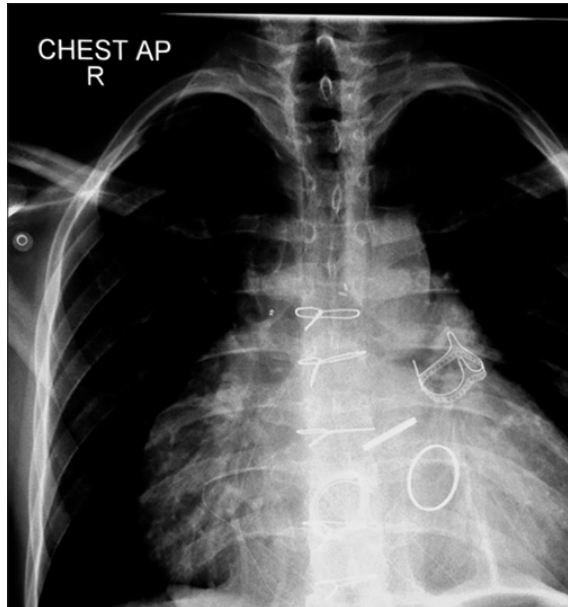


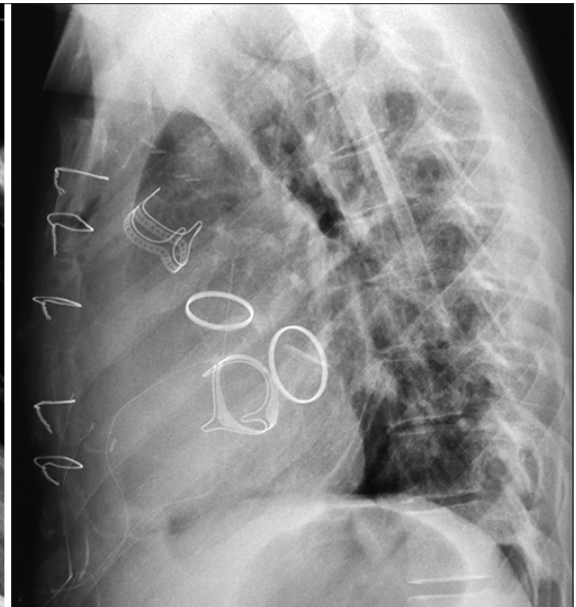
Which valve is which?

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X-ray anteroposterior view



X-ray lateral view

A 25-year-old man presented with a history of breathlessness for the past 2 years. He had a history of operation for Tetralogy of Fallot at the age of 5 years and history suggestive of Rheumatic fever at the age of 7 years. On echocardiographic examination, all his heart valves were severely regurgitating. Morphologically, all the valves were irreparable. The ejection fraction was 35%. He underwent

quadruple valve replacement. The aortic and mitral valves were replaced by metallic valve and the tricuspid and pulmonary by tissue valve.

Recovery was uneventful, and the patient discharged on the 7th postoperative day.

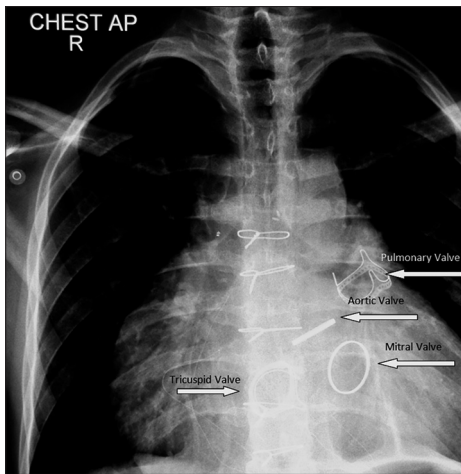
Day 1: X-ray is shown above. Can you identify all four prosthetic valves?

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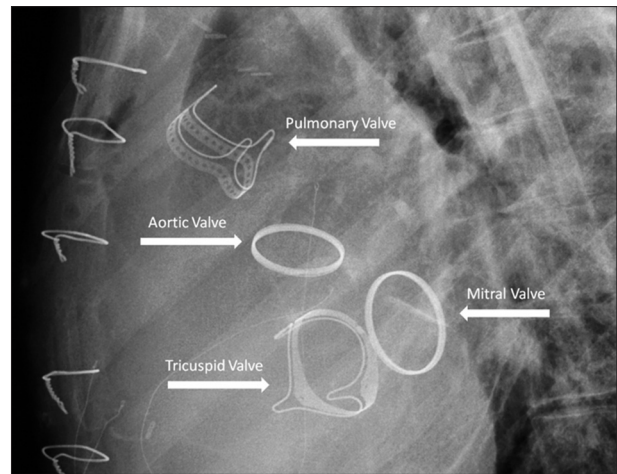
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X-ray anteroposterior view



X-ray lateral view

ANSWER

The location of the cardiac valves is best determined on lateral radiogram. A line is drawn from the carina to the cardiac apex.

The pulmonary and aortic valves sit above this line, whereas the tricuspid and mitral valves sit below this line.

A second technique to further localize the prosthetic valves involves drawing a second line which is perpendicular to the patient's upright position which bisects the cardiac silhouette. The aortic valve projects in the upper quadrant, the mitral in

the lower quadrant, and the tricuspid in the anterior quadrant.

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Conflicts of interest
There are no conflicts of interest.

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