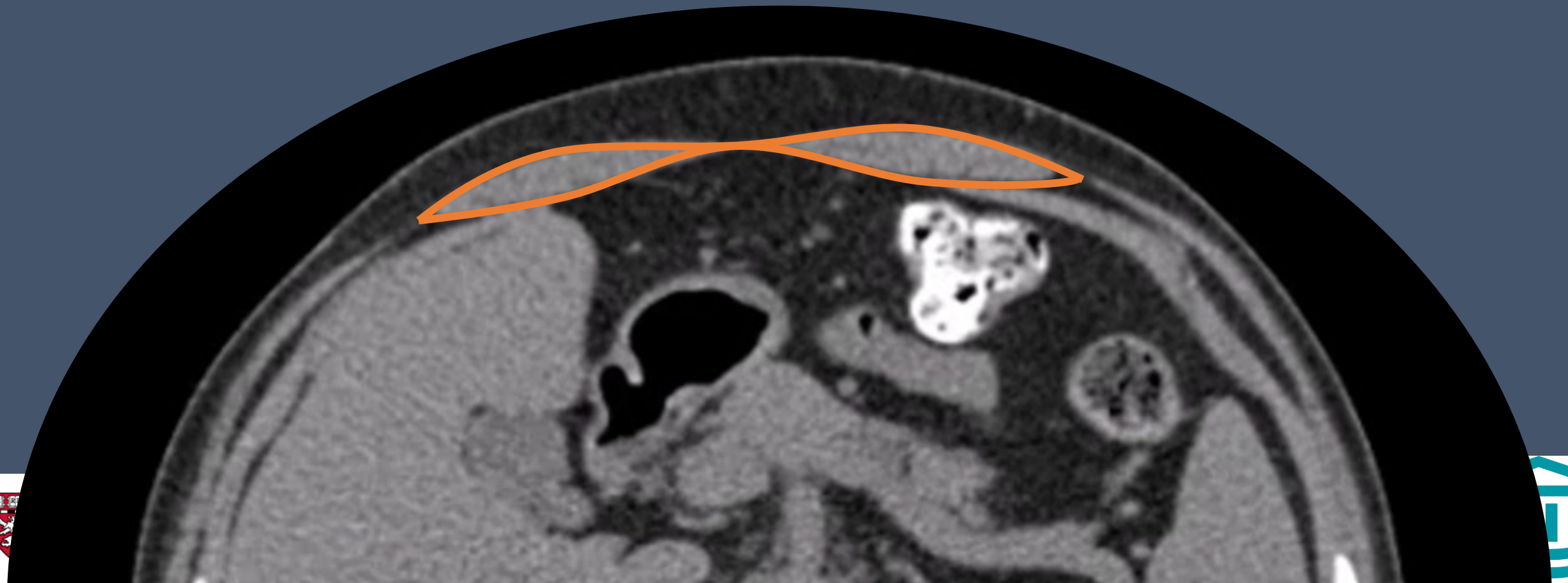
Meshes are visible next to fat



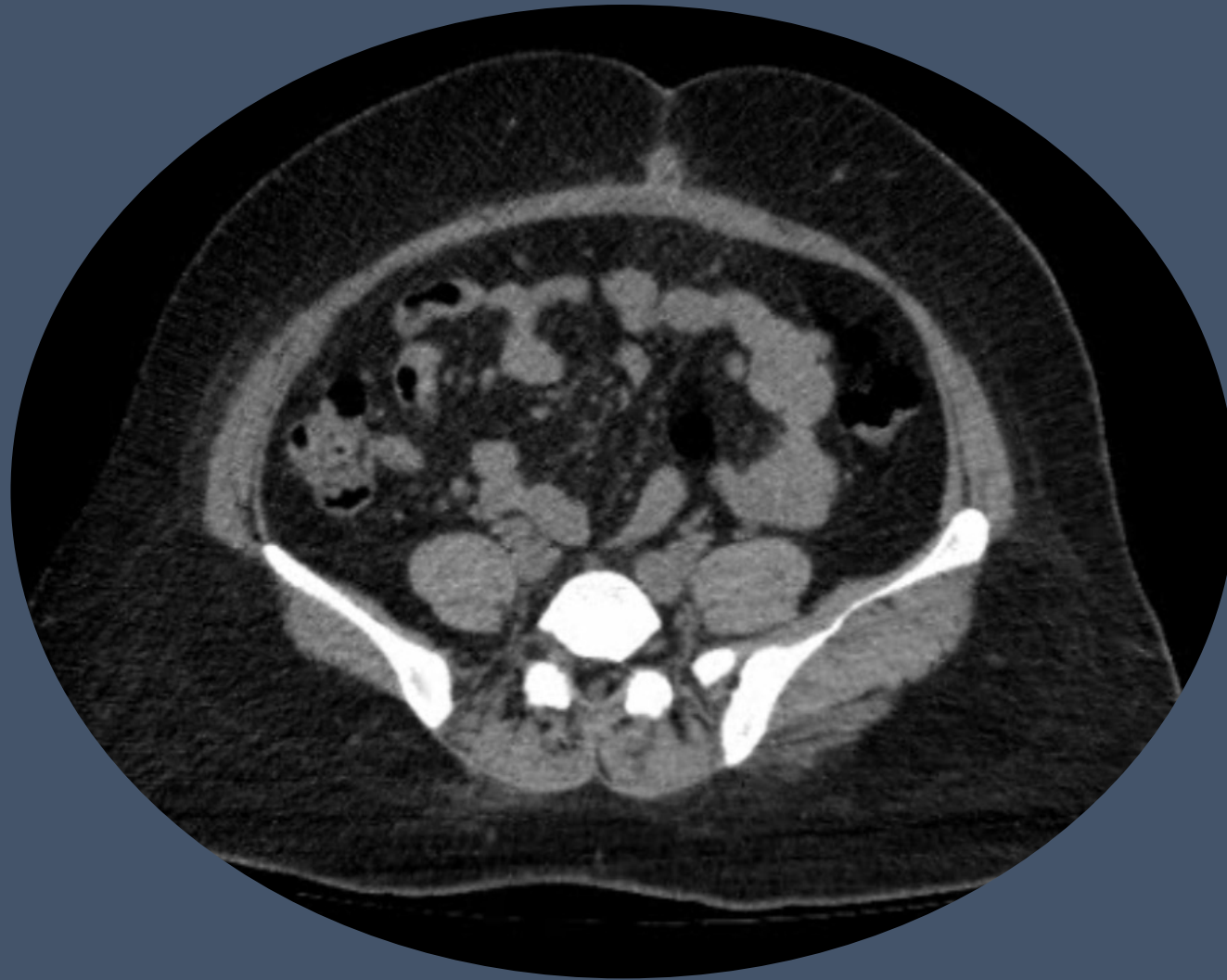
Retromuscular “Sublay” meshes



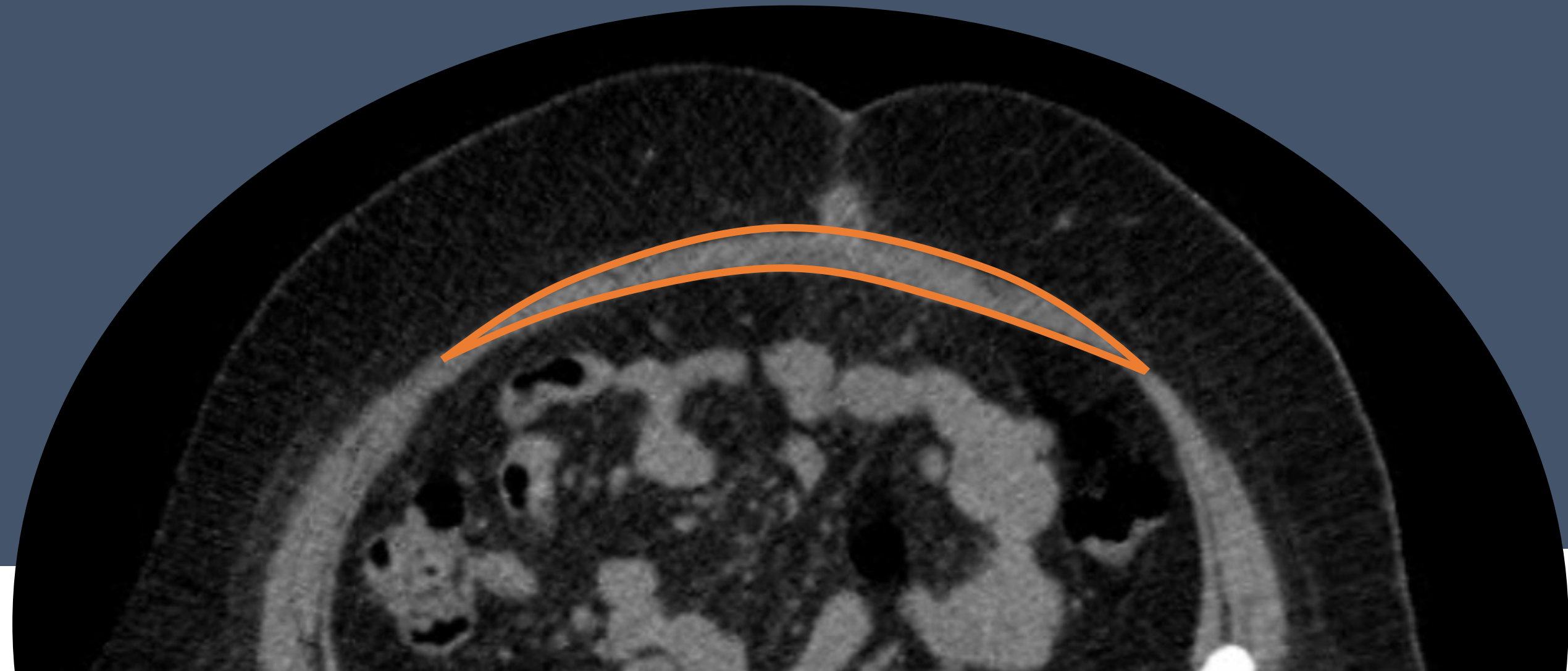
Retromuscular “Sublay” meshes



Retromuscular “Sublay” meshes



Retromuscular “*Sublay*” meshes



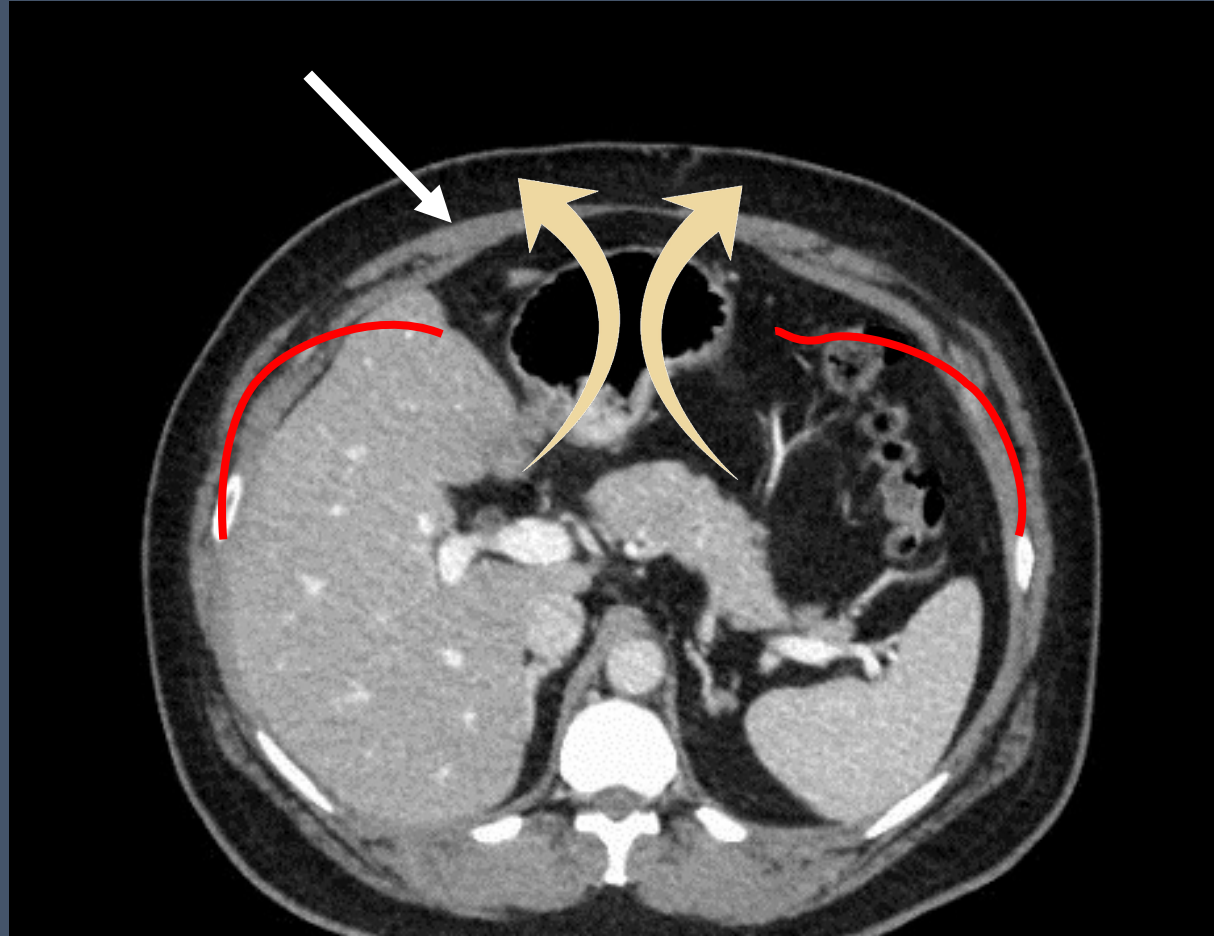
Retromuscular “Sublay” meshes



Retromuscular “Sublay” meshes



Inter-parietal Hernias



Be Thorough



Thank you

