



Basic information in radiology



Radiological terminology

In X-ray.....

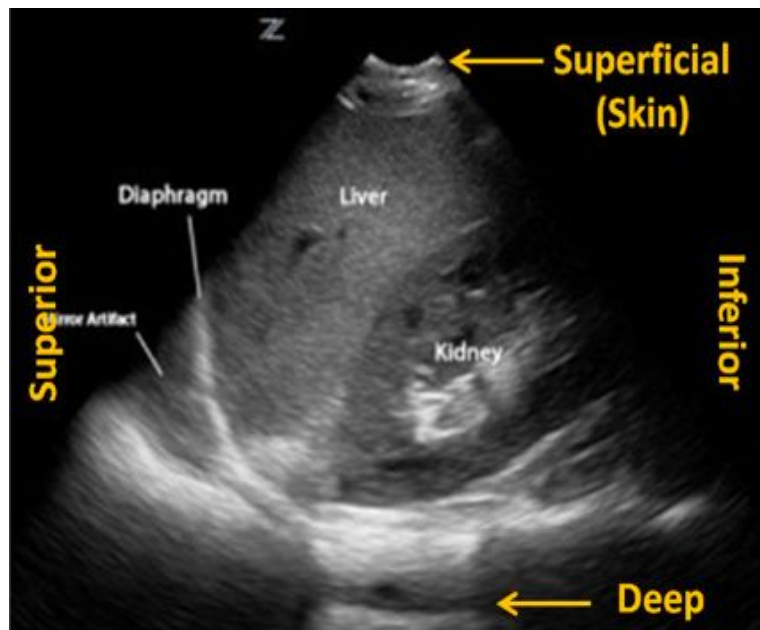
Radiolucent = Materials allow x-Ray photons to pass through easily (dark) ex: Air and soft tissues.

Radiopaque = Materials are not easily penetrated by photons (white) ex: Bones.

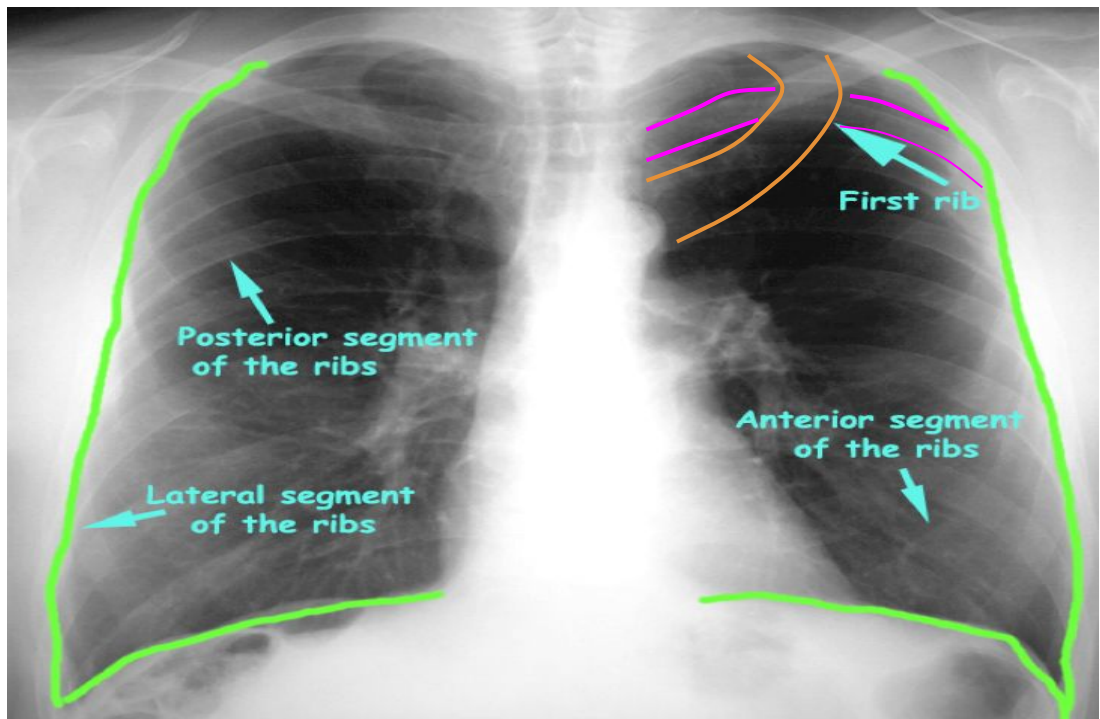
In other modalities we use another terms with similar meanings:

Modality	Light (White)	Dark (Black)
X-Ray	Radiopaque	Radiolucent
US	Hyper-echoic	Hypo-echoic
CT	Hyper-dense	Hypo-dense
MRI	Hyper-signal	Hypo-signal
Nuclear	Low-uptake	High-uptake

Quick revision of US scan interpretation

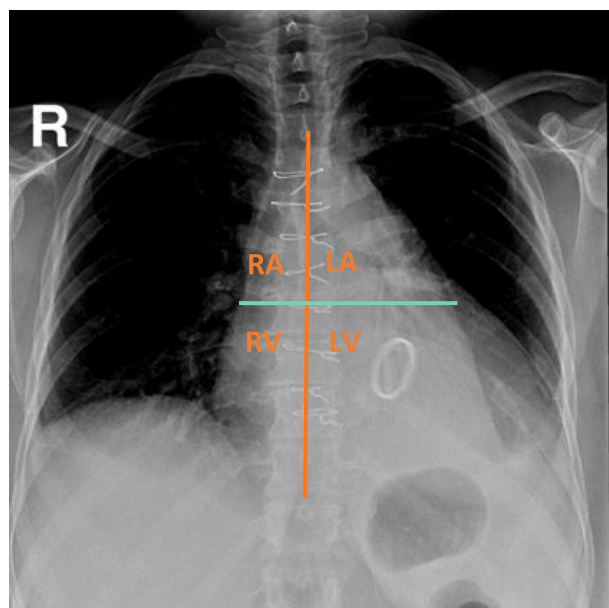


Ribs counting



The arrow (first rib) is pointing to the **FIRST ANTERIOR** rib in orange. However, the rib highlighted with pink is the **THIRD POSTERIOR** rib. The posterior ribs directed downwards, the anterior ribs posterior upwards.

How to locate the cardiac valves?



This trick makes the identification of the cardiac valves easier. Start by drawing a ventricular line on the spinous processes, and then another line between the atria and the ventricles, you will have 4 quadrants each one refers to a cardiac chamber. So, when you know which chamber is the prosthetic valve in, you will know which valve has an abnormality. In the previous image, the prosthetic valve is located in the left ventricle, so we have mitral valve replacement.