

Tricuspid Anatomy

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F.E.S.C., F.C.S.A.N.Z., F.A.S.E., J.P.

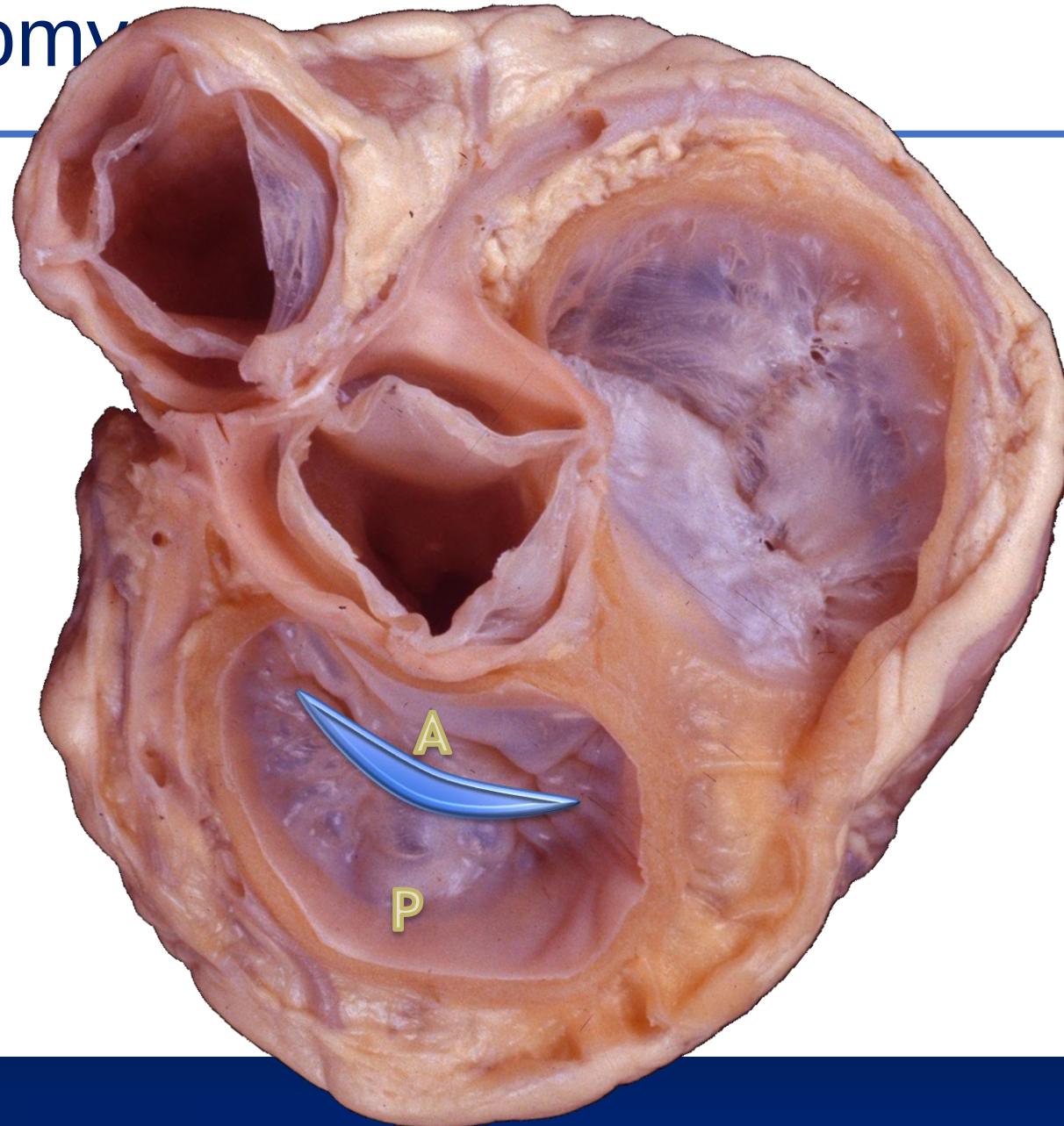


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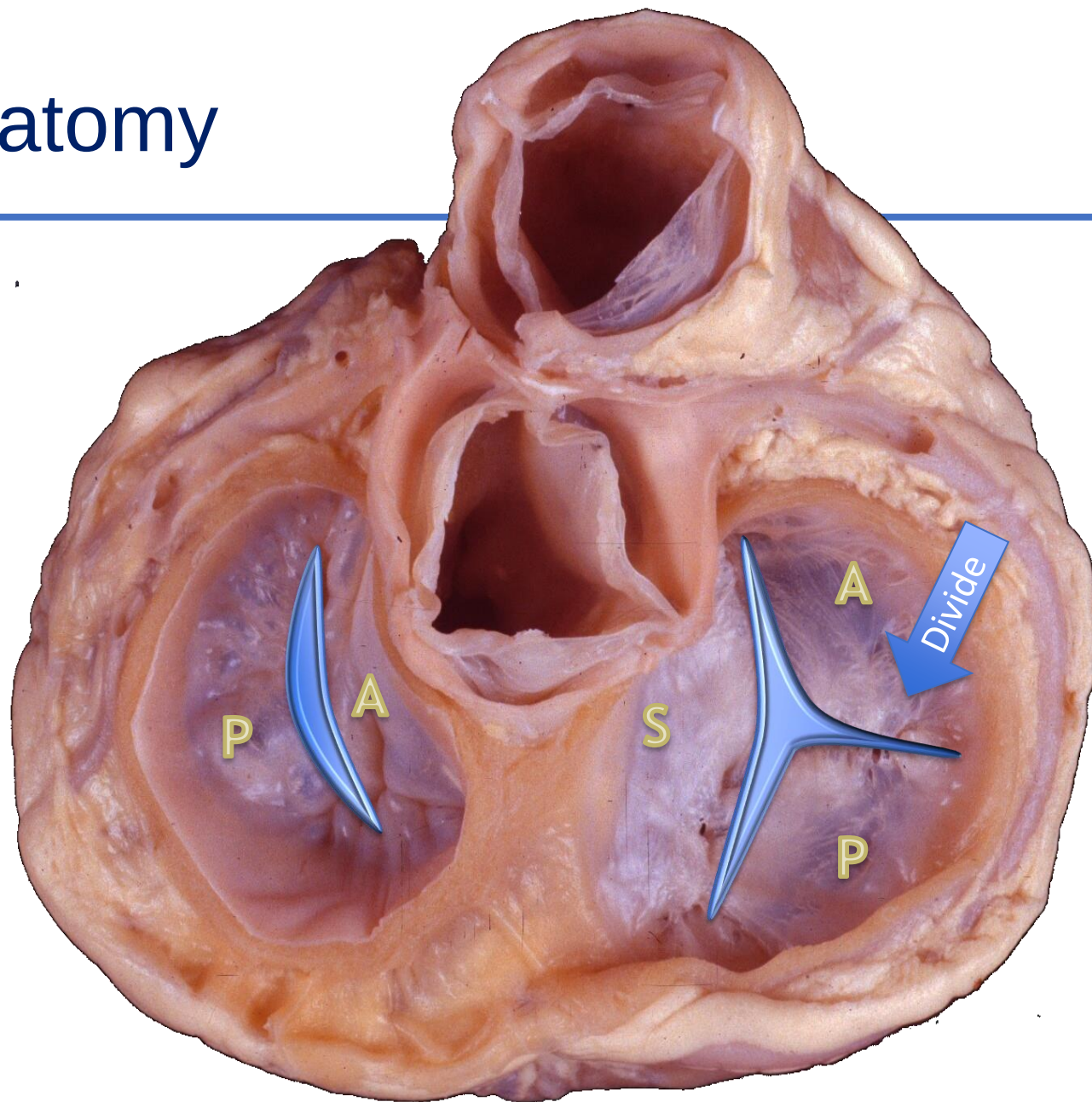
17-19 March 2025



Tricuspid anatomy



Tricuspid anatomy



Tricuspid anatomy

Leaflets

Anterior

- RVOT/RCA

Posterior

- RV free wall

Septal

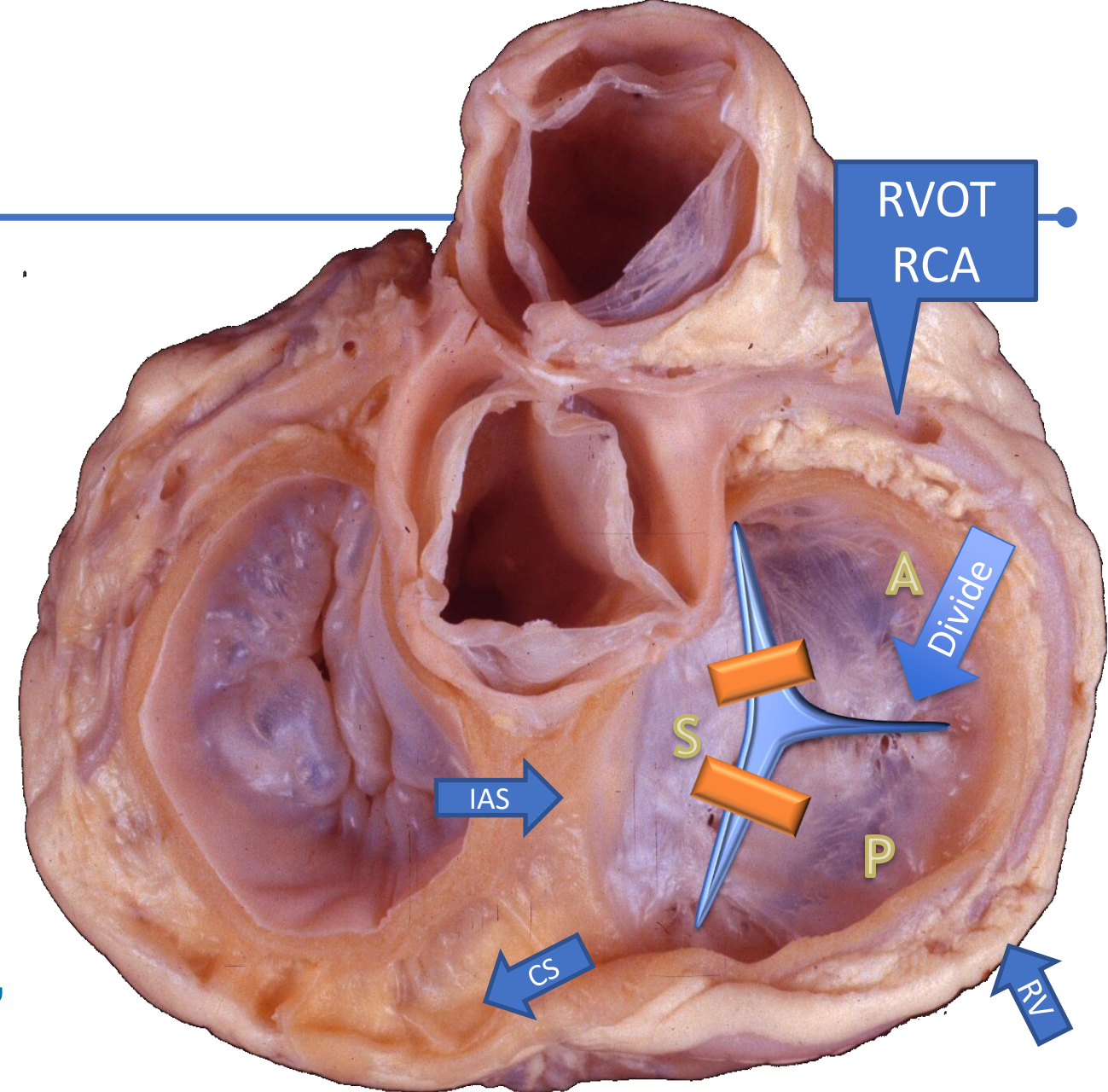
Commissures

- Septo-anterior
- Septo-posterior
- Antero-posterior

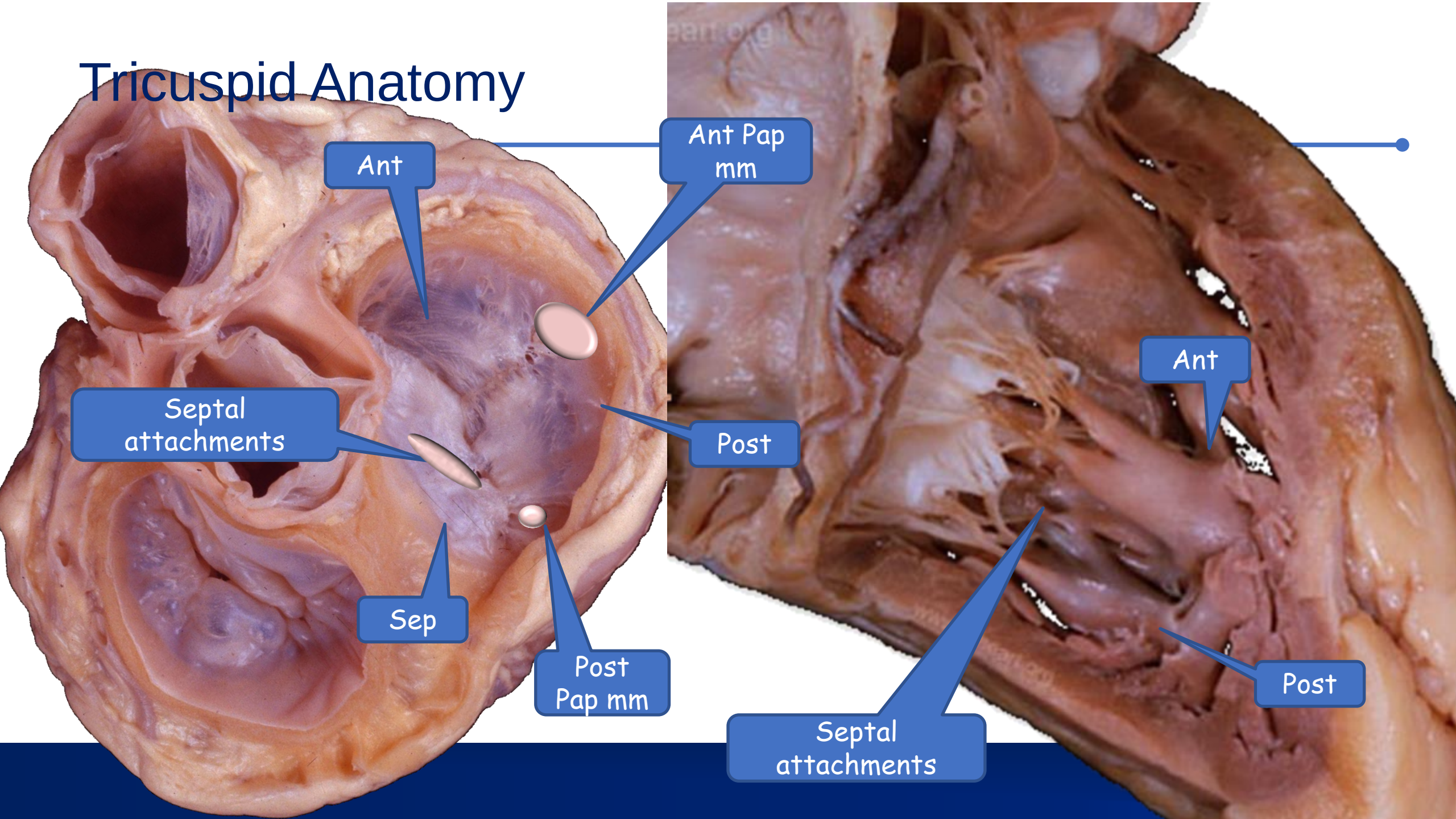
Aortic root

IVC

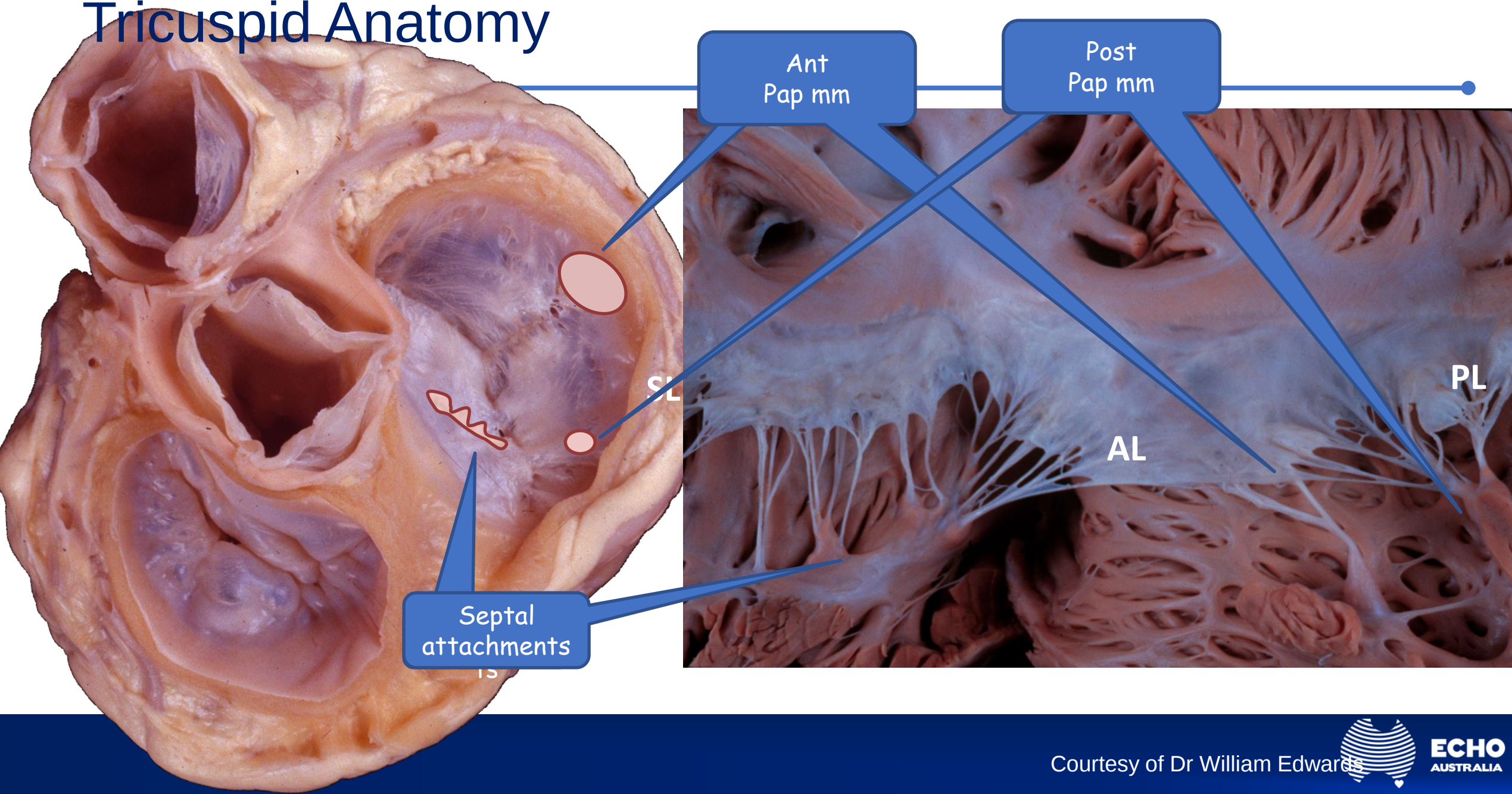
“The Divide”



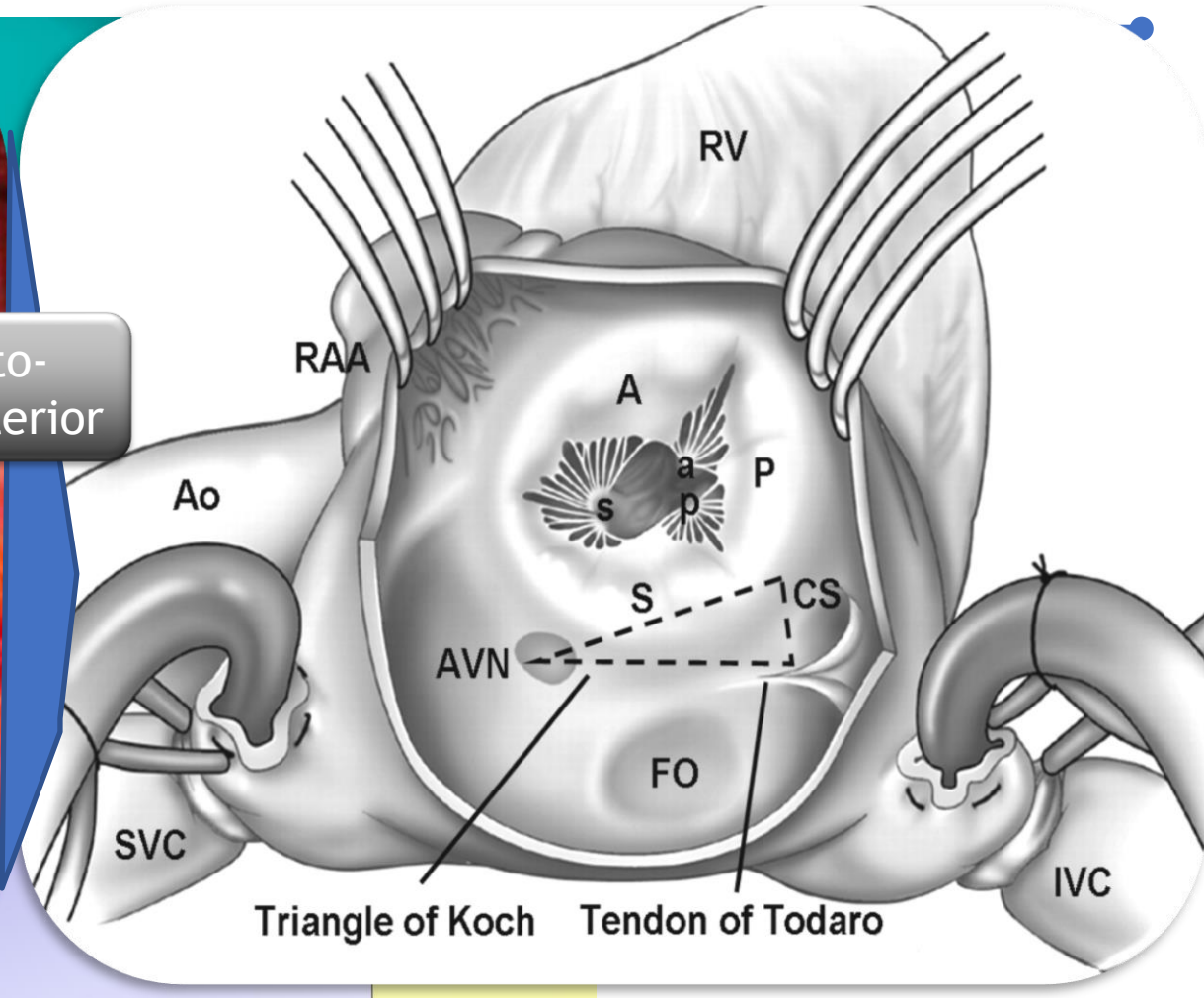
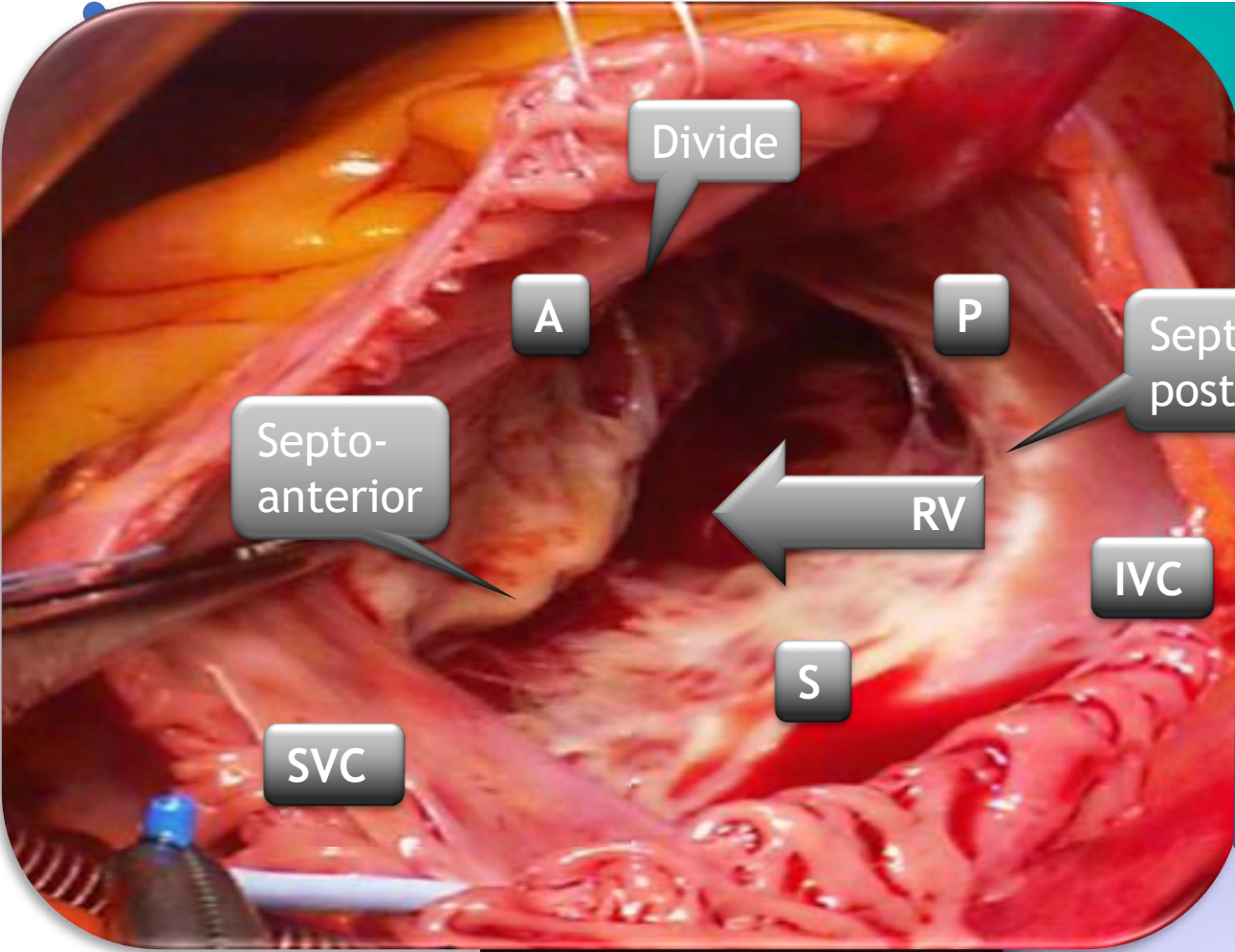
Tricuspid Anatomy



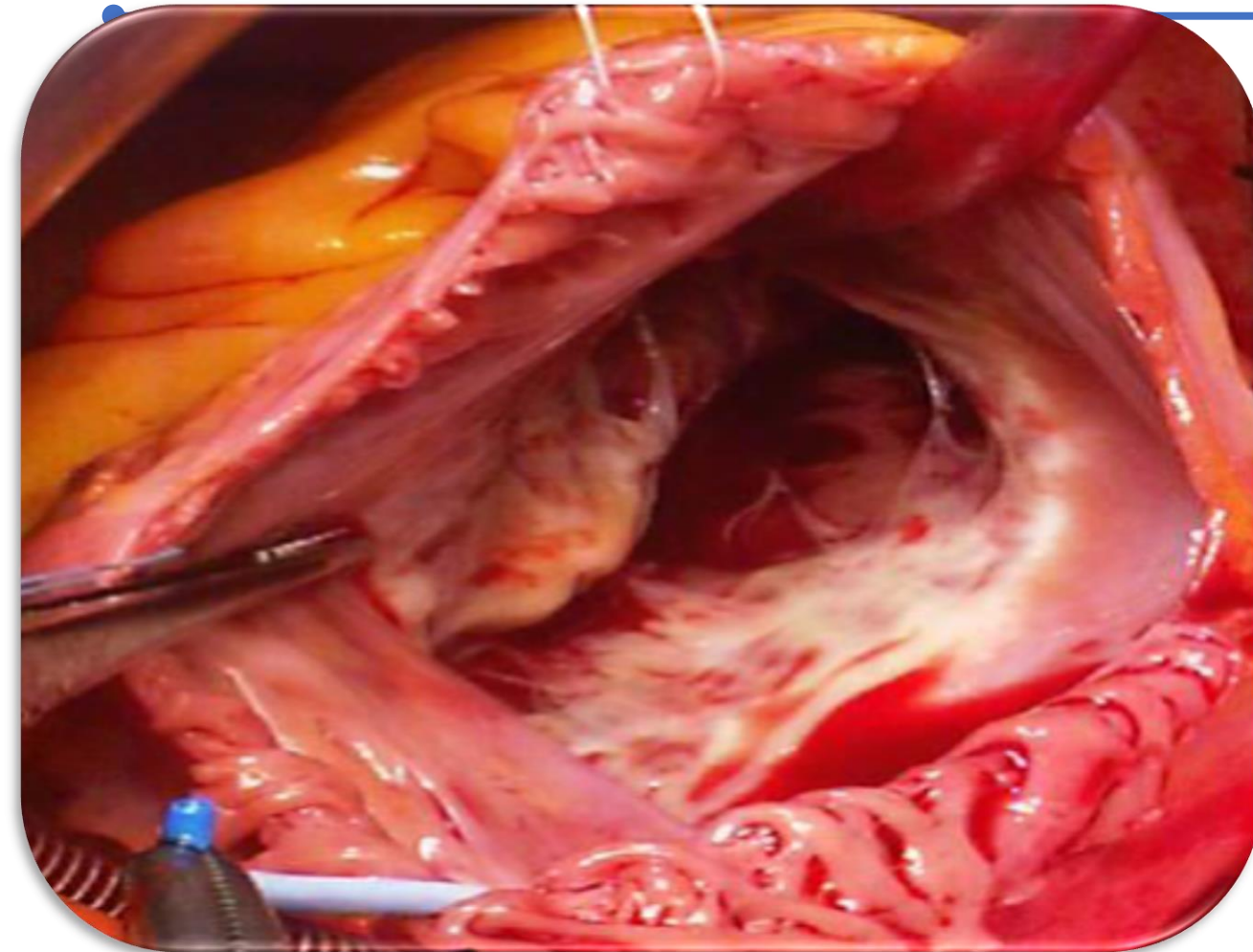
Tricuspid Anatomy



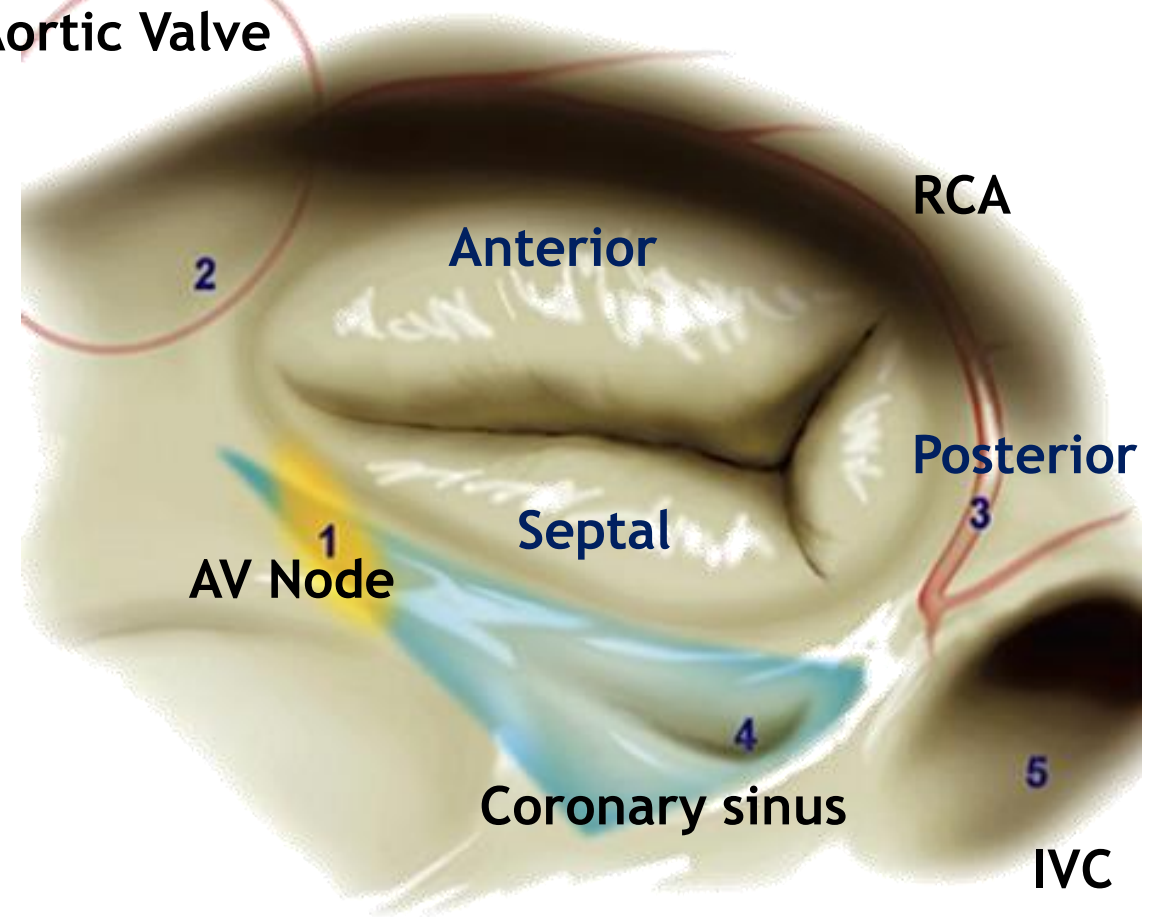
Anatomical Relationships



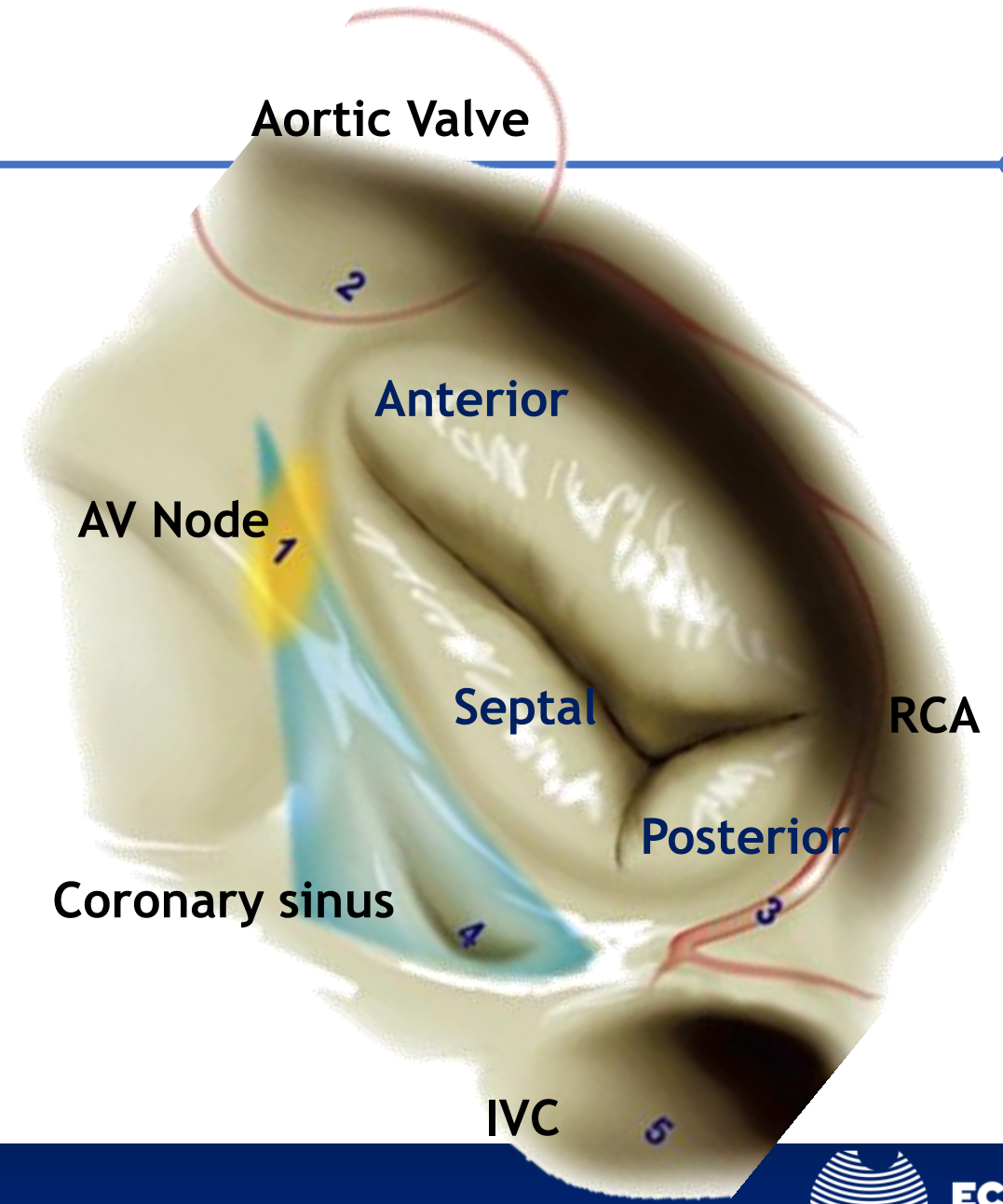
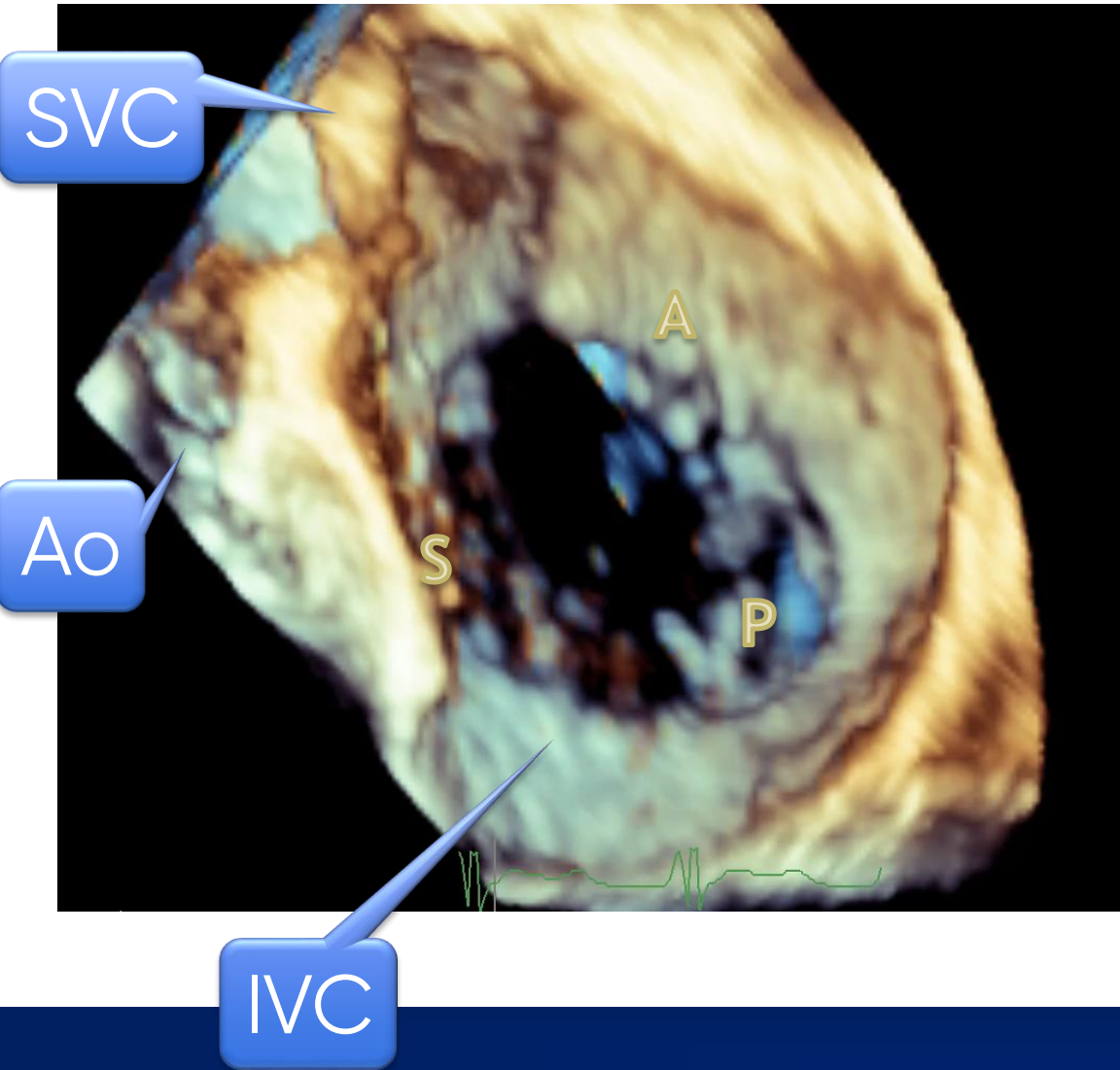
Anatomical Relationships



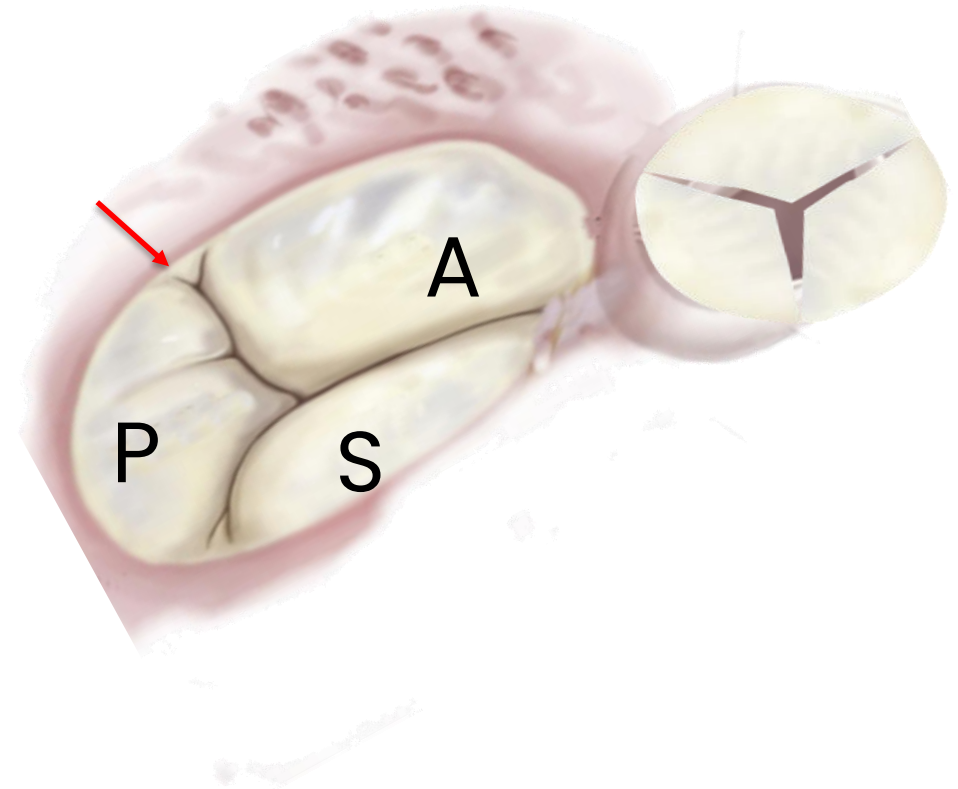
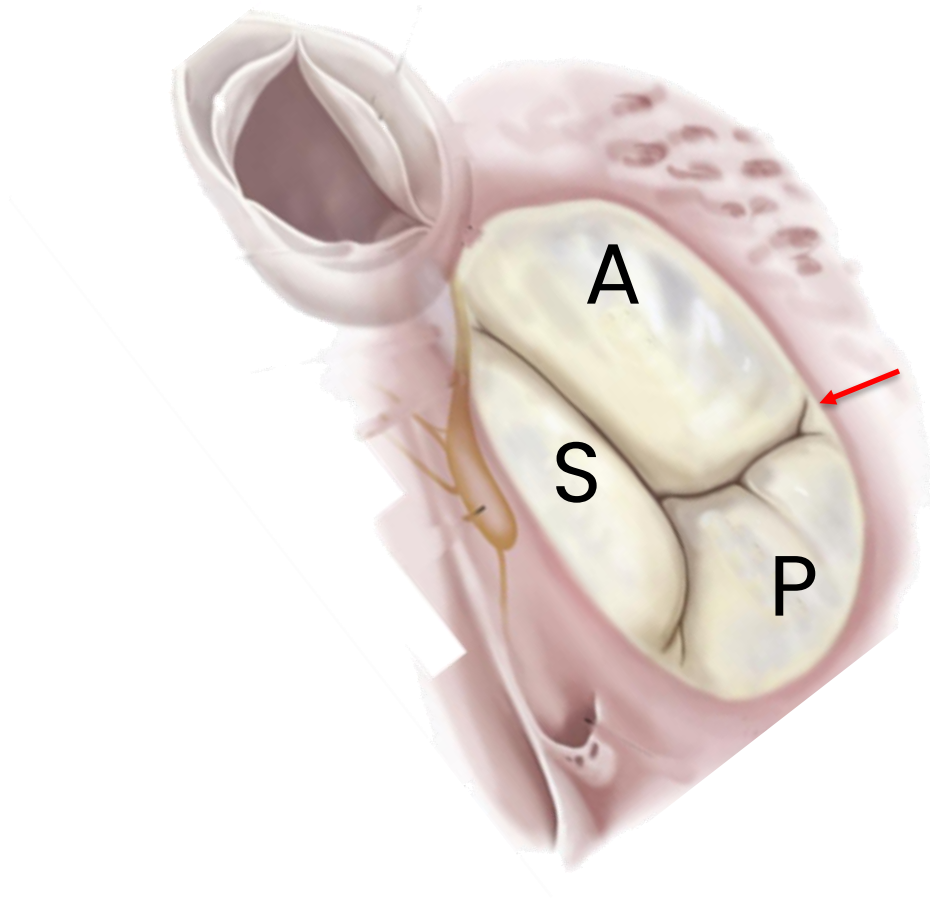
Aortic Valve



Anatomical Relationships

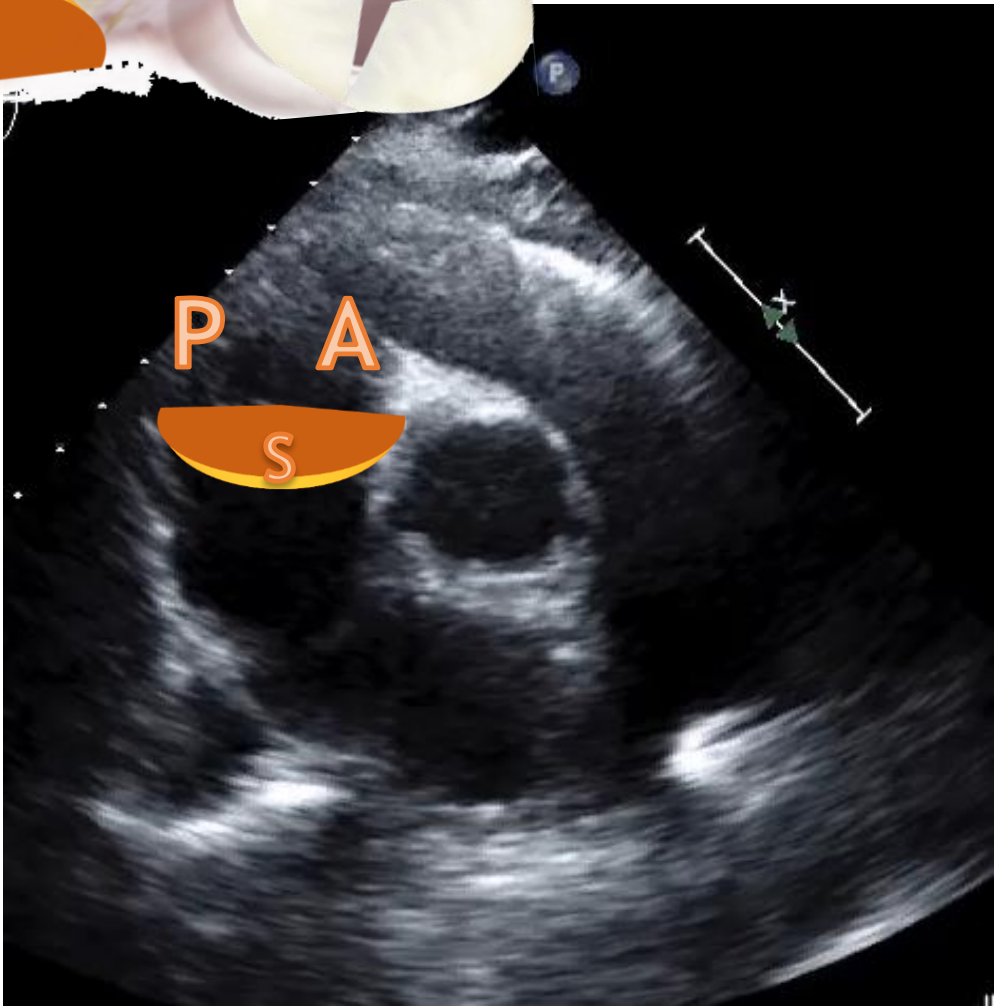
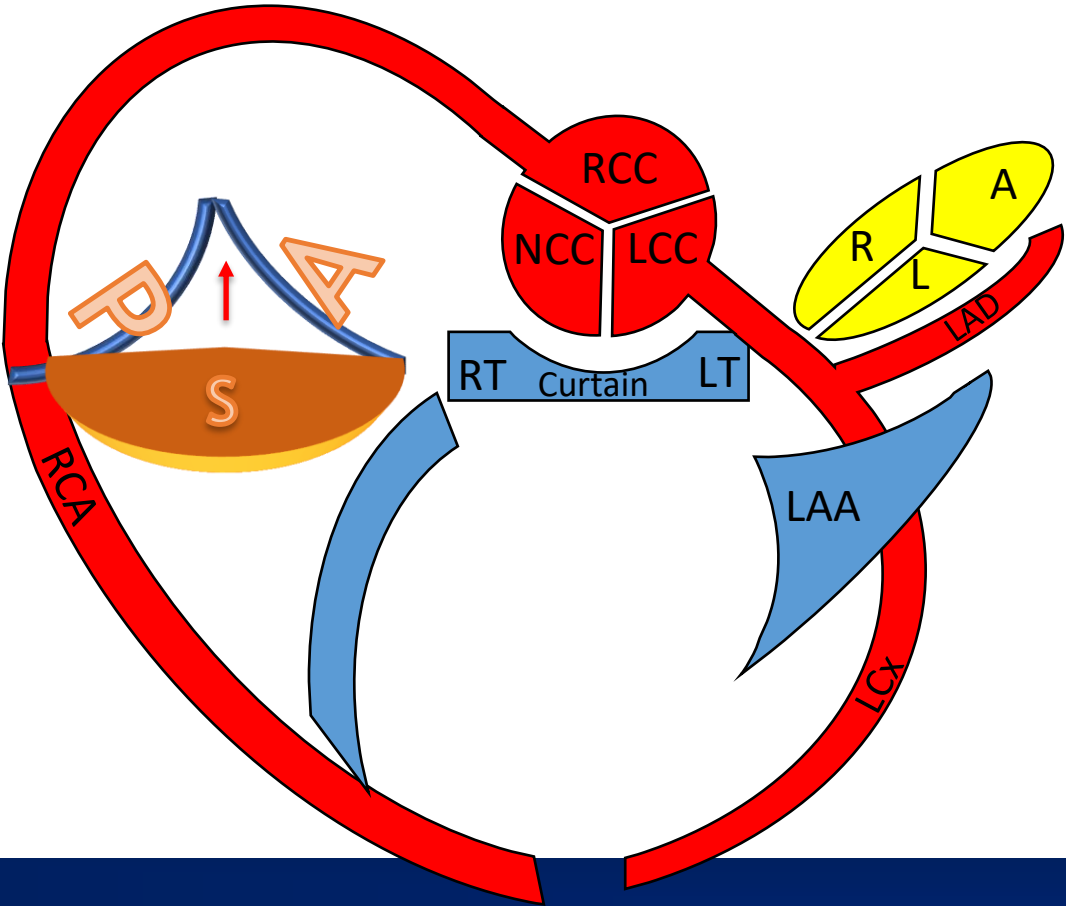
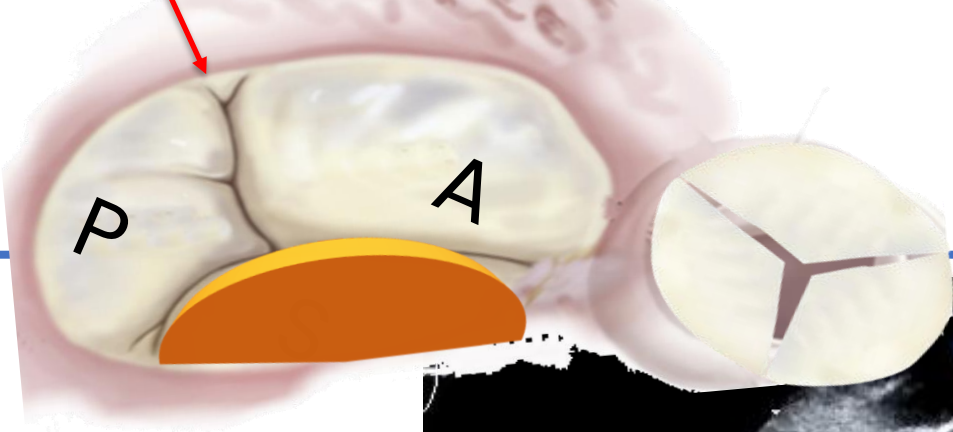


SAX TTE – from above and below



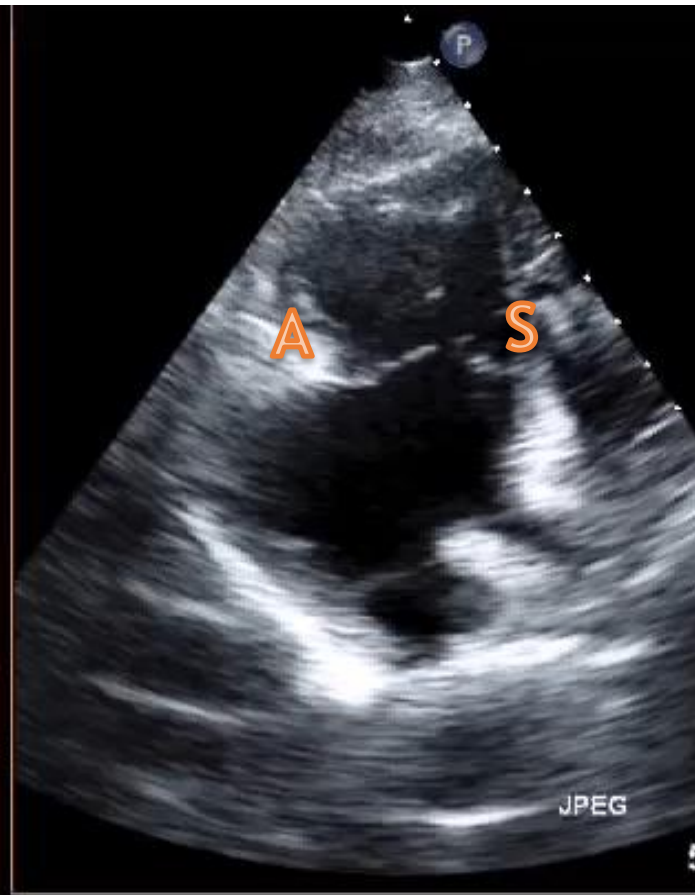
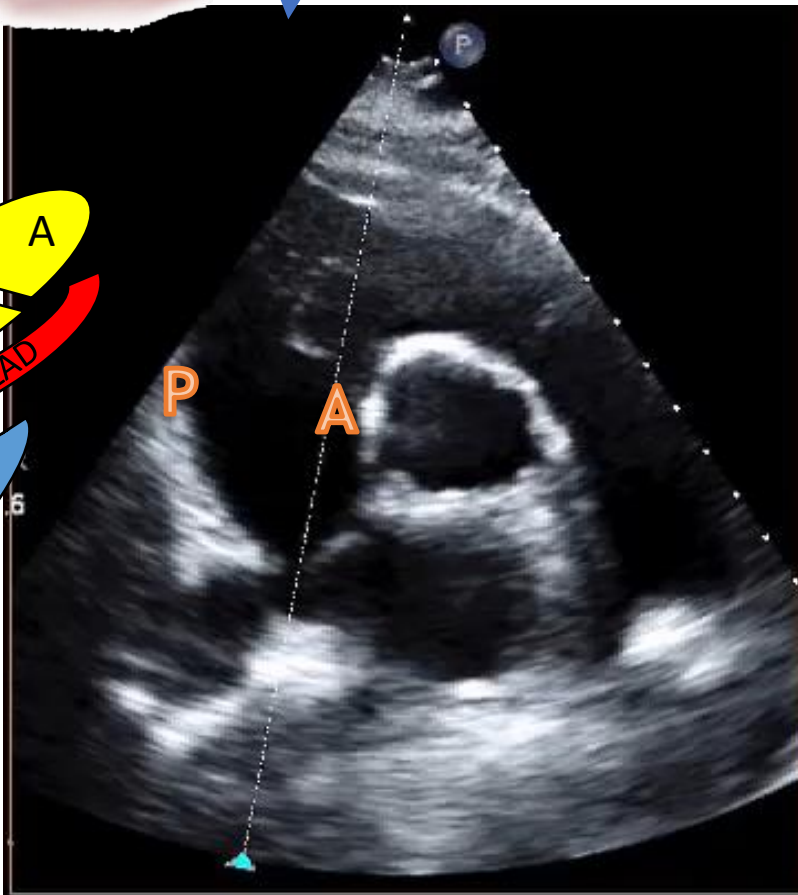
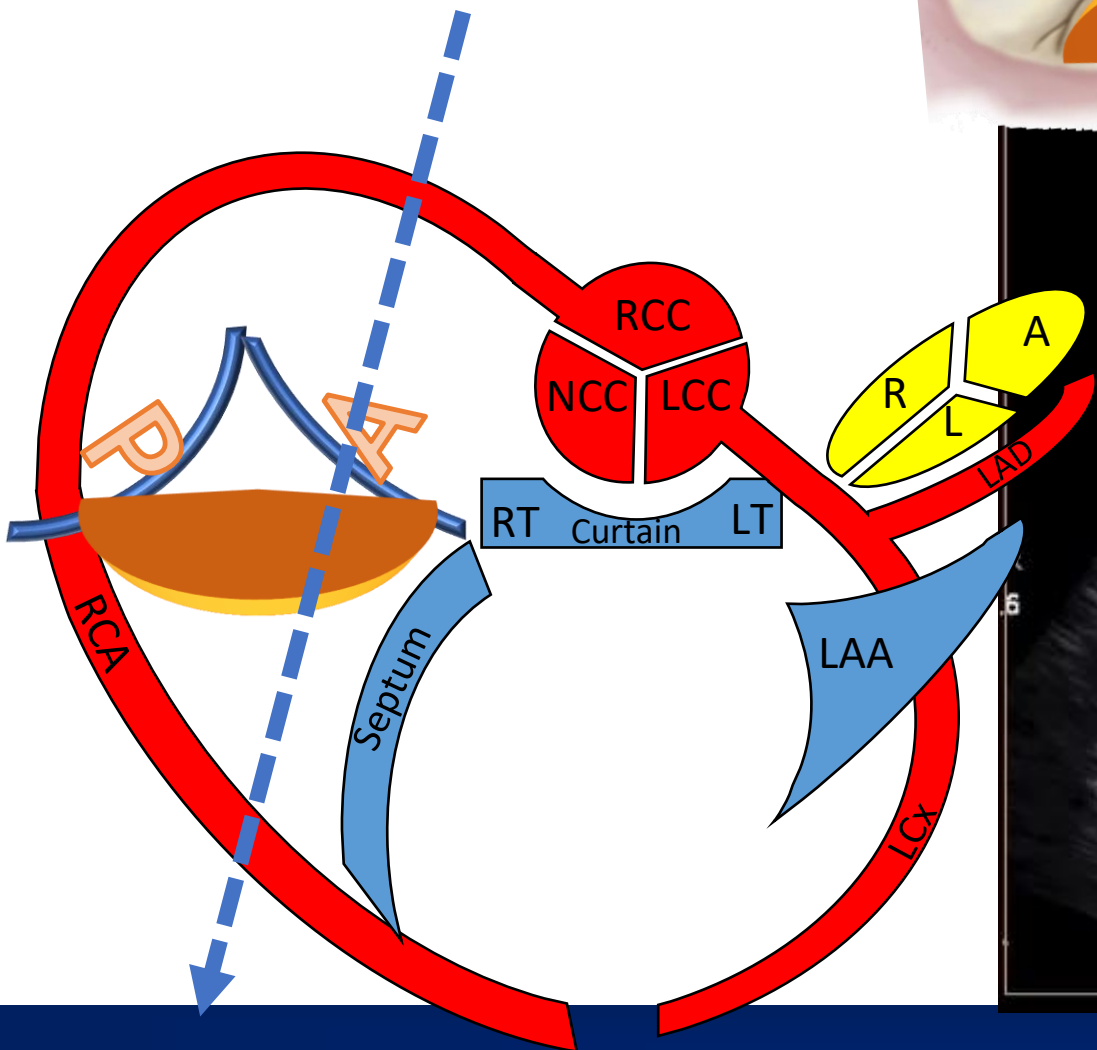
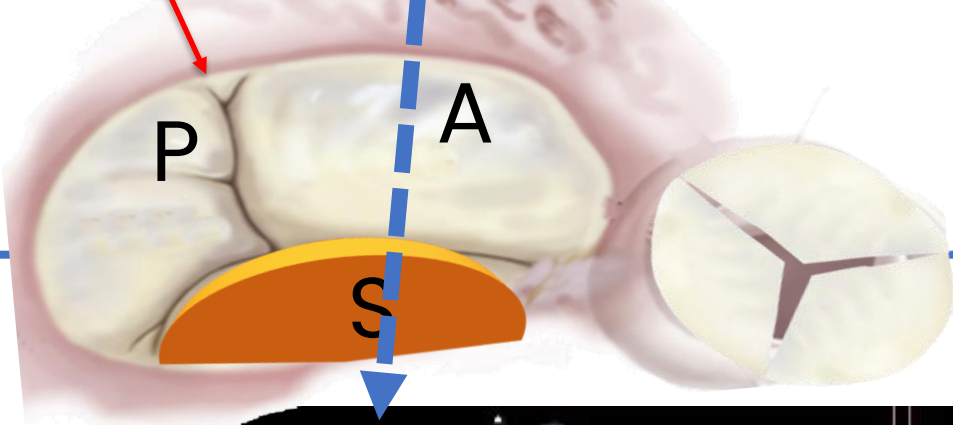
TTE

Inlet-outlet view



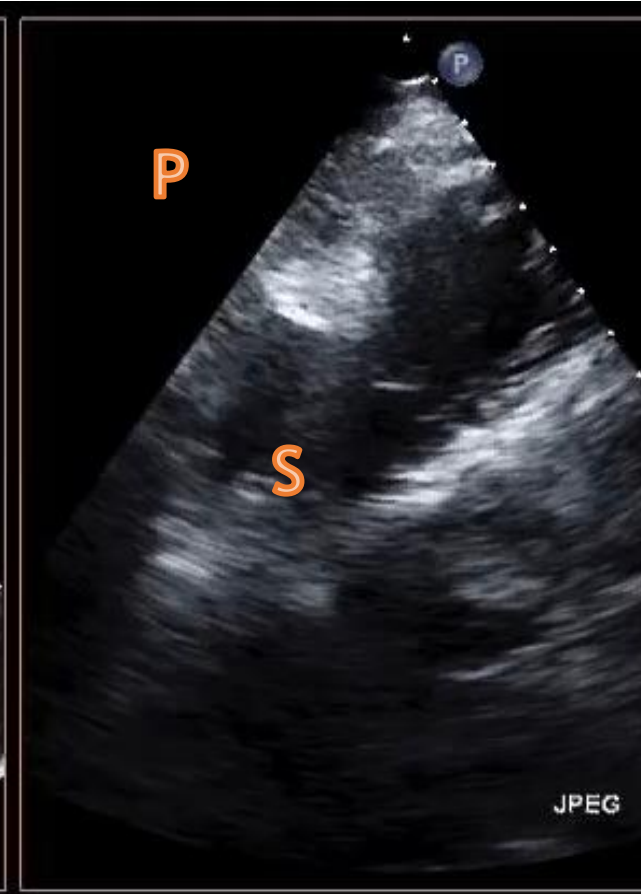
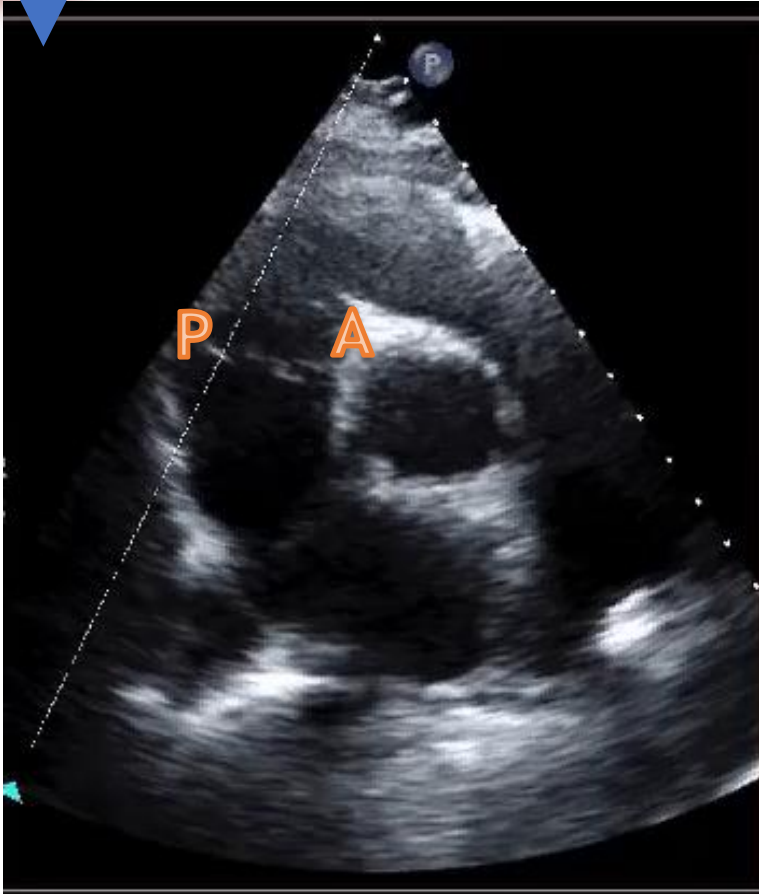
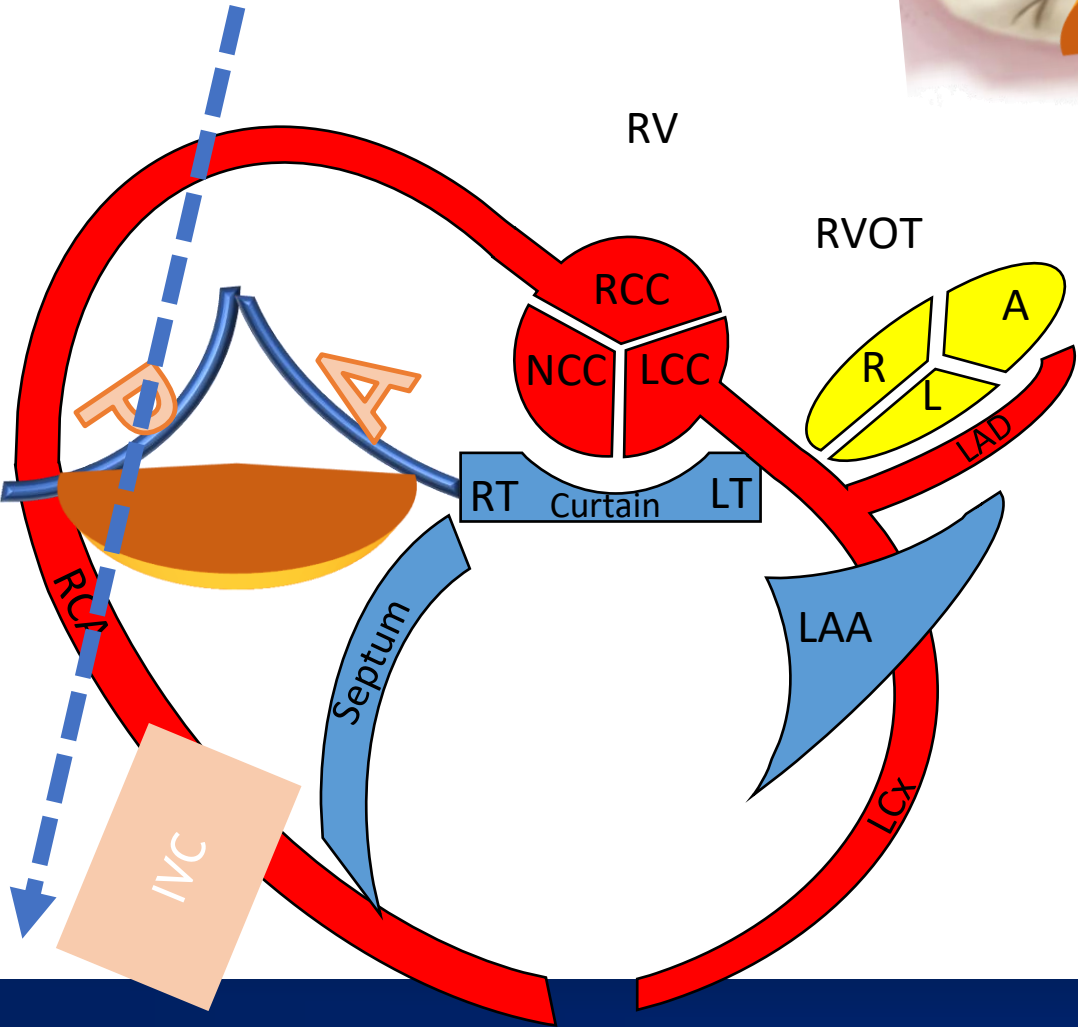
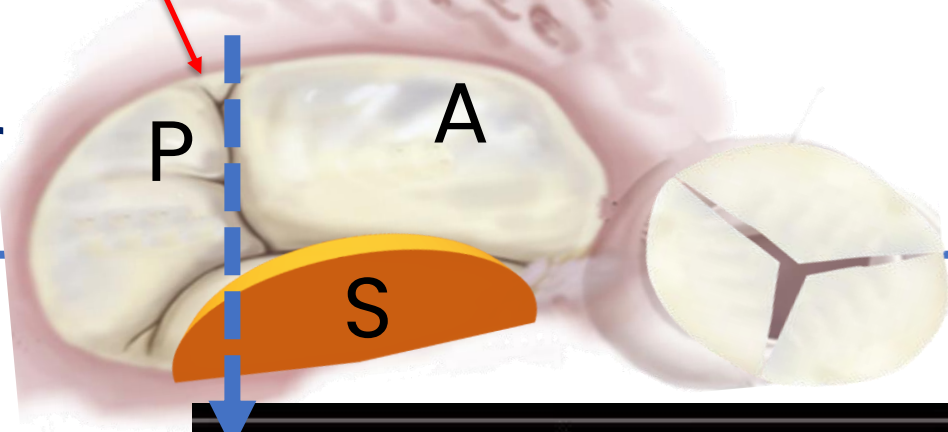
TTE – Septo-anterior

Inlet-outlet view

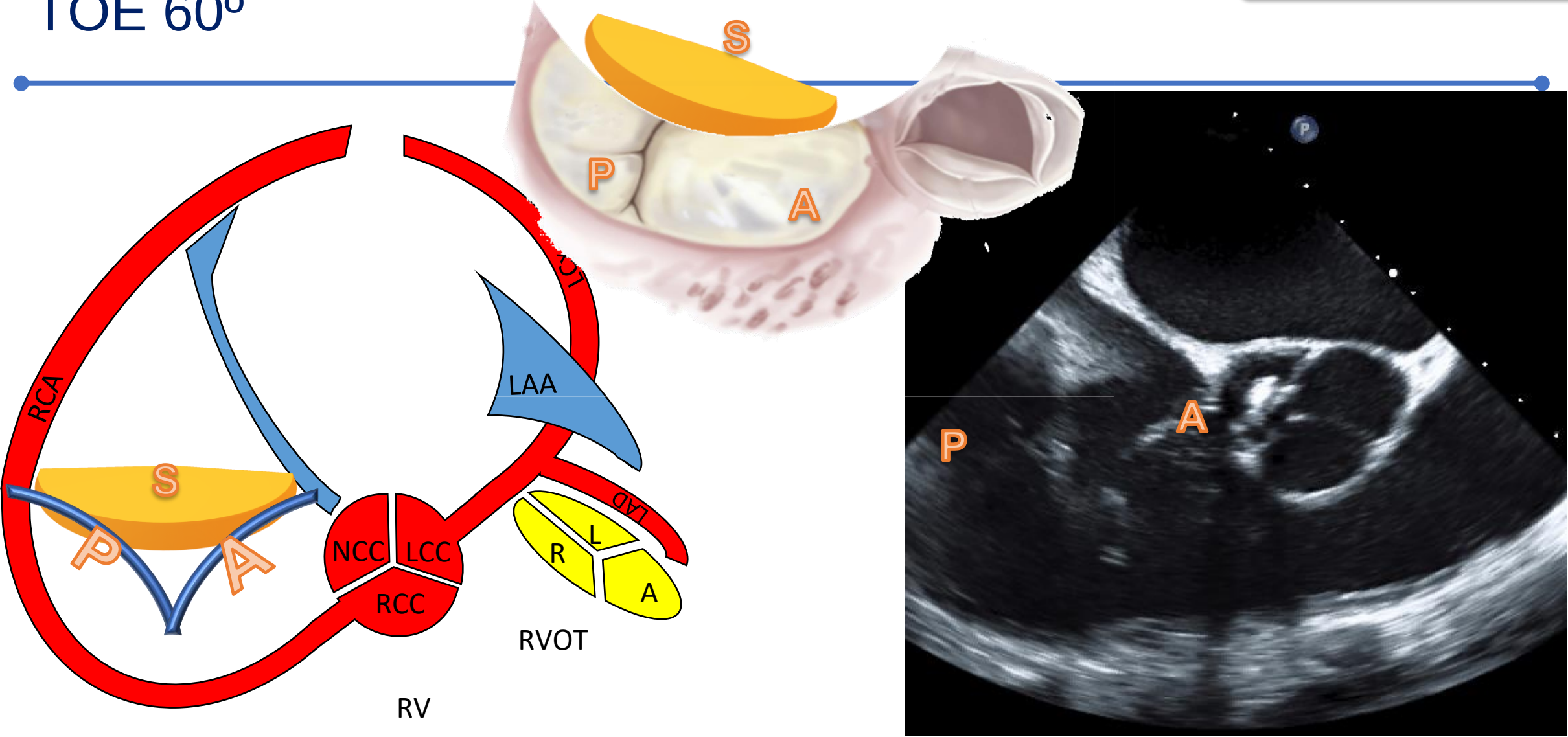


TTE – Septo-posterior

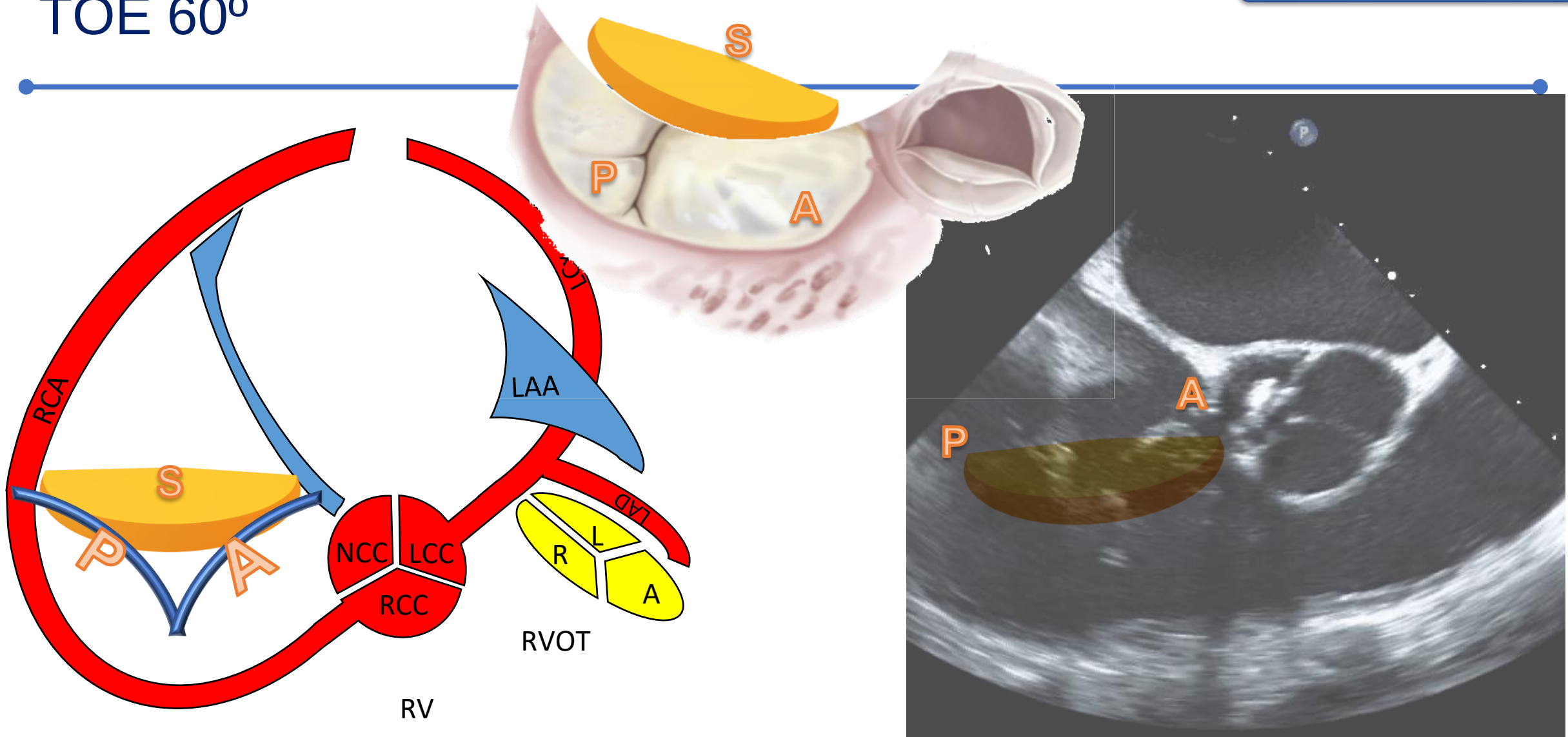
Inlet-outlet view



TOE 60°

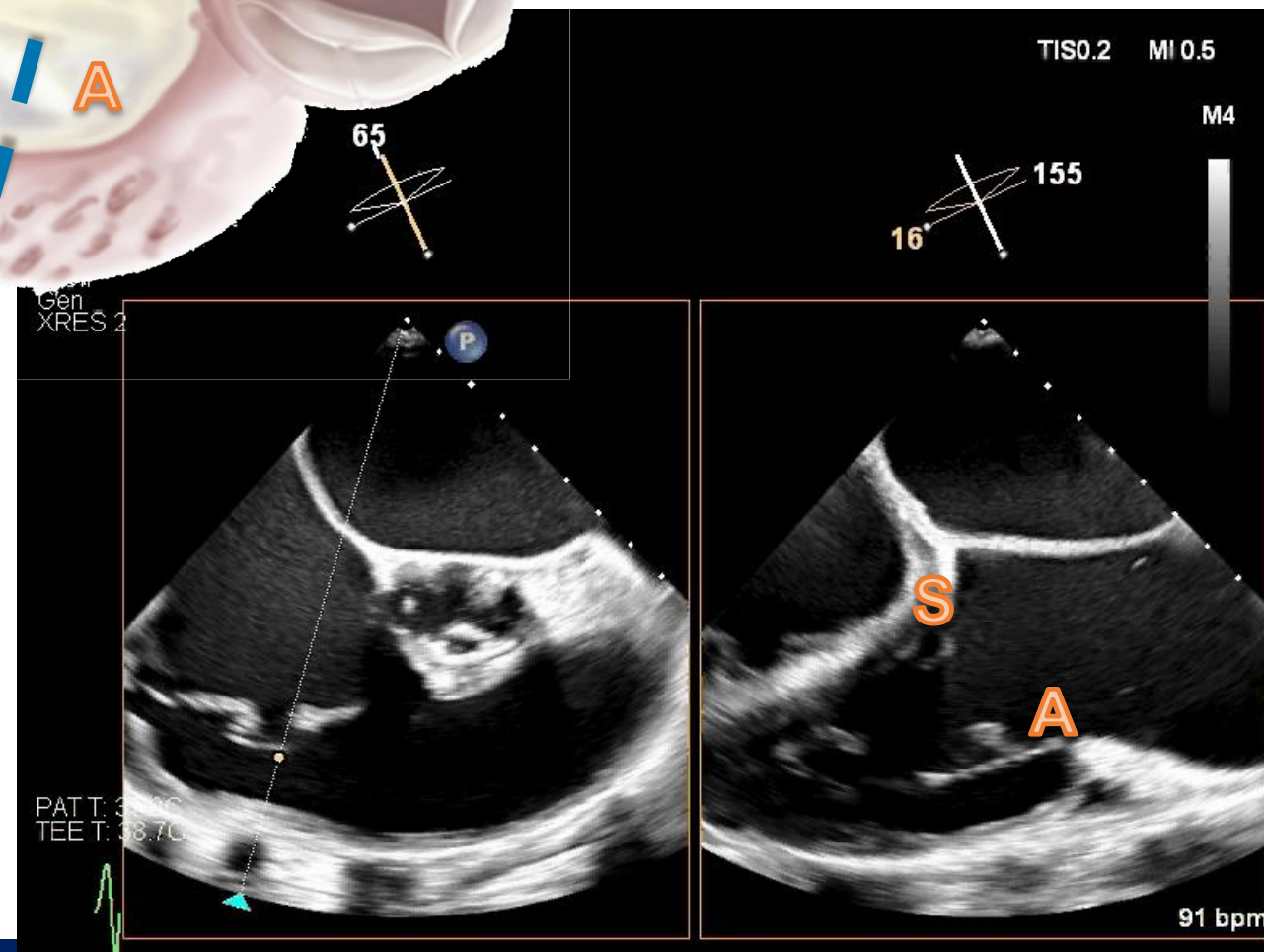
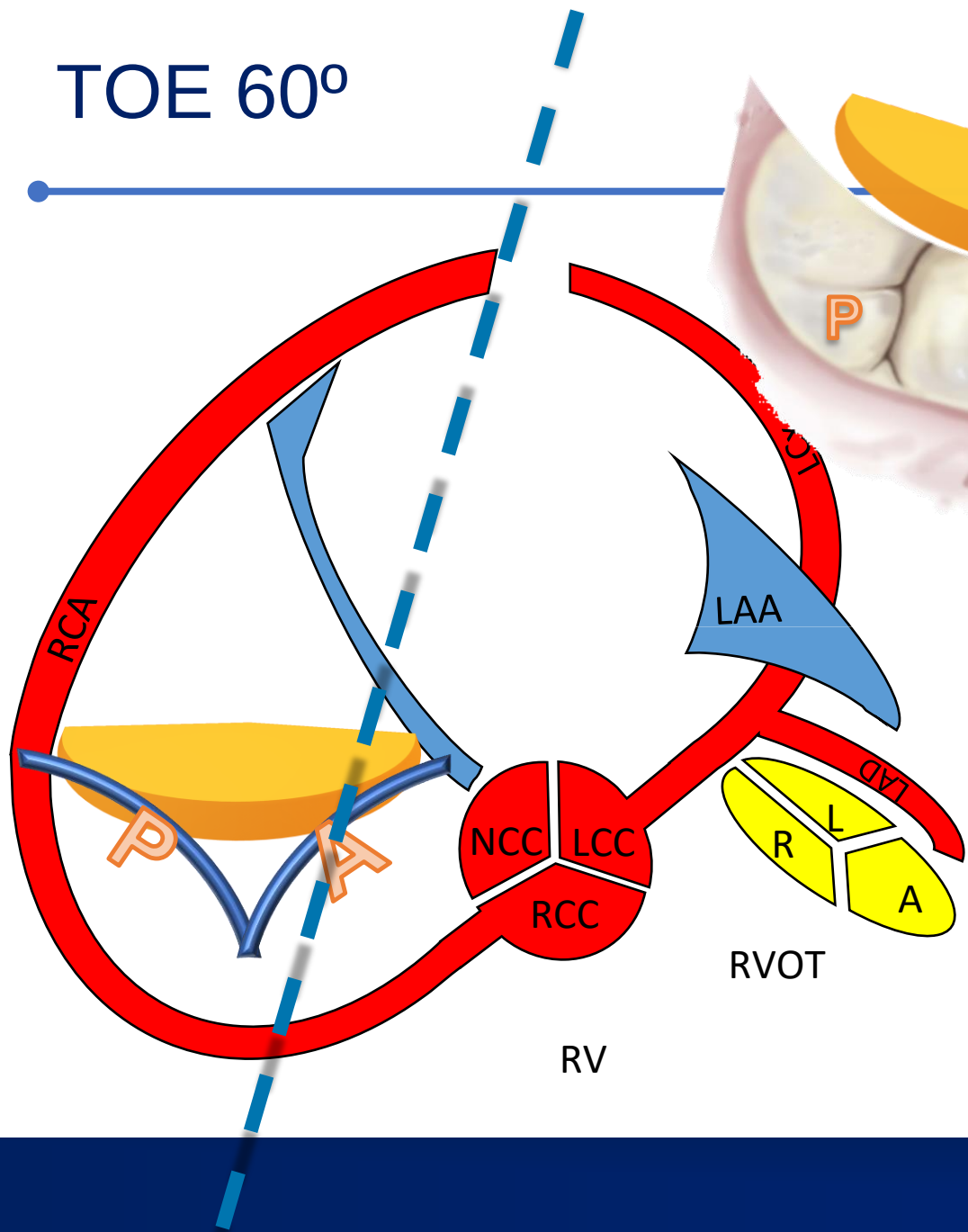


TOE 60°



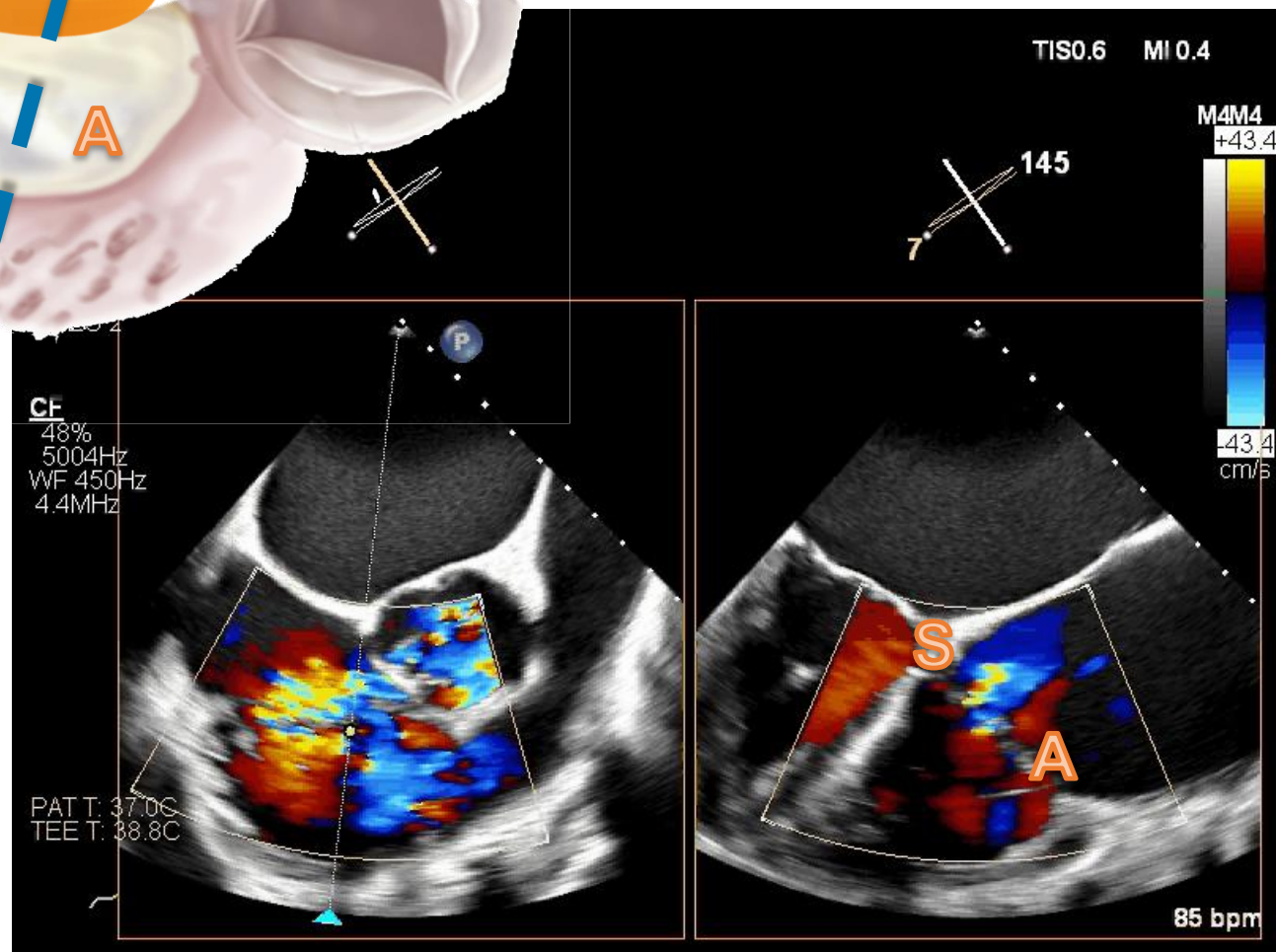
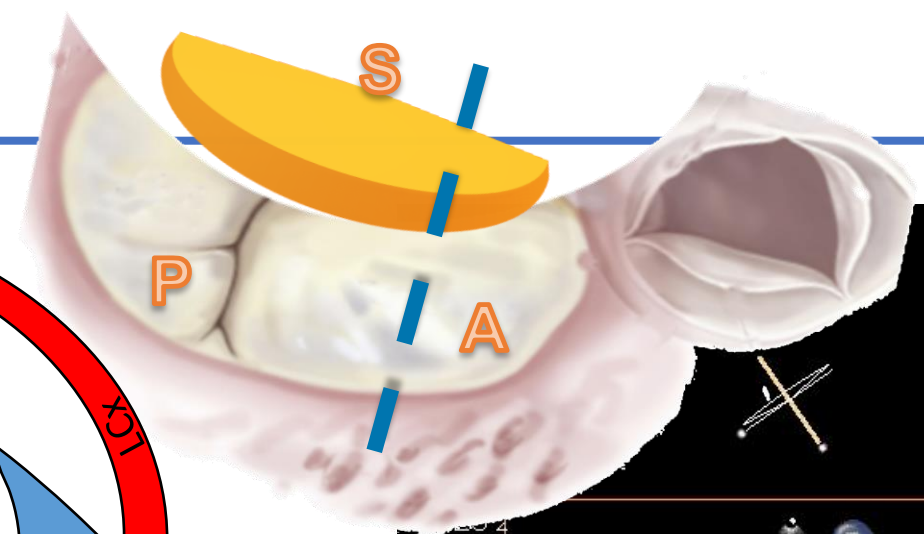
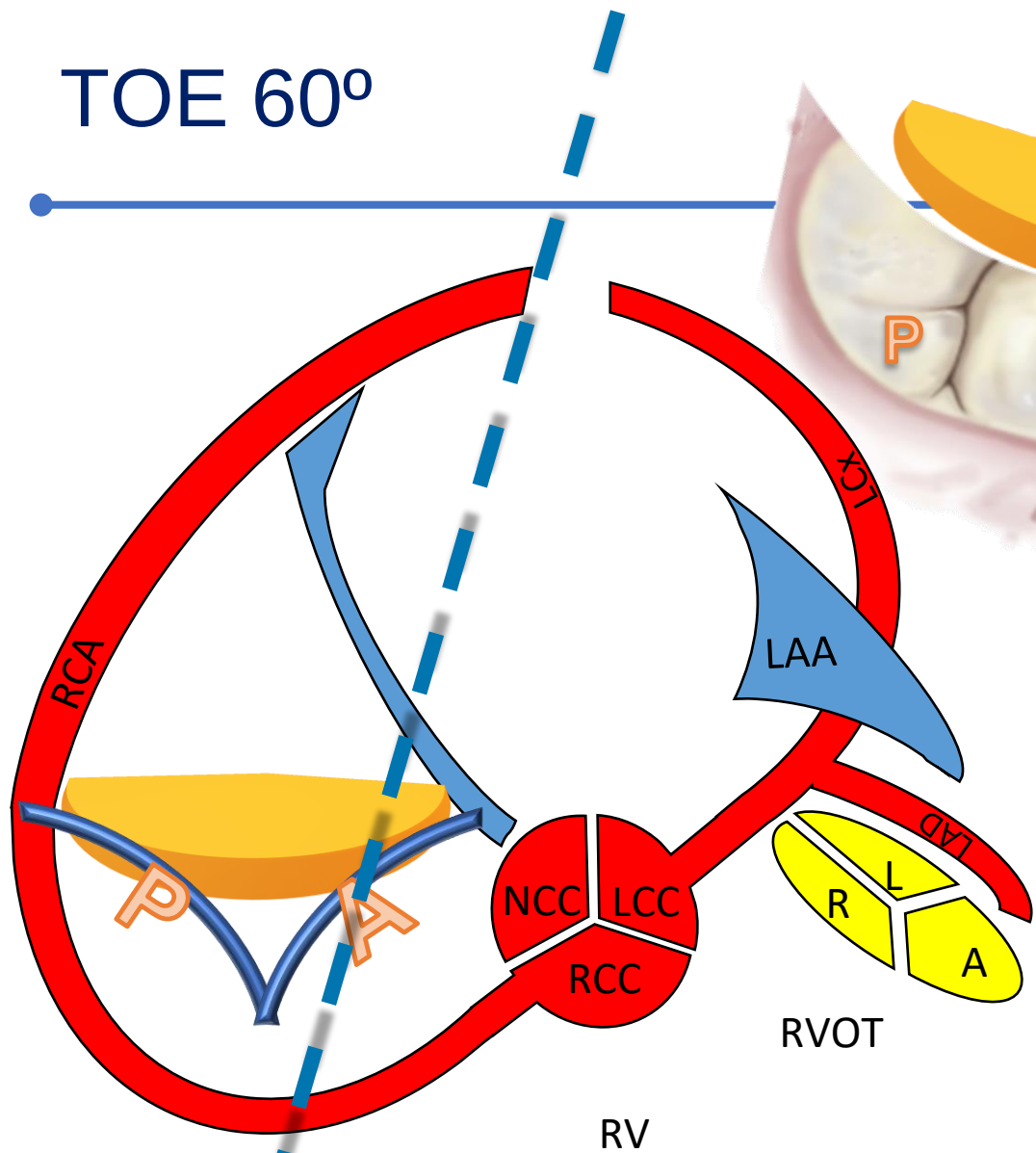
TOE 60°

Inlet-outlet view
Bi-plane



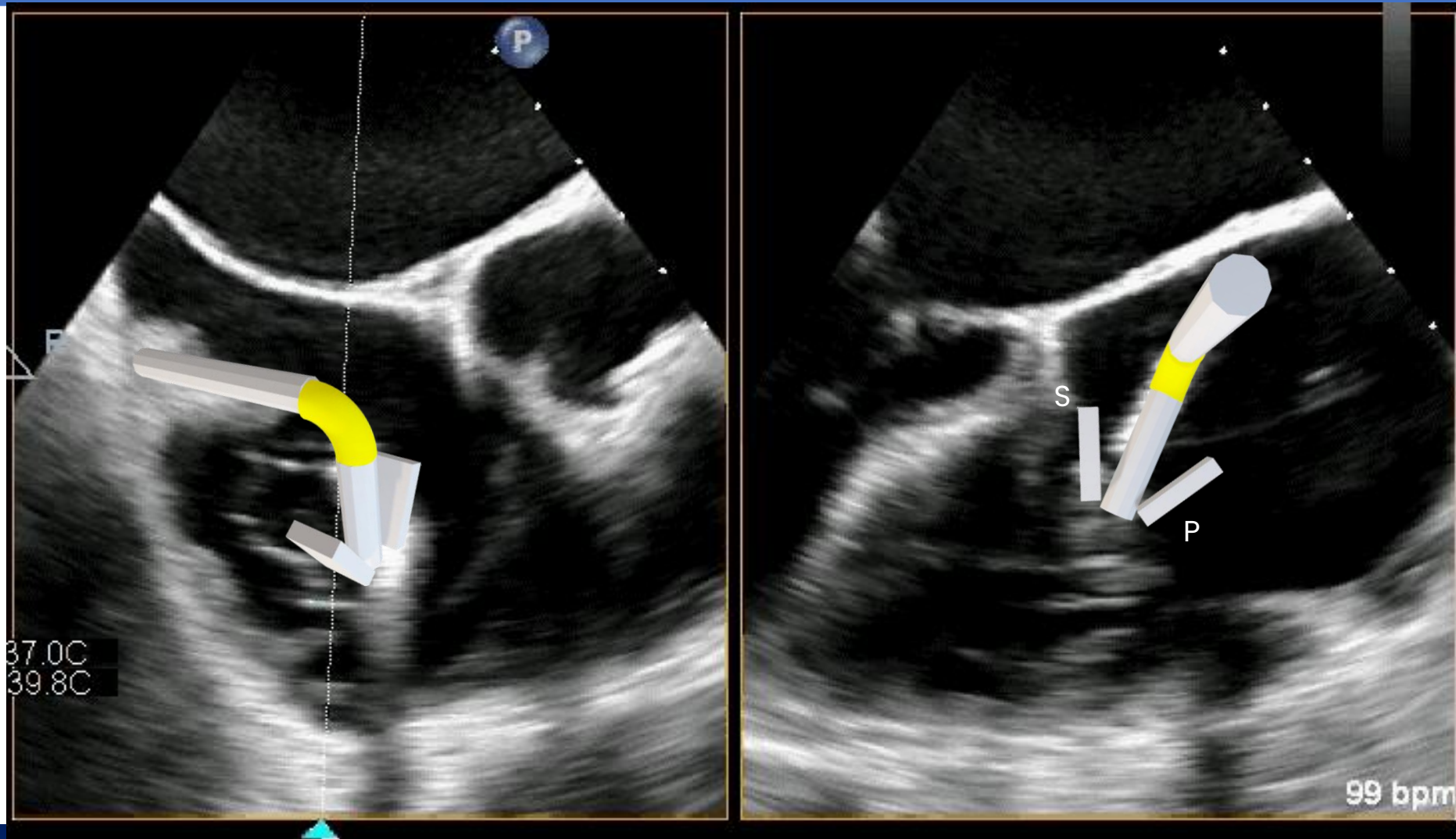
TOE 60°

Inlet-outlet view
Bi-plane

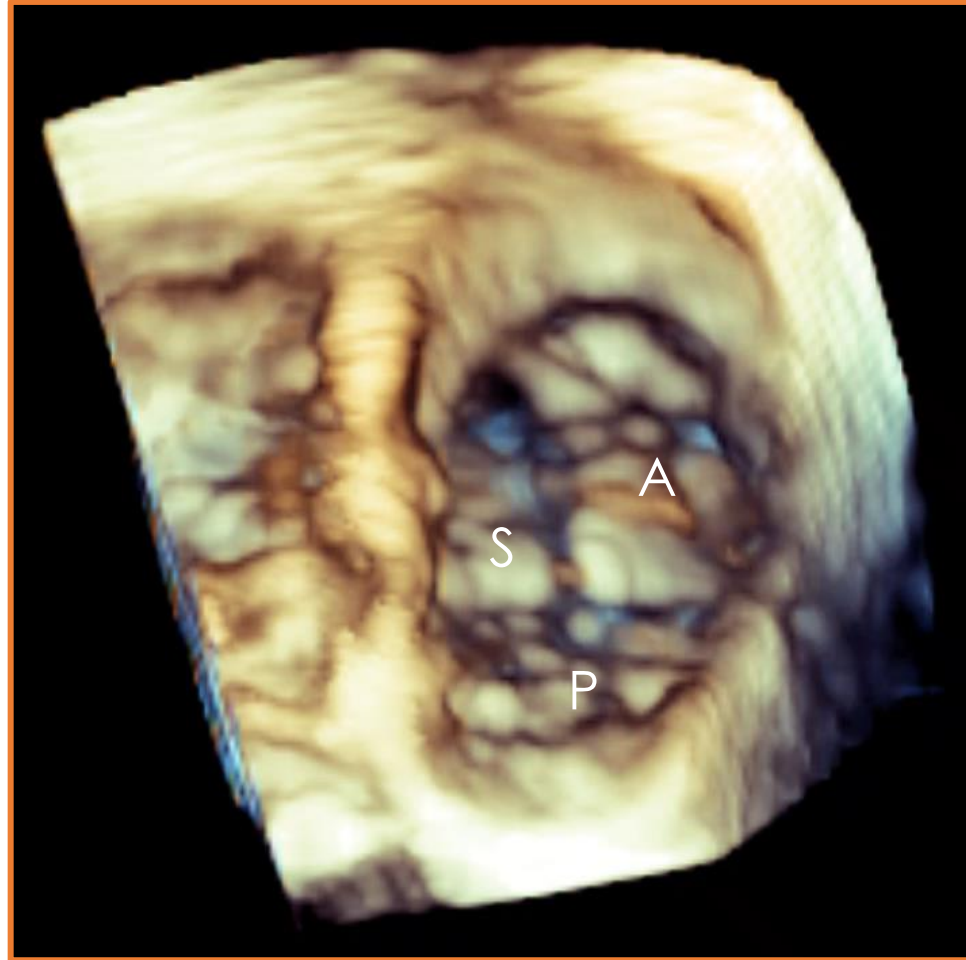


X-Plane Mid Oesophagus Short axis

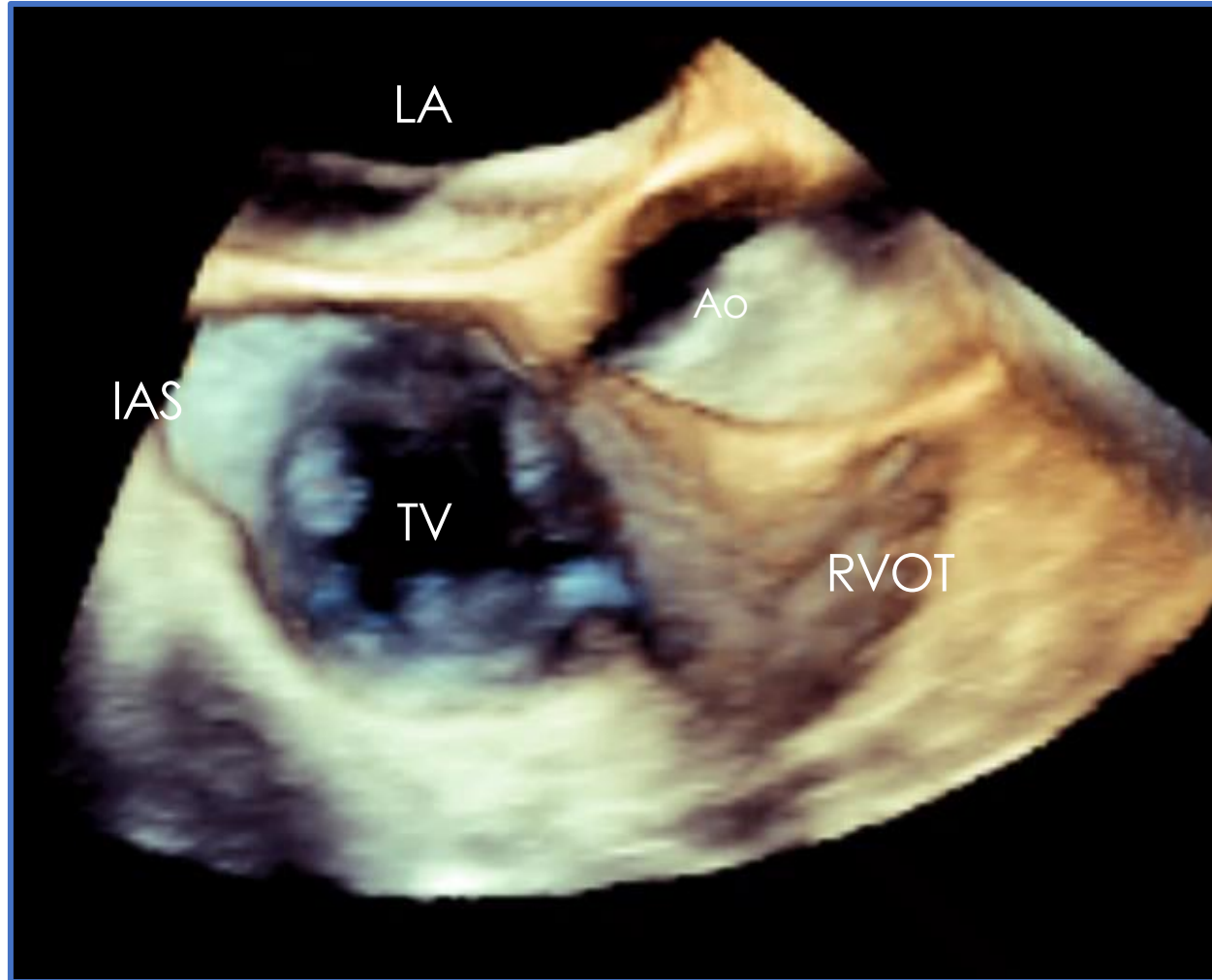
Inlet-outlet view
Bi-plane



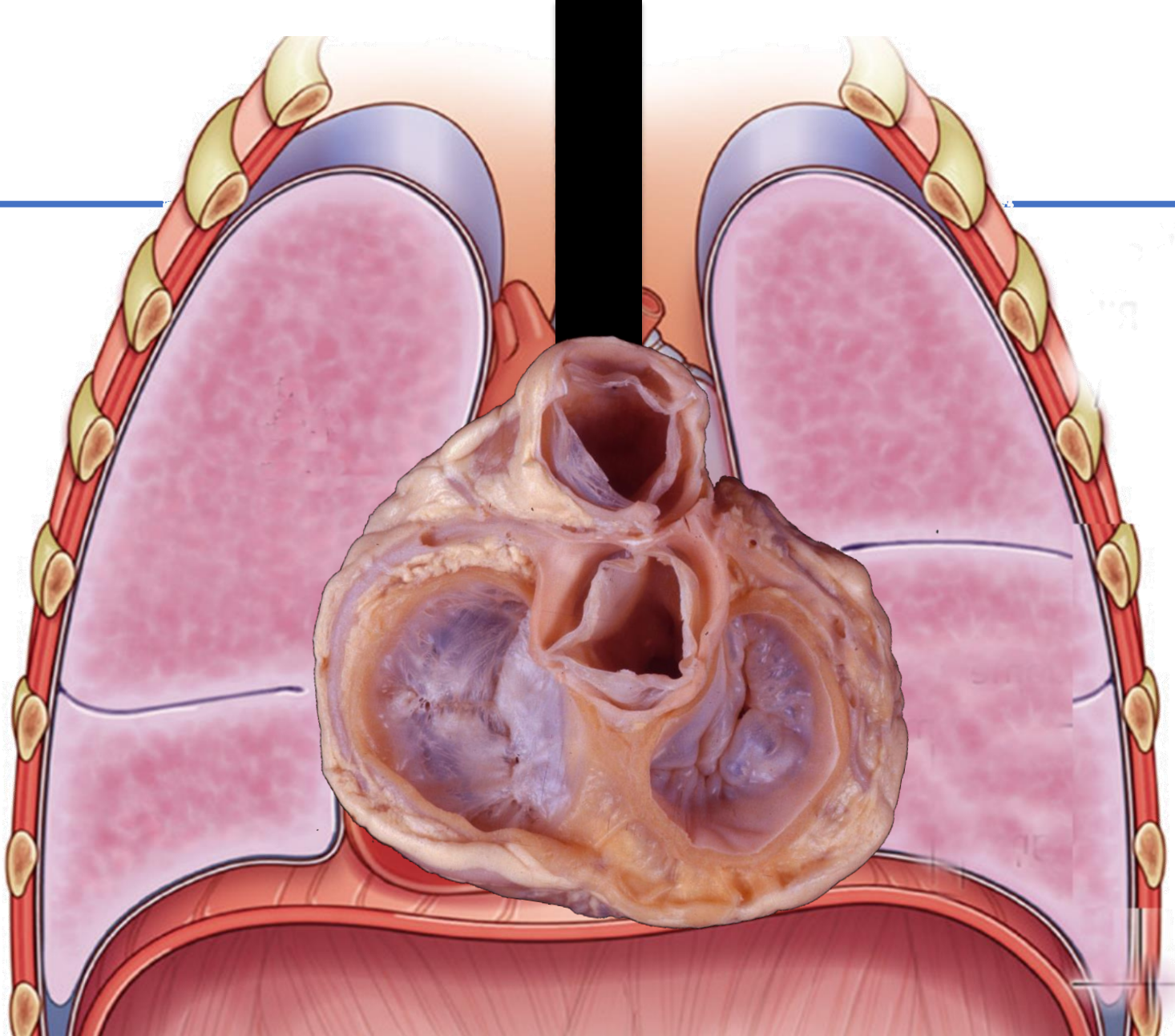
3D imaging- views -Commissural view



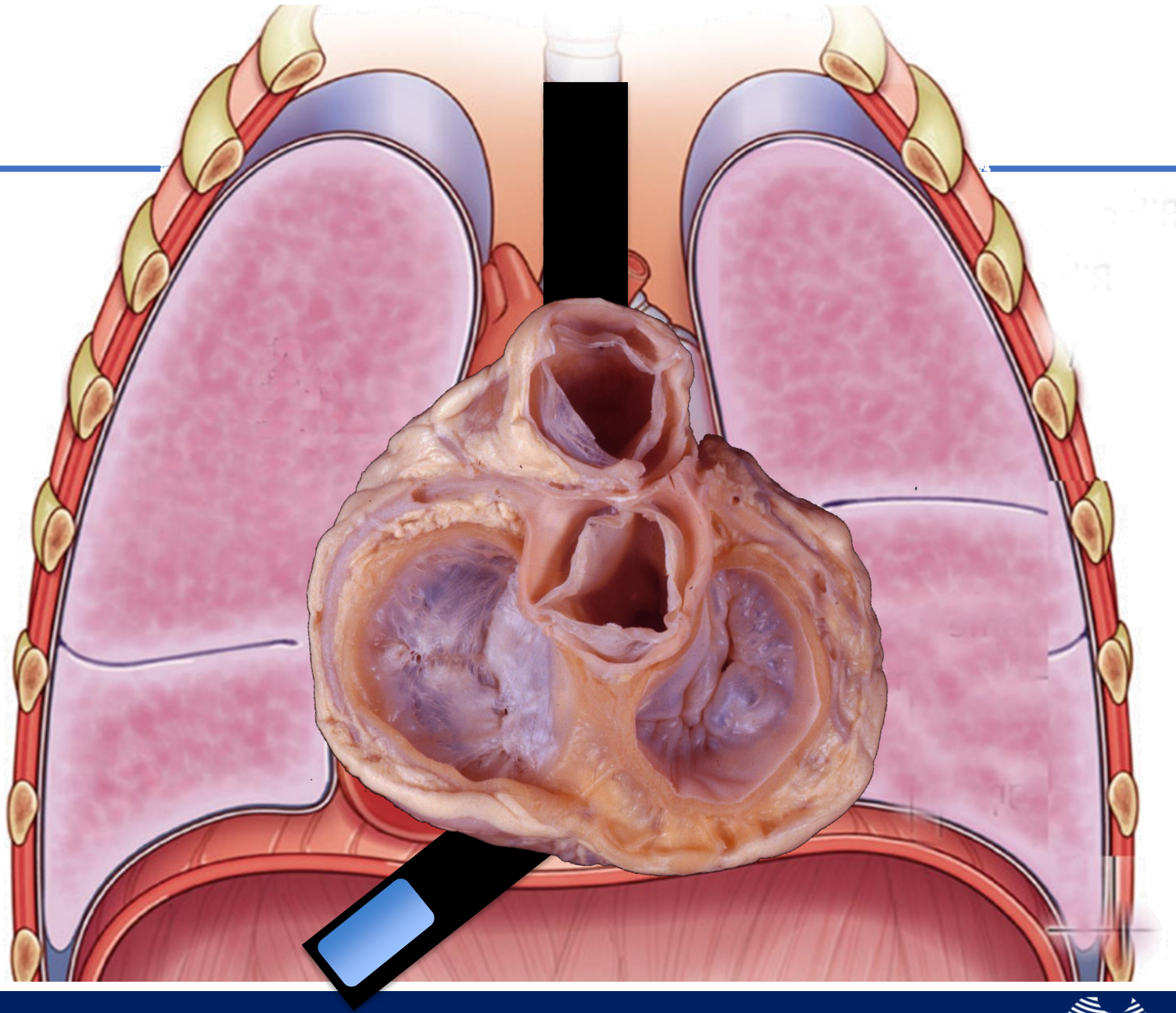
3D imaging- views - Bi-caval view



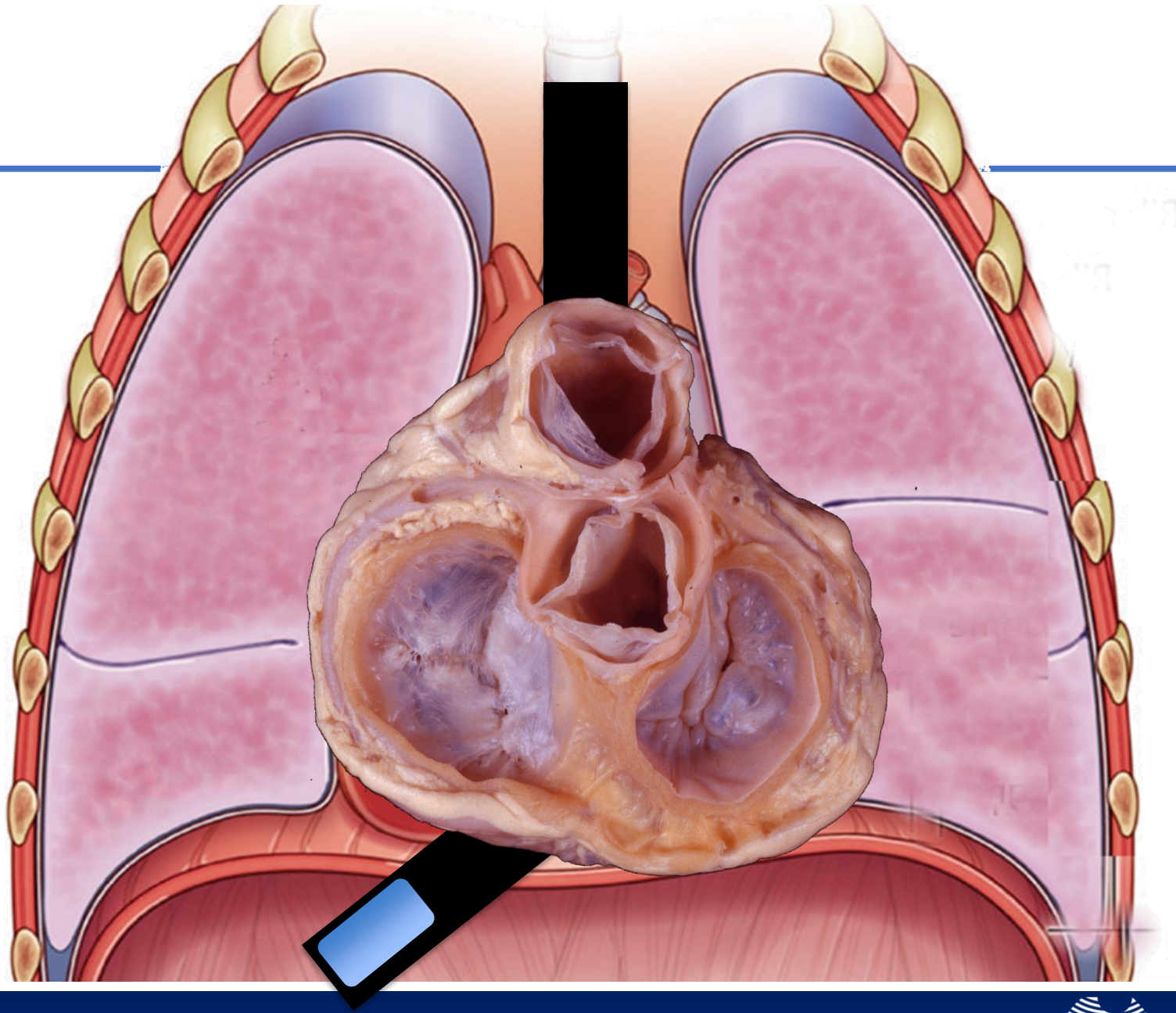
Transgastric



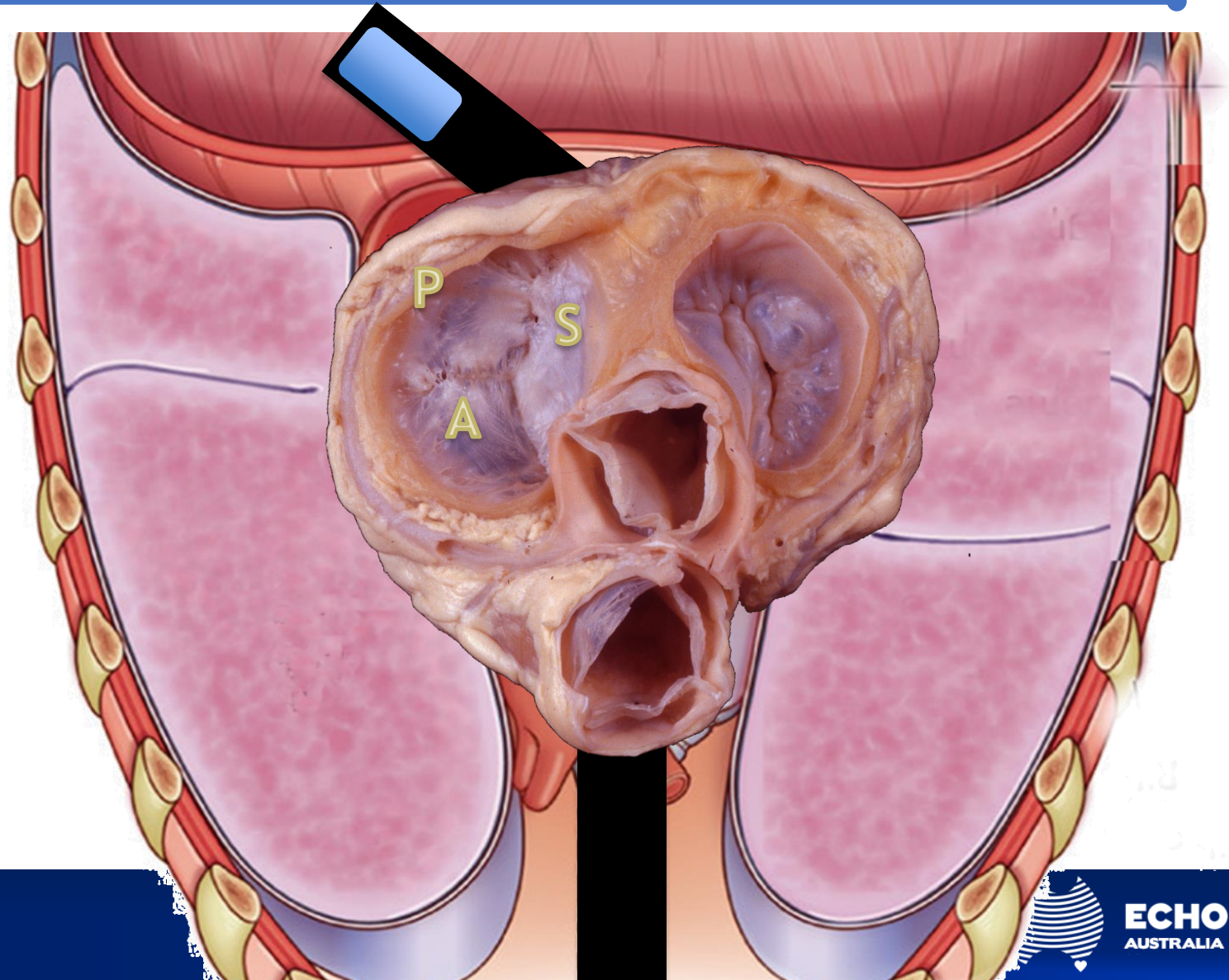
Transgastric



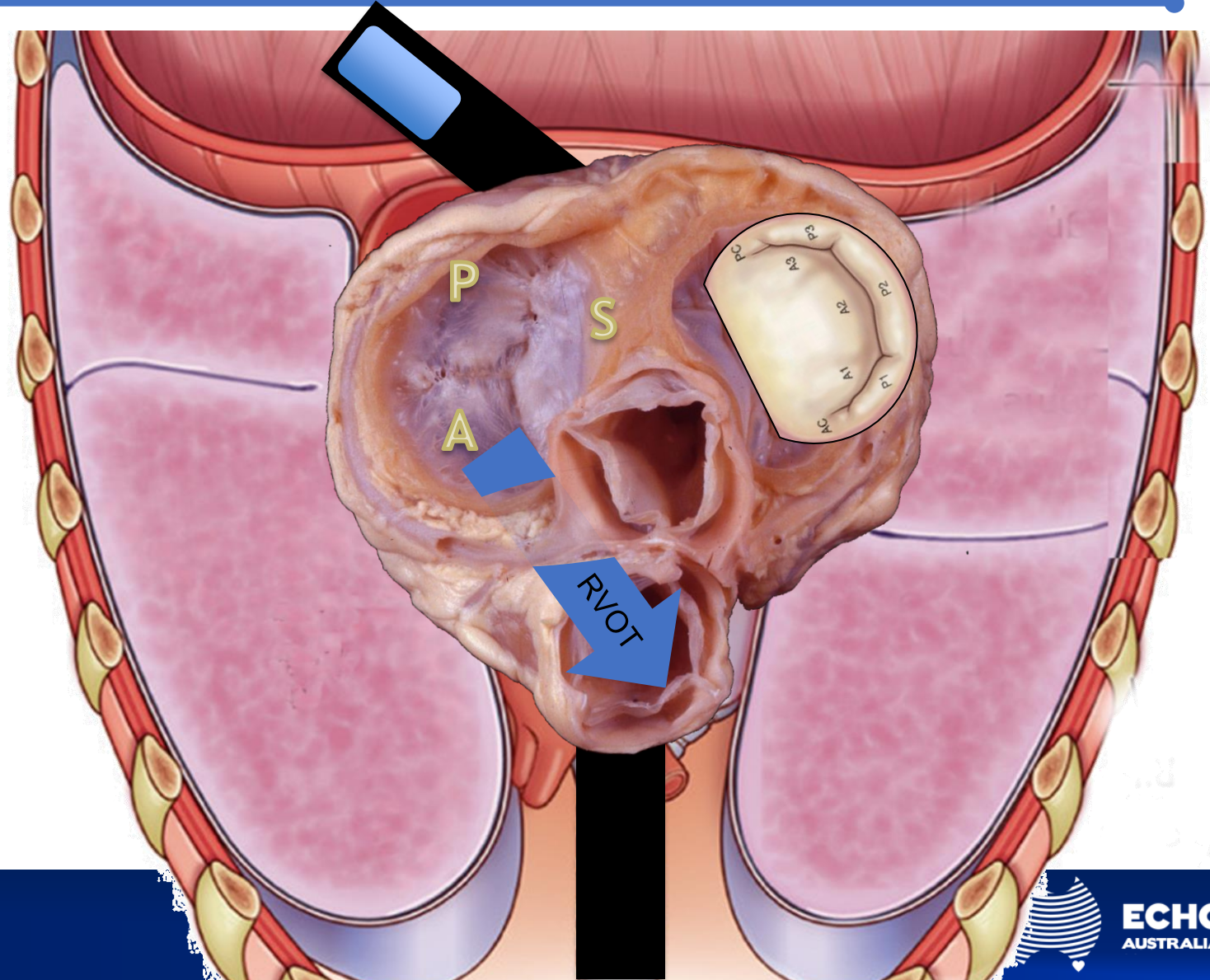
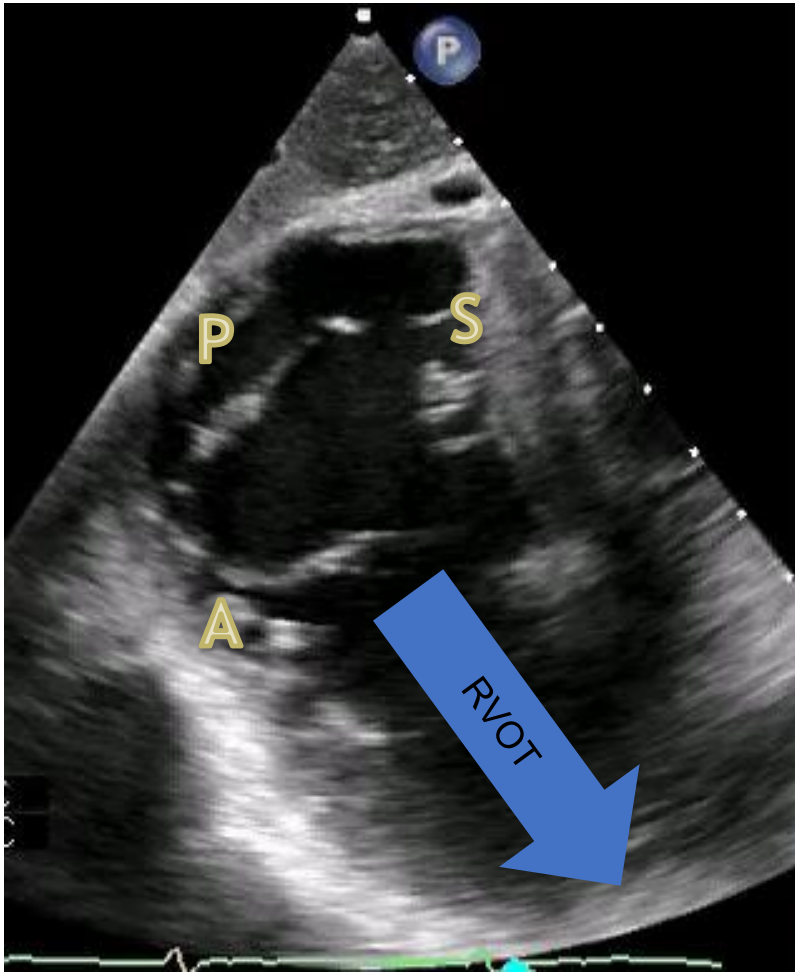
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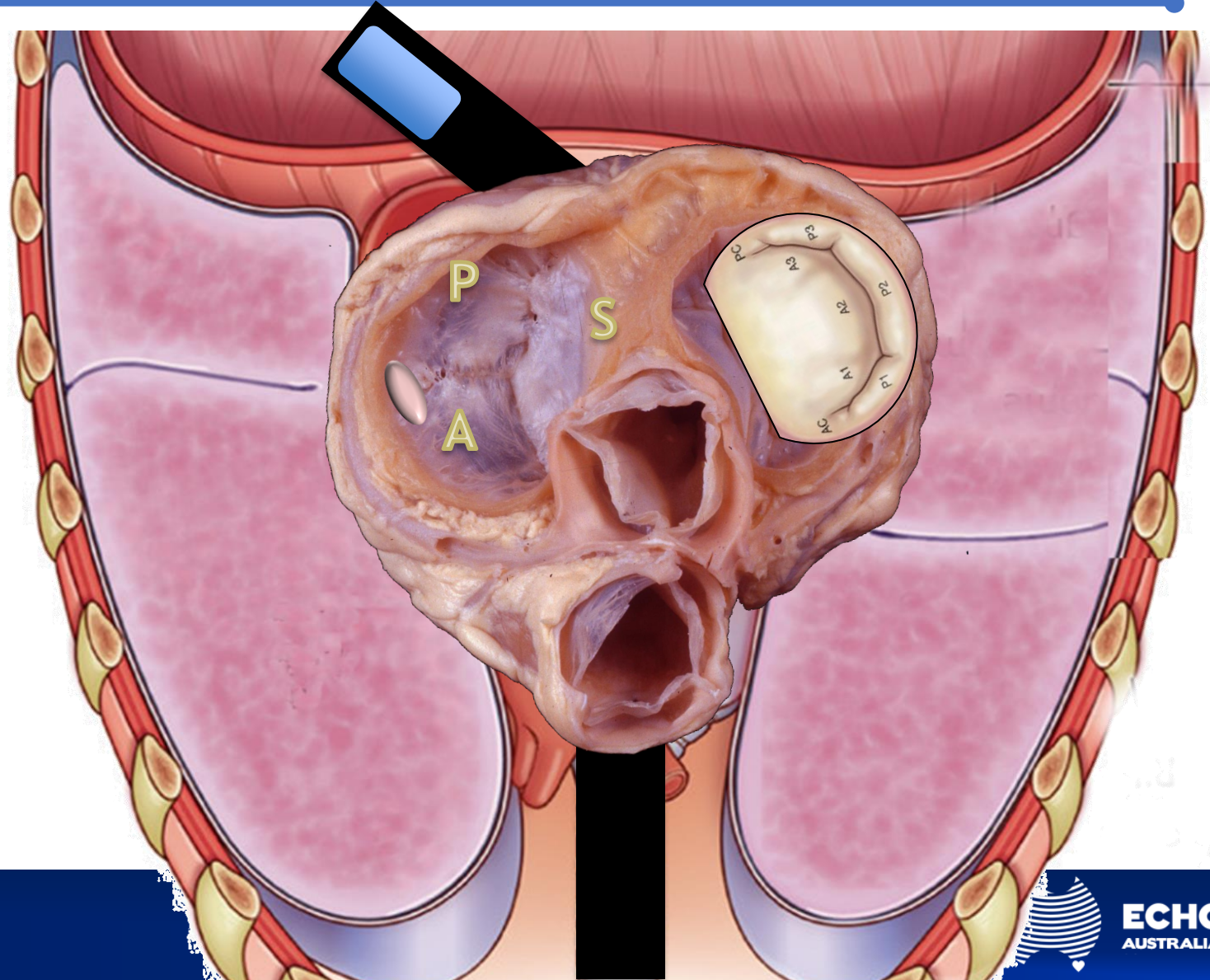
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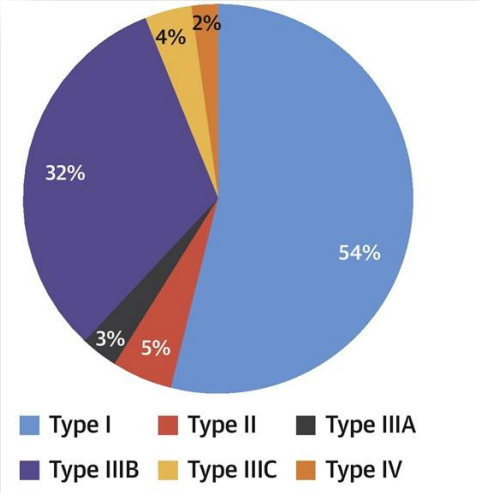
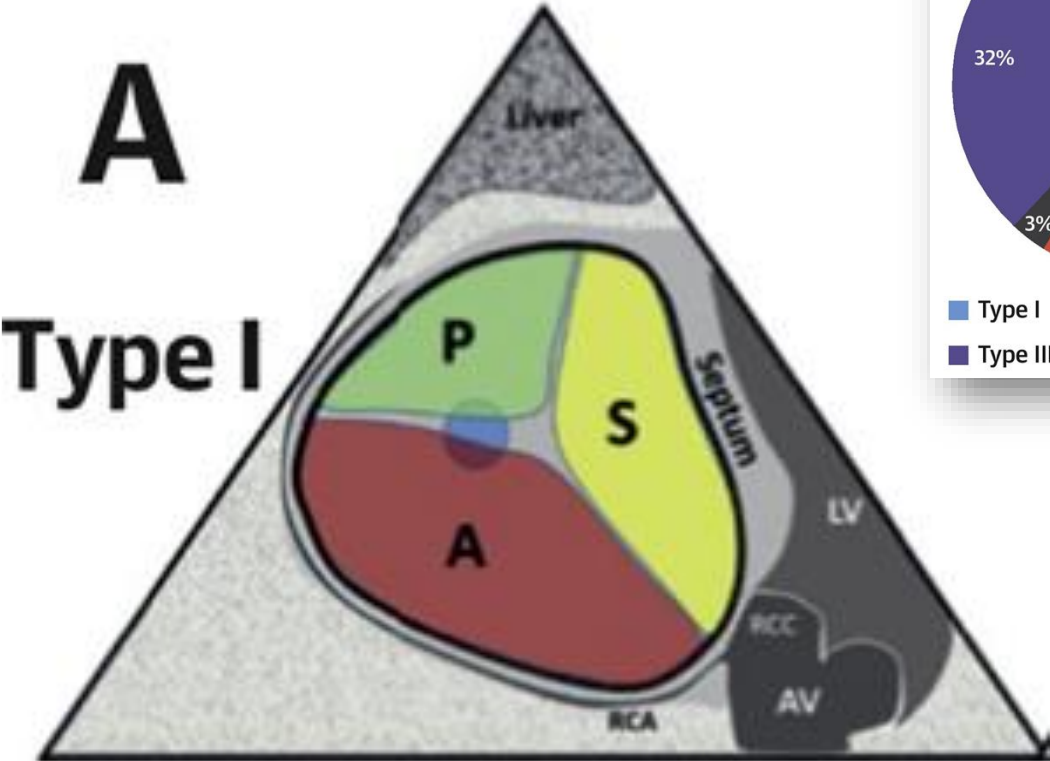
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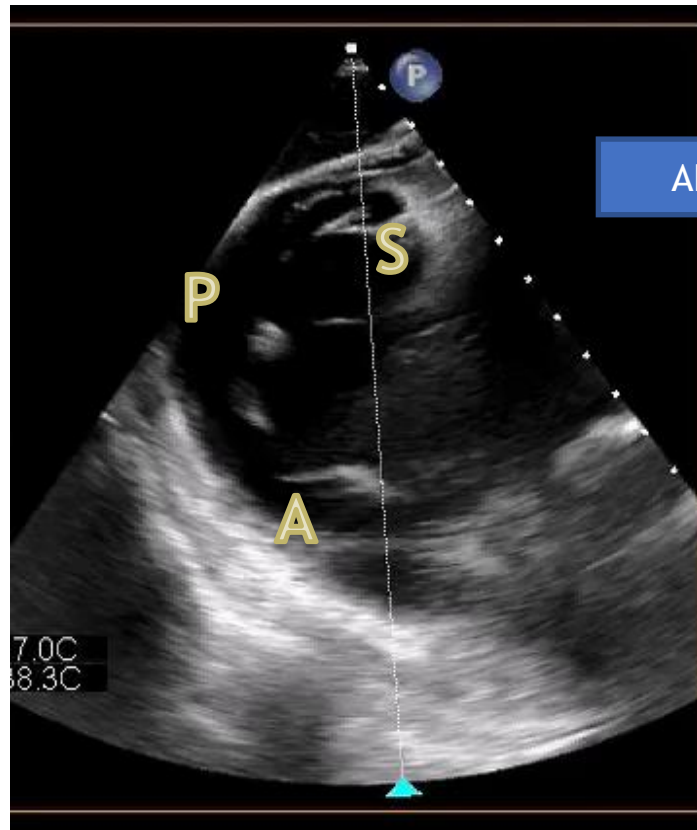
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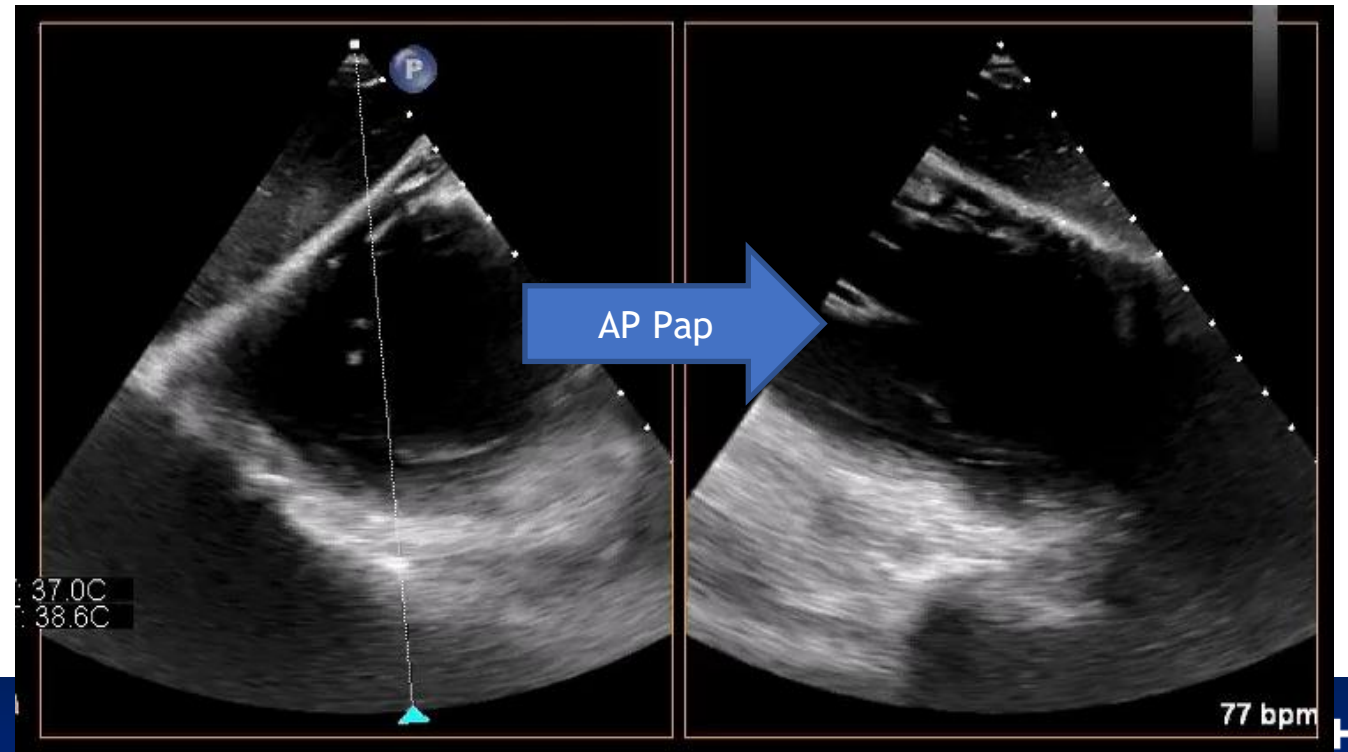
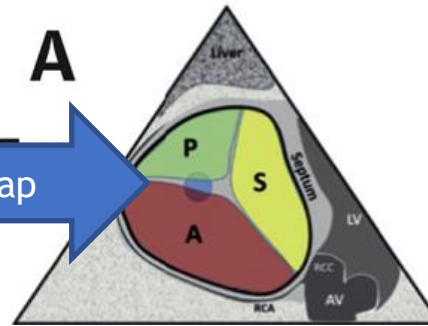
Transgastric



Trans-gastric



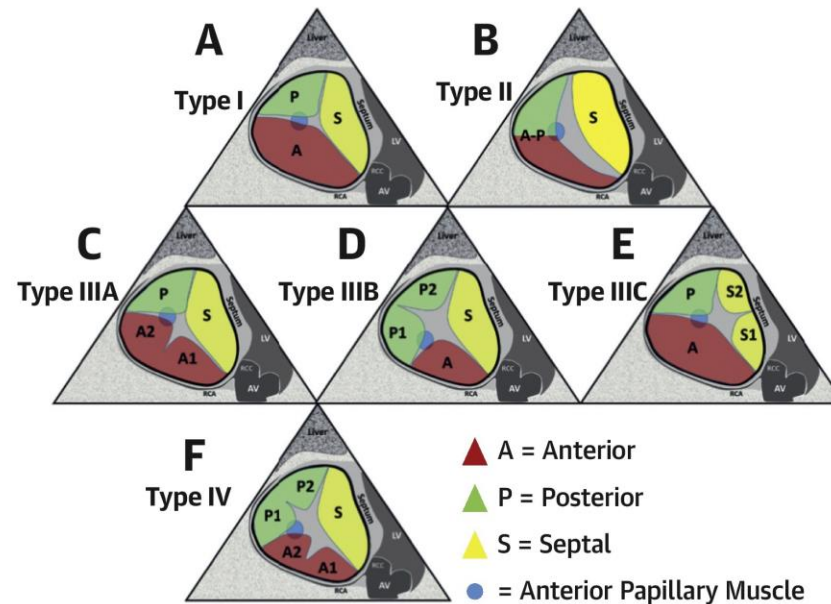
AP Pap



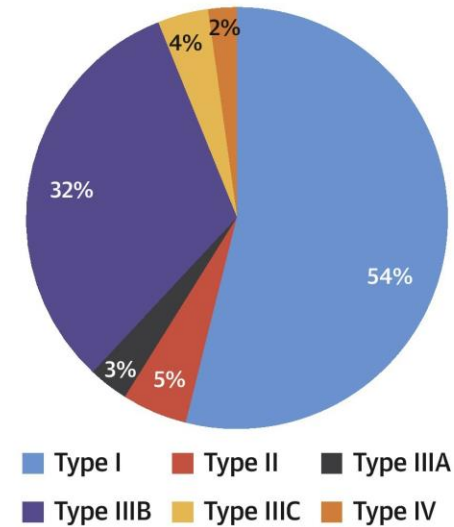
AP Pap

Classification

CENTRAL ILLUSTRATION: Tricuspid Valve Nomenclature Classification Scheme

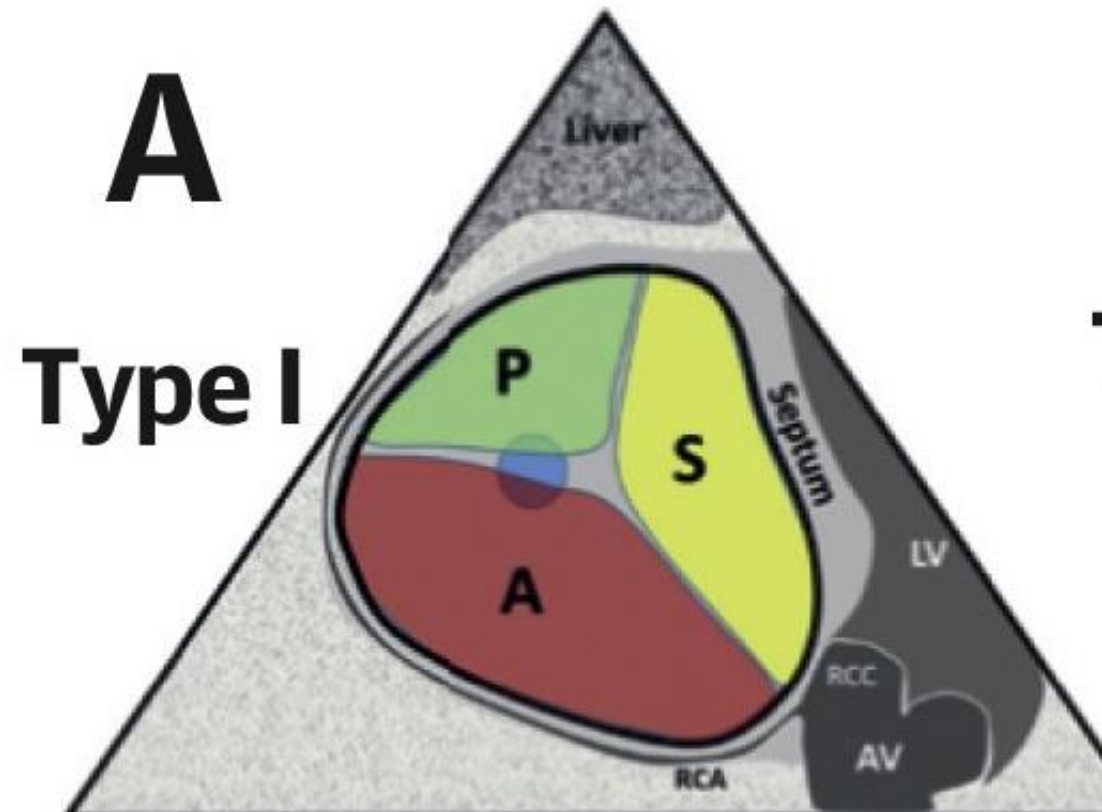


Incidence of Tricuspid Morphologies

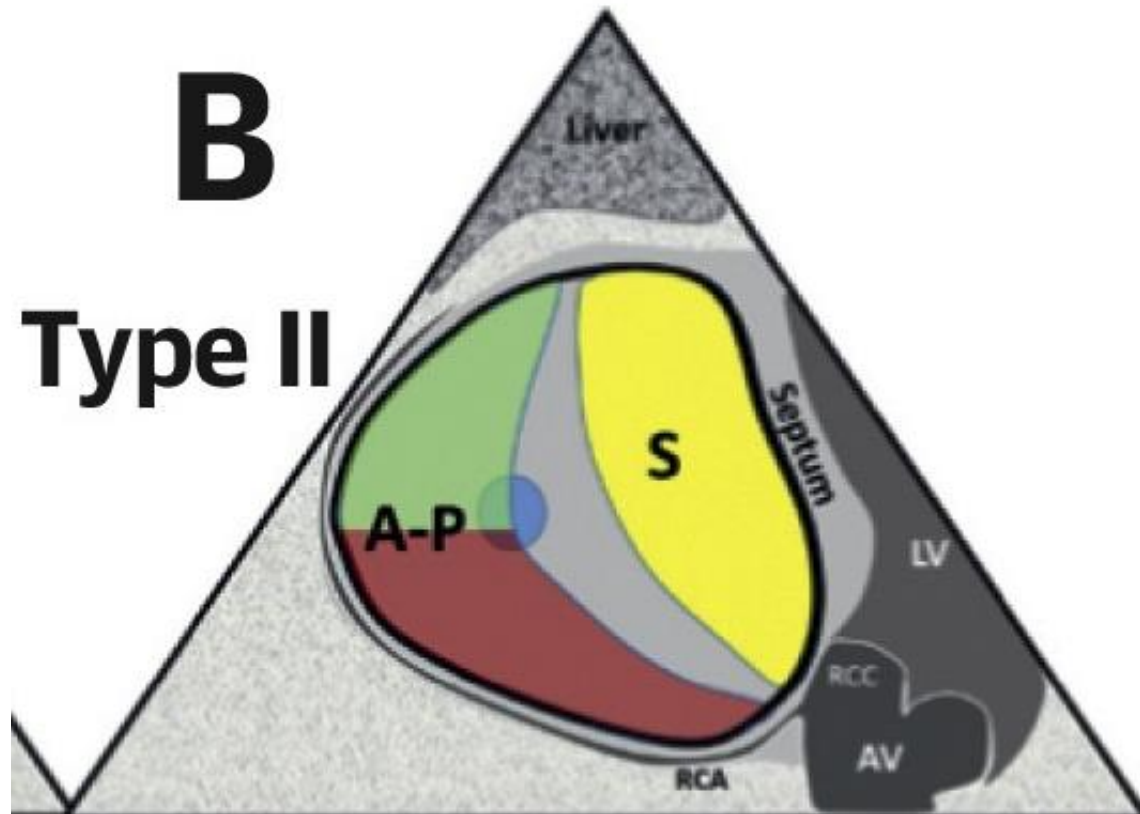


Hahn, R.T. et al. J Am Coll Cardiol Img. 2021;14(7):1299-305.

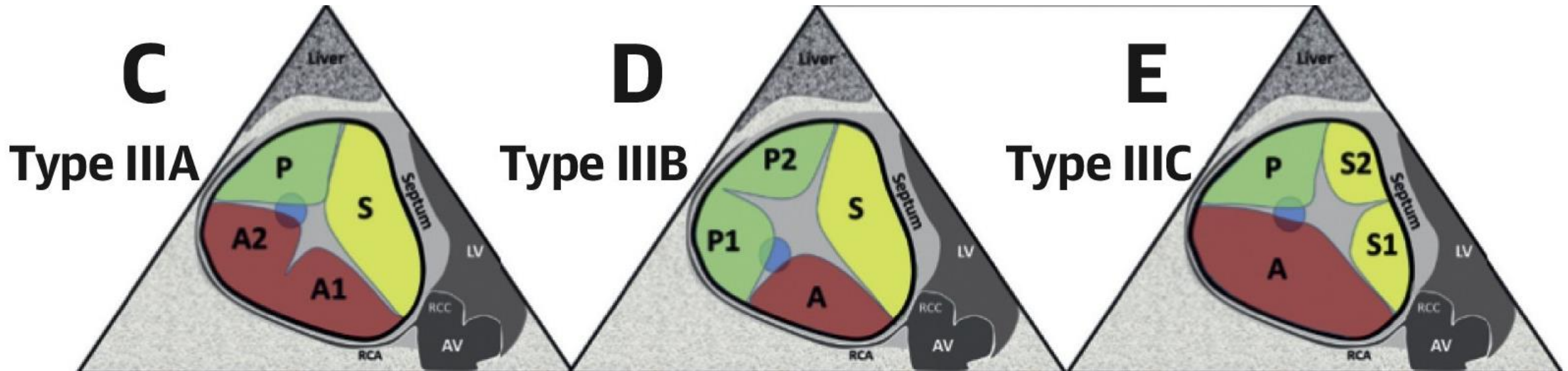
Classification – True tricuspid – Type 1



Classification –Bicuspid – Type 2

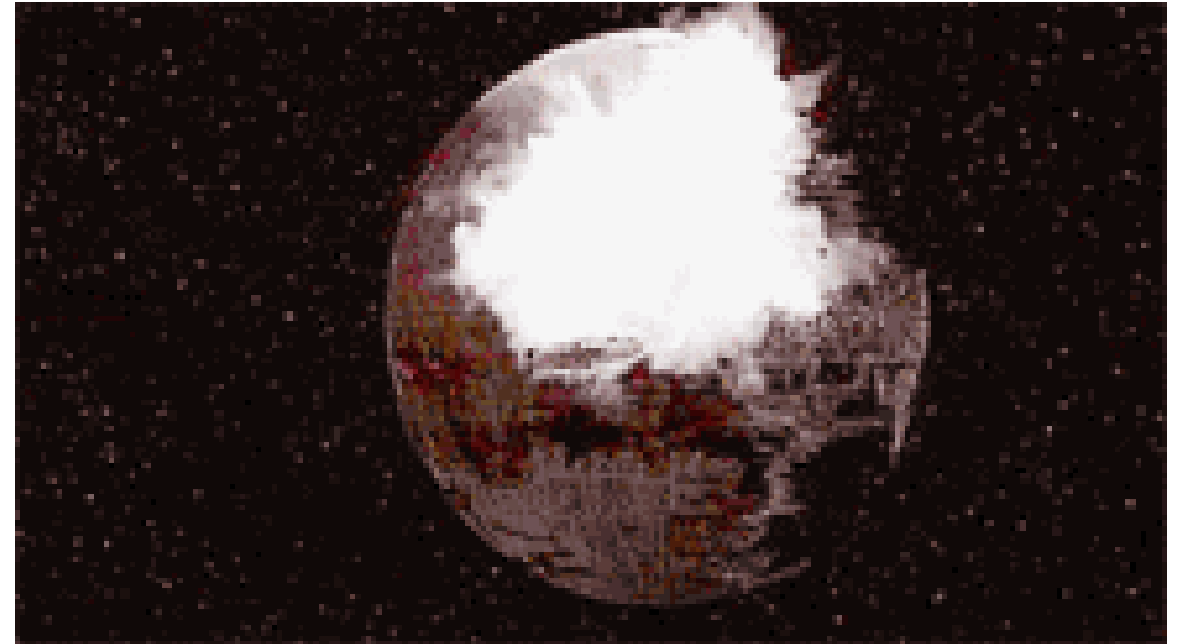
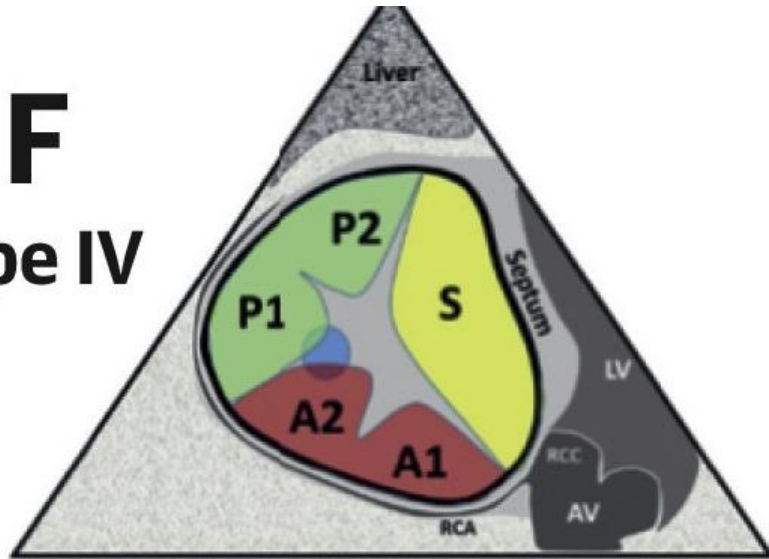


Classification – quadracuspid – Type III

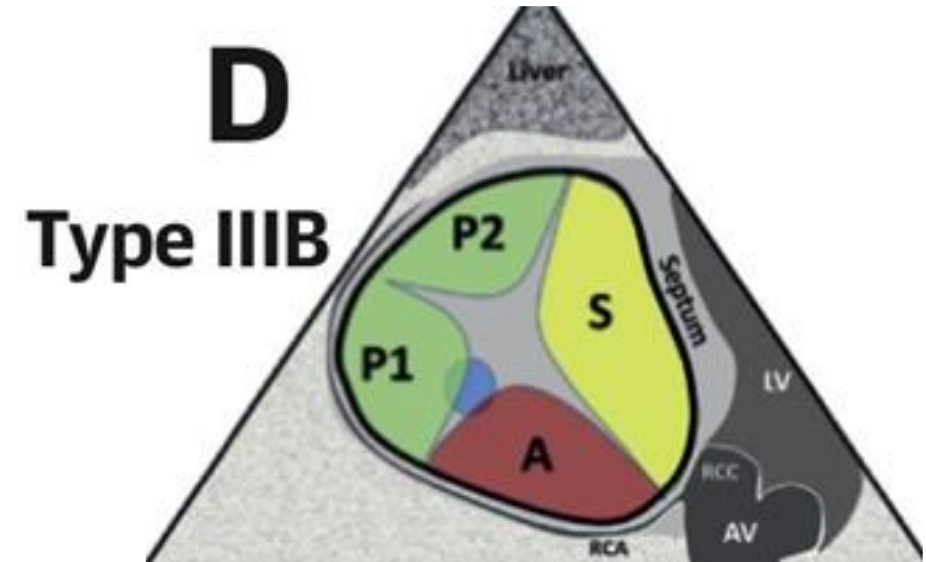


Classification – Star-burst – Type IV

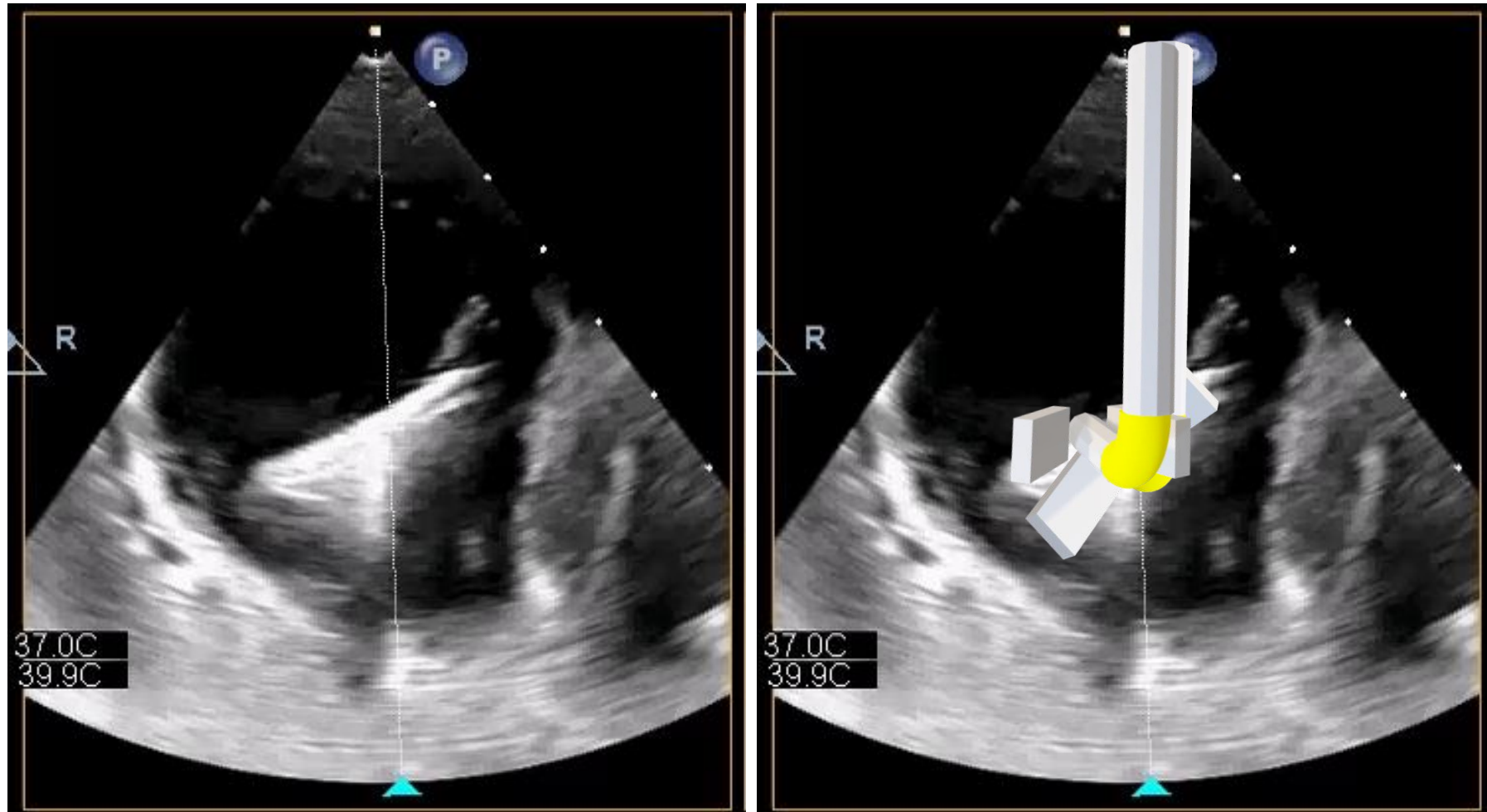
F
Type IV



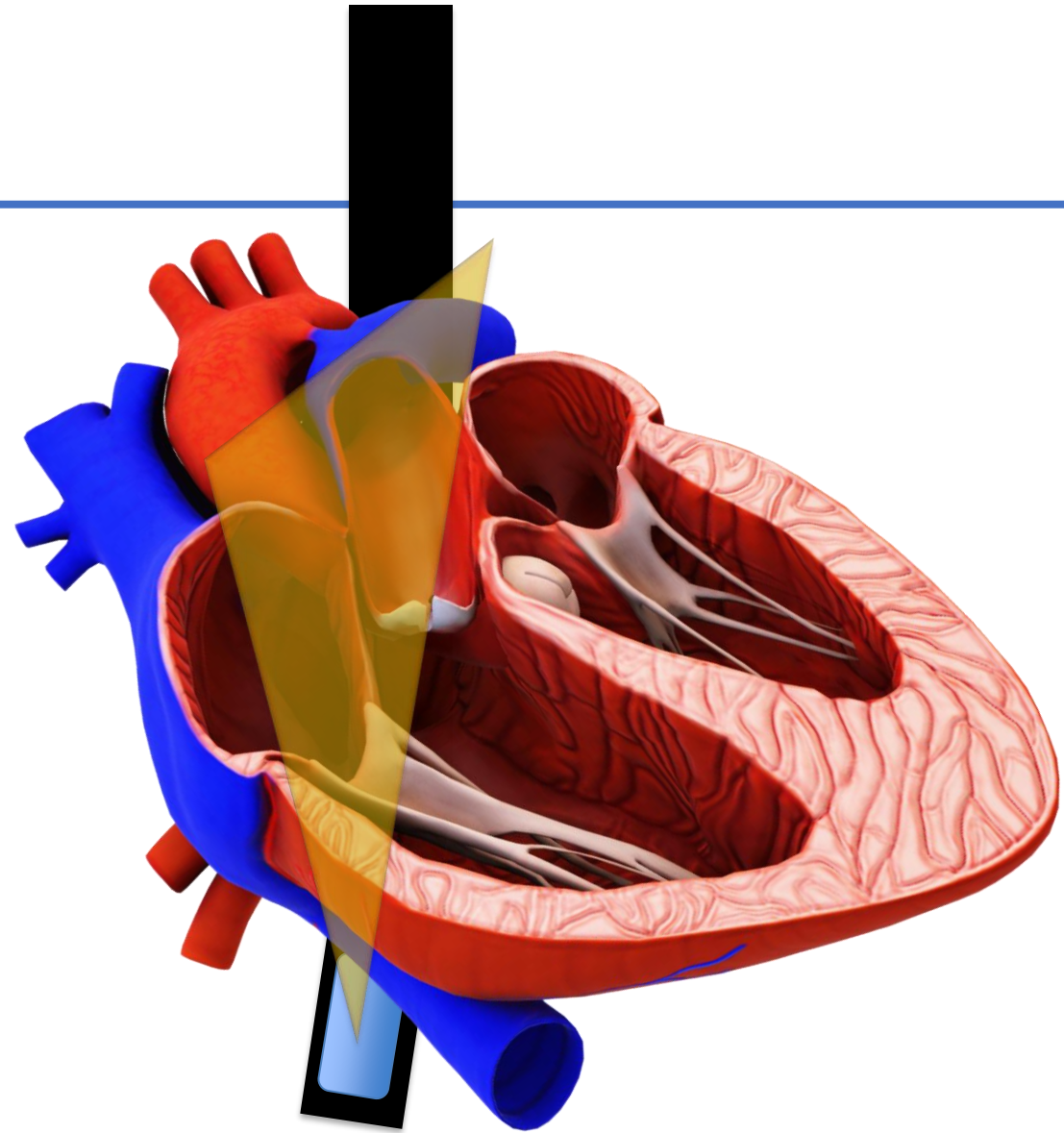
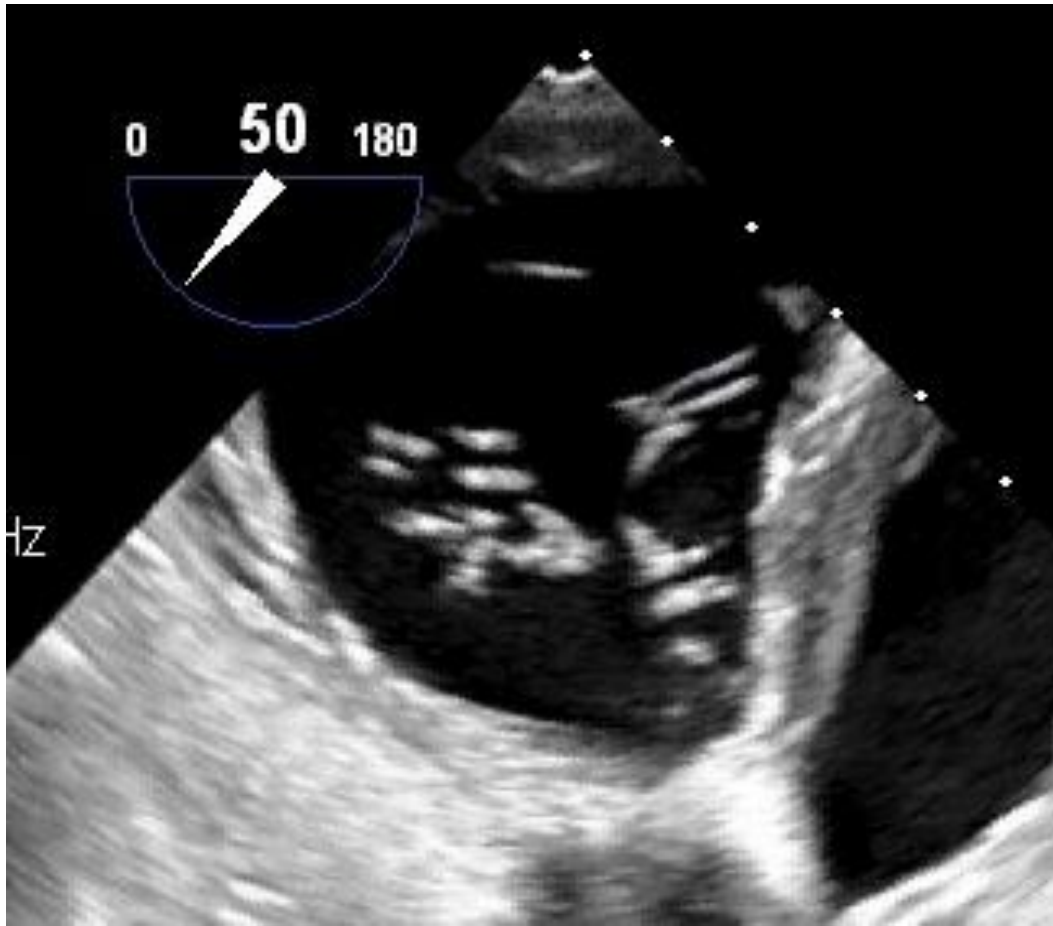
Trans-gastric



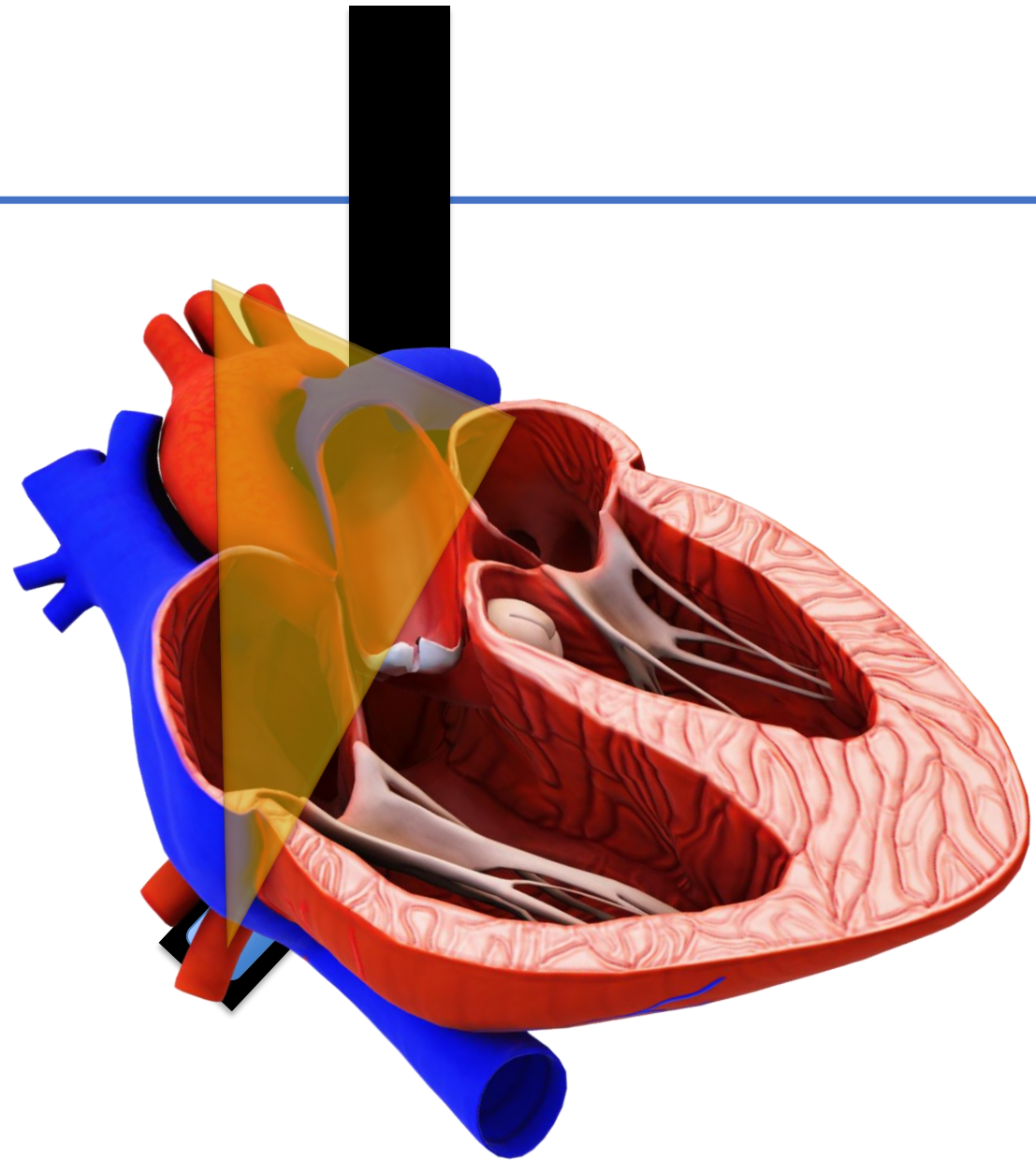
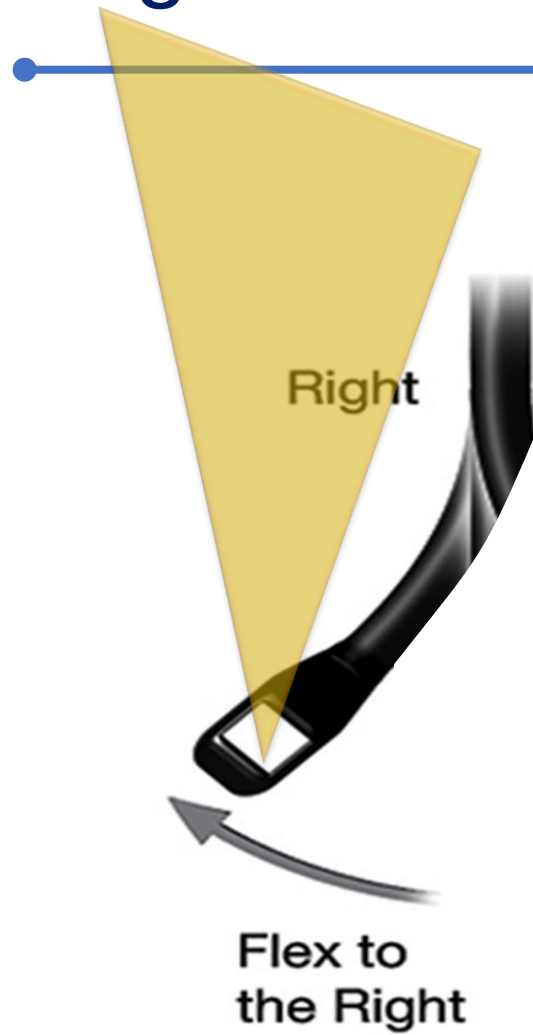
Transgastric axially



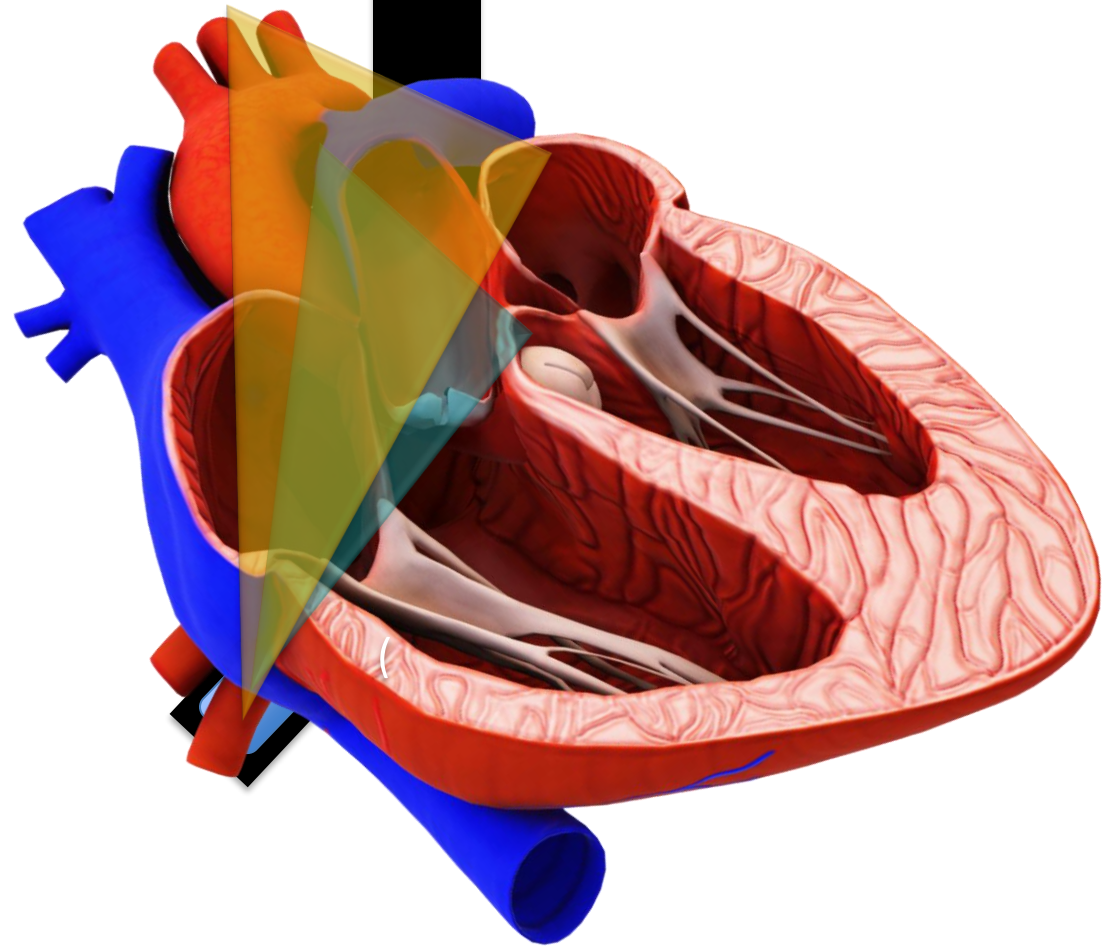
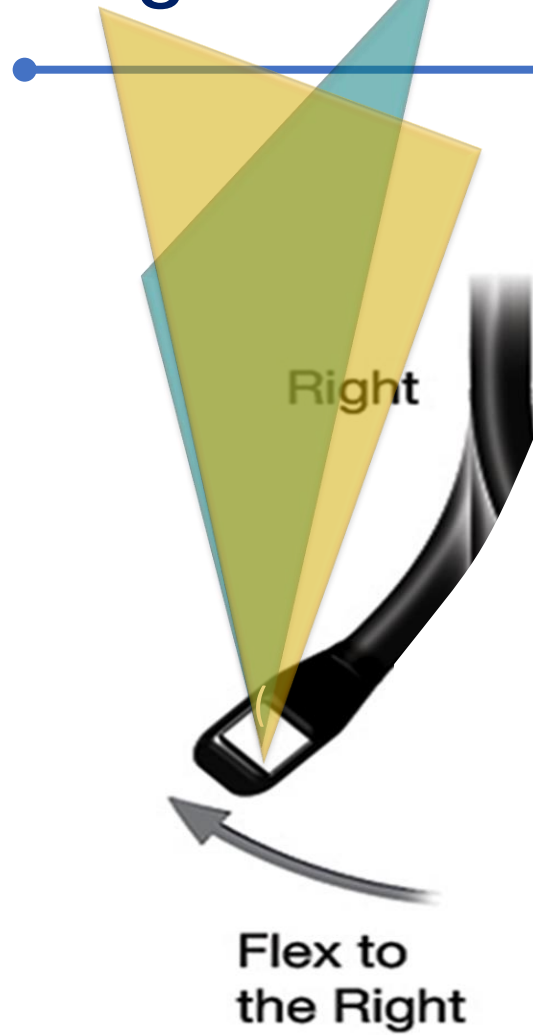
Trans-gastric – 30-50°



Right trans-gastric – 0°

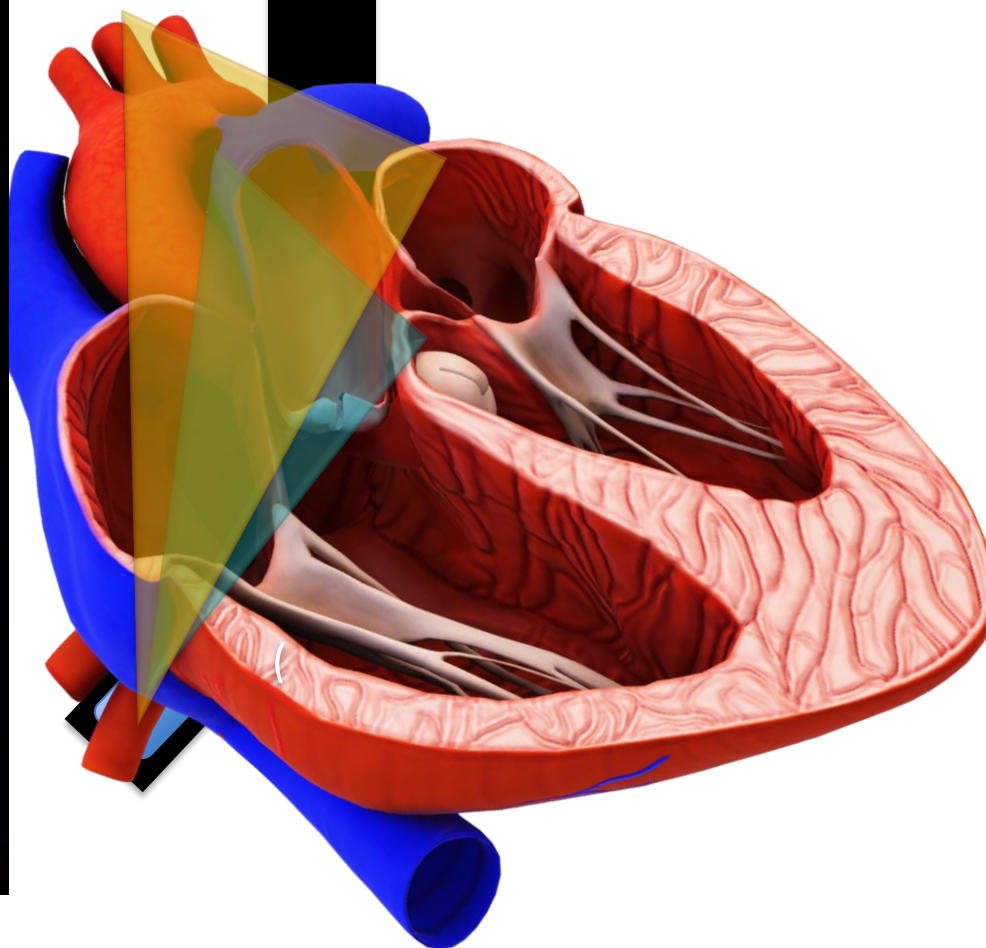
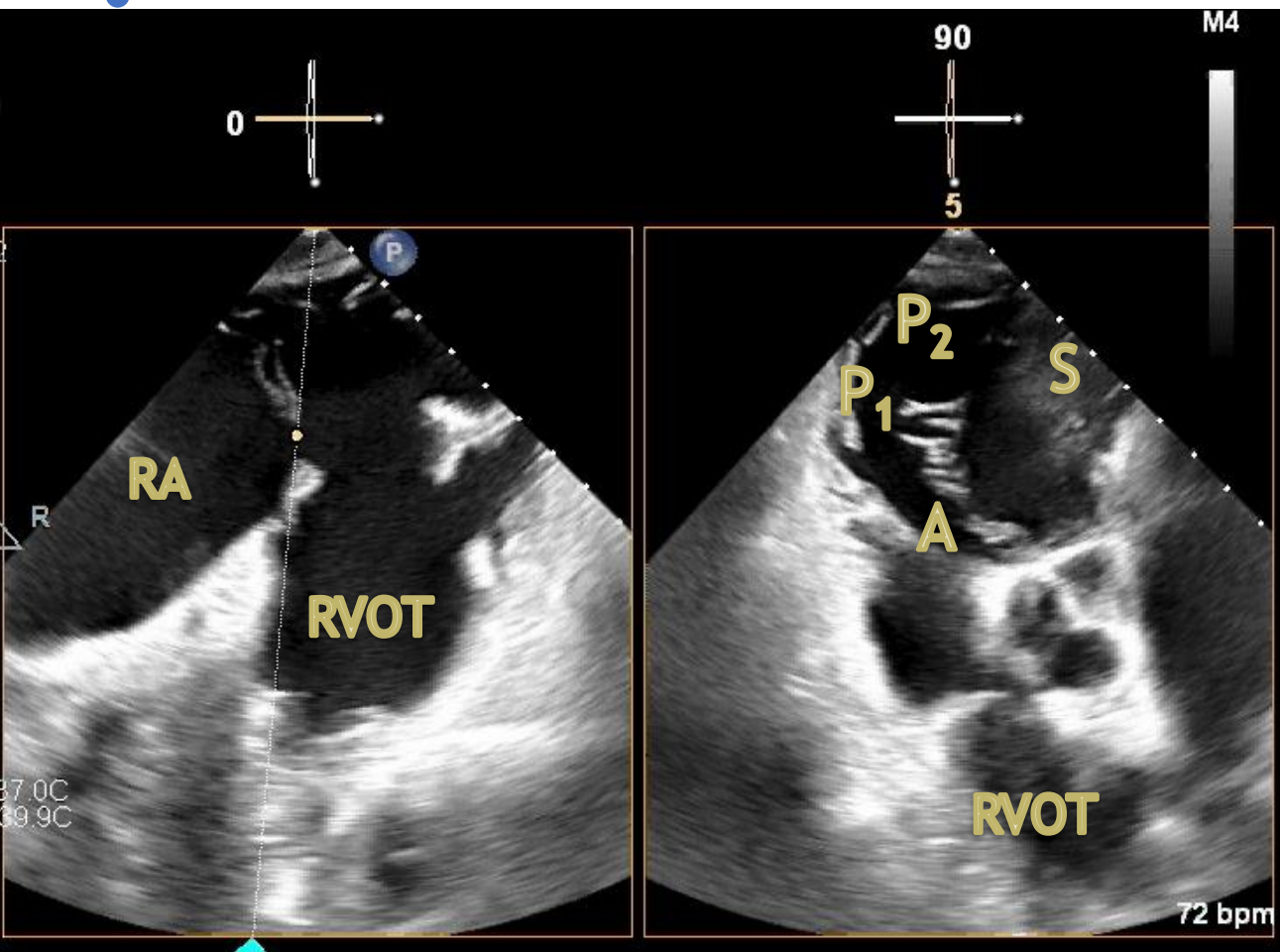


Right trans-gastric – 0° and 90°

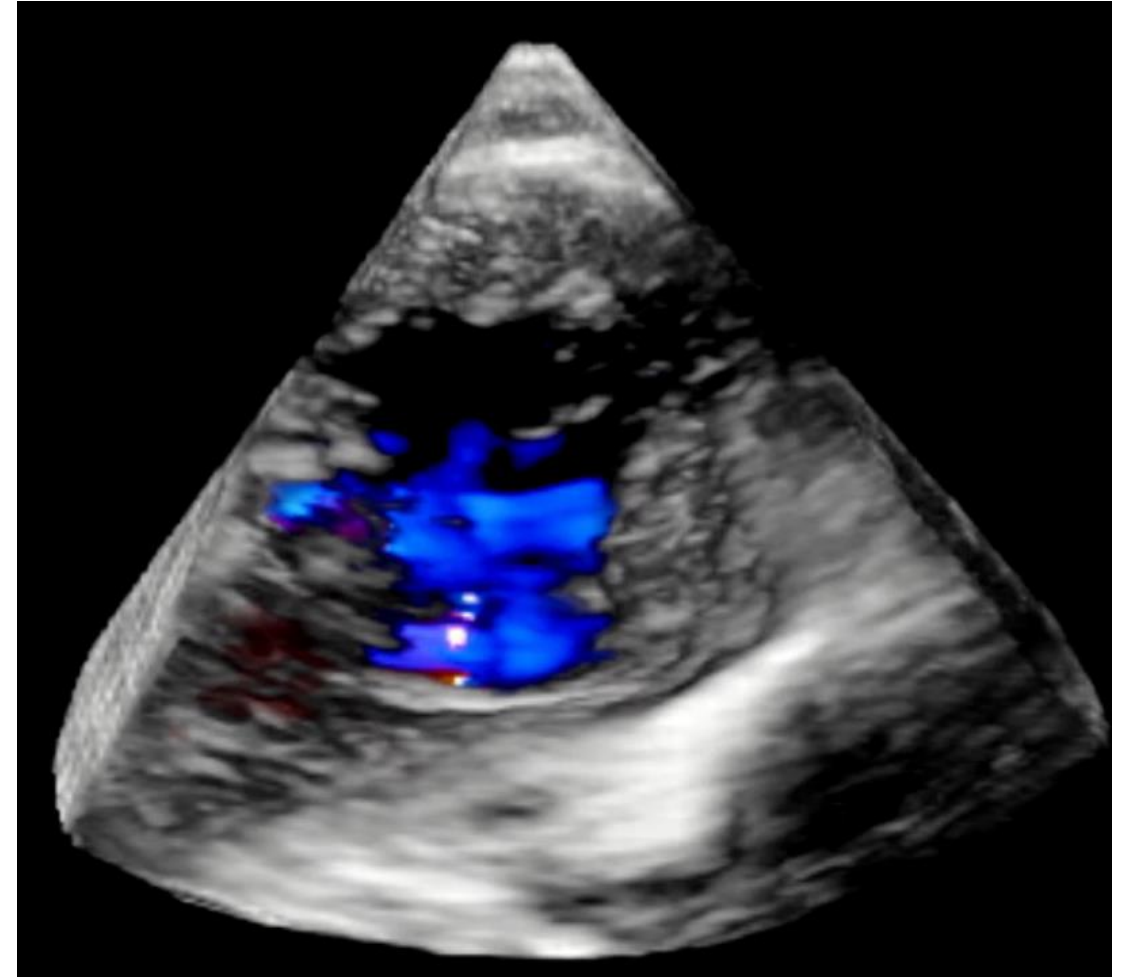
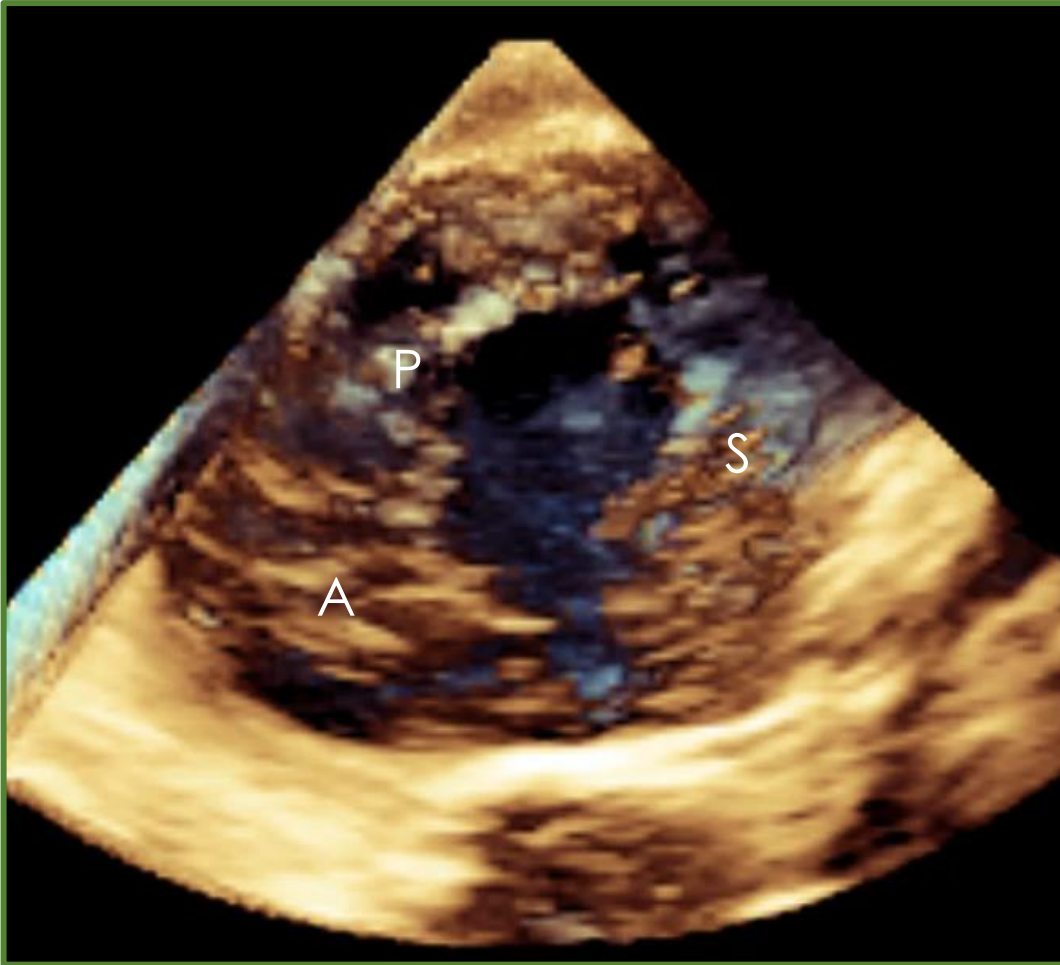


Right trans-gastric – 0° and 90°

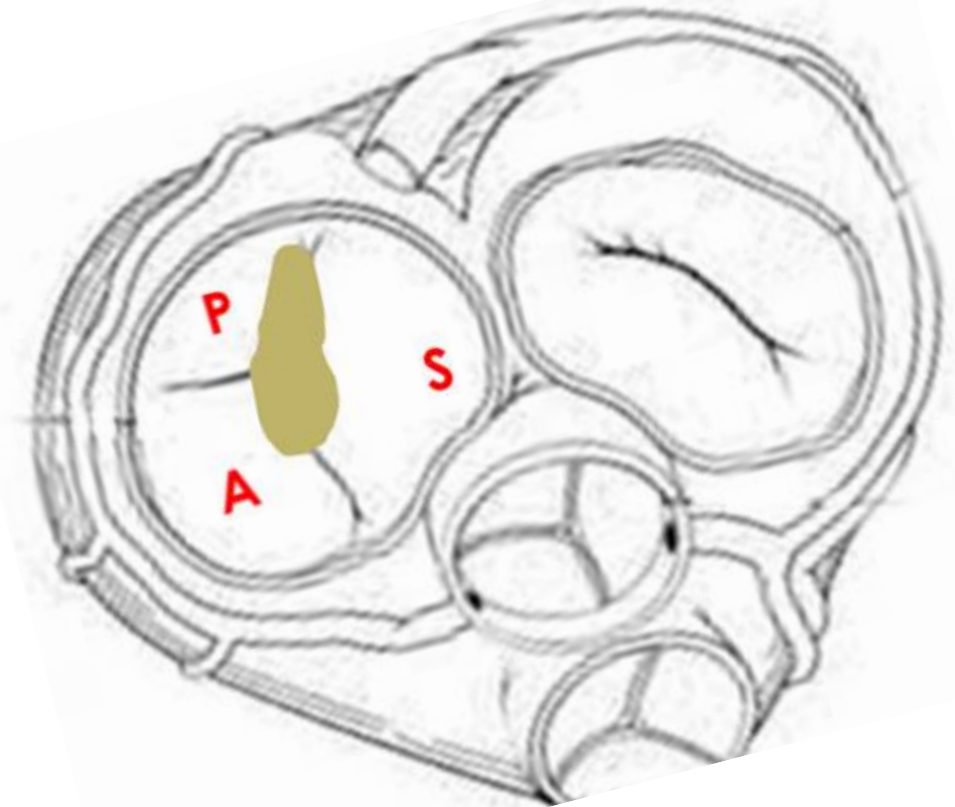
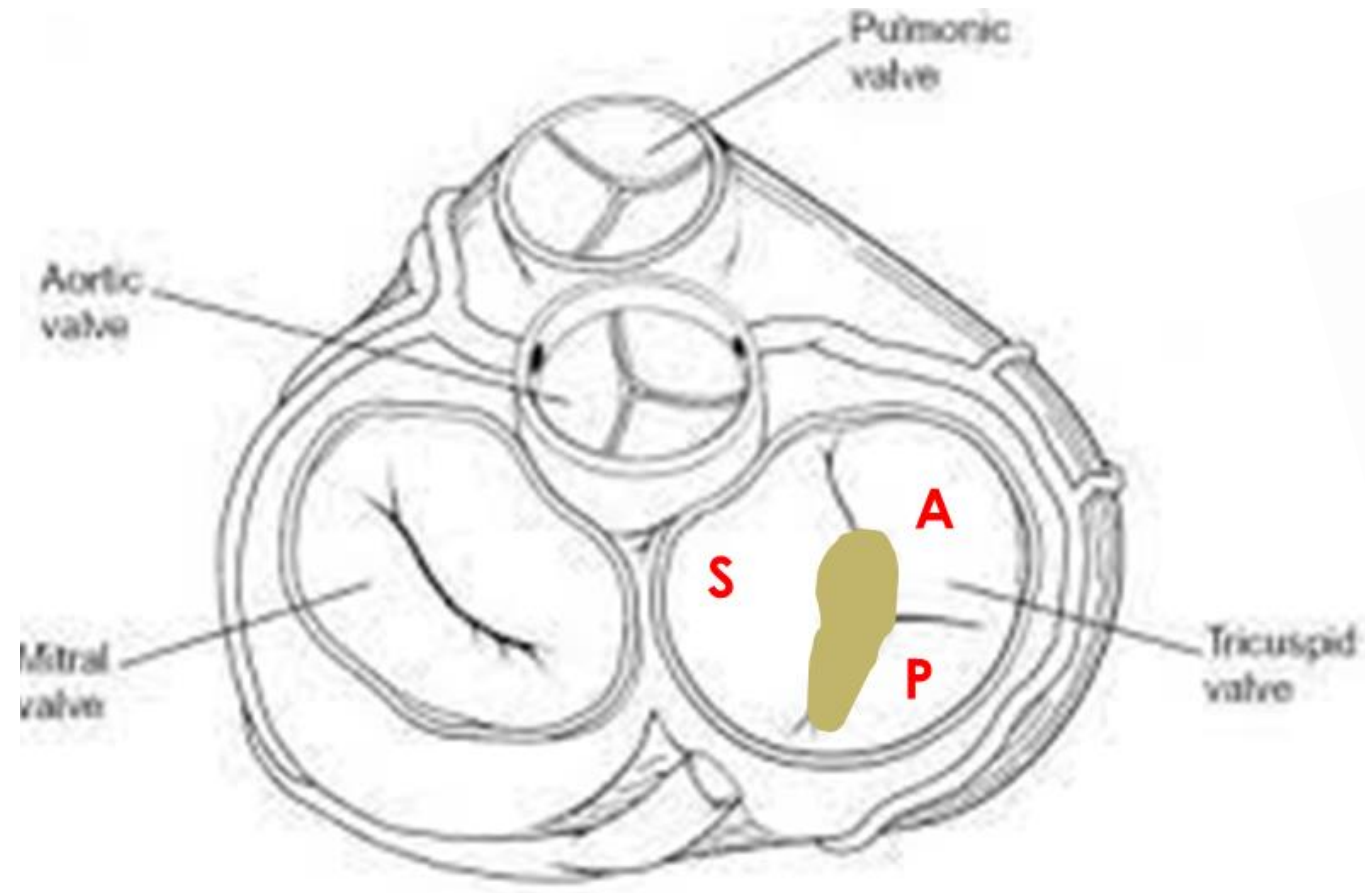
Inlet-outlet view
Bi-plane



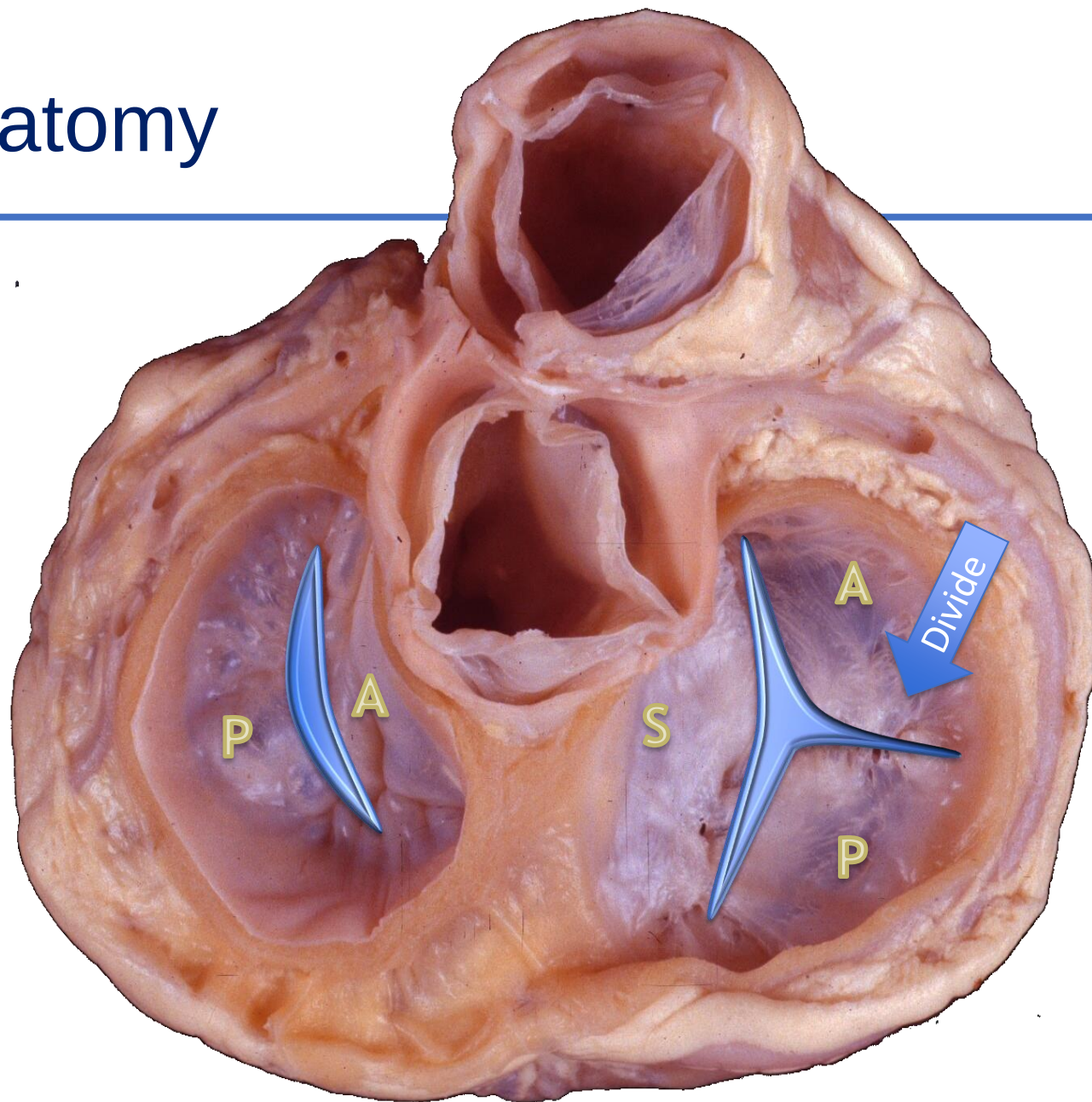
3D imaging- Trans-gastric view



Final diagram – for MDT – for TEER



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Professor of Medicine, University of Queensland

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