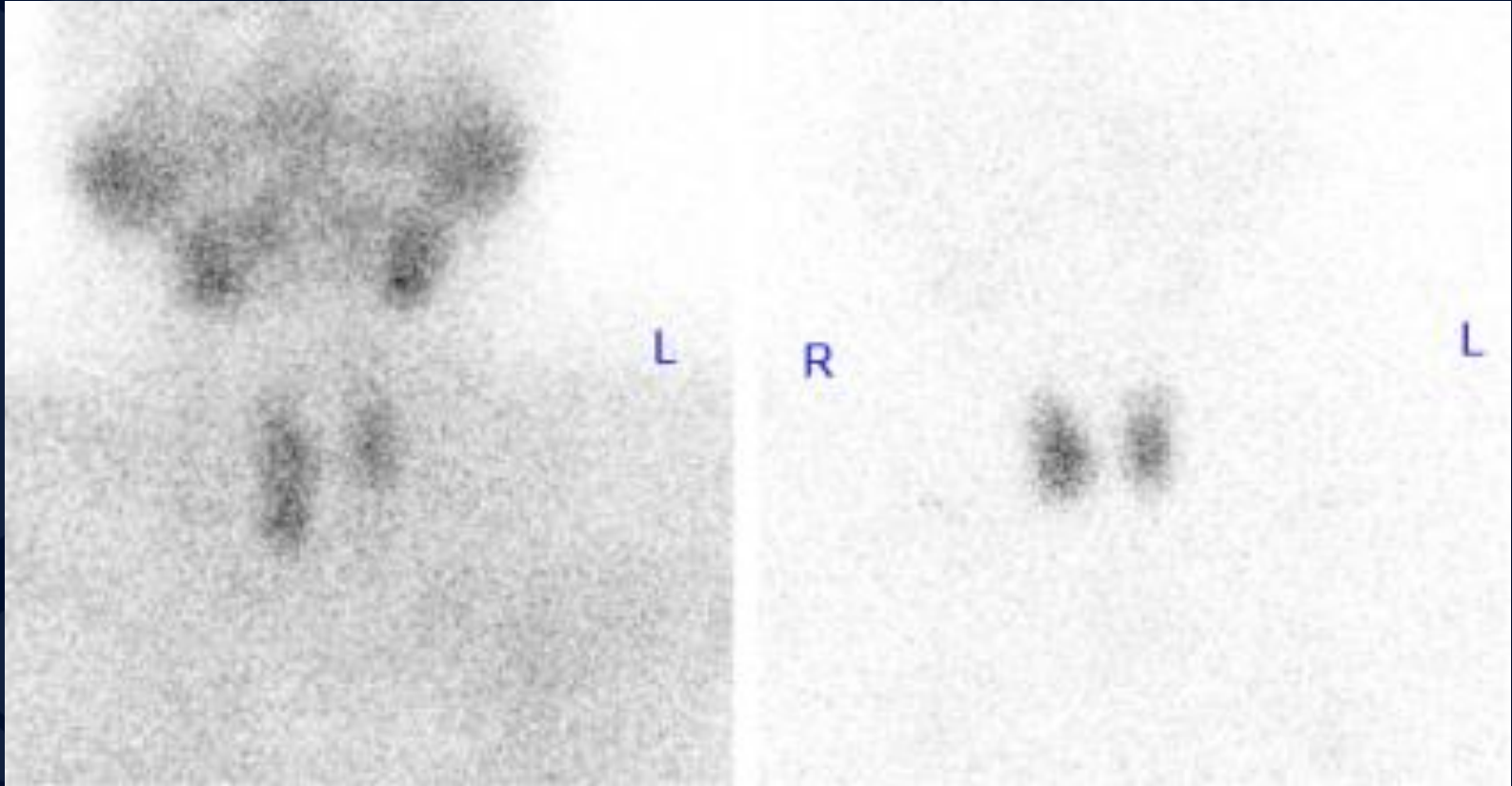


A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text area.

31 y/o male with hypercalcemia

Atul Kumar, MD, MS

Planar images of neck



Sestimibi

I-123

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

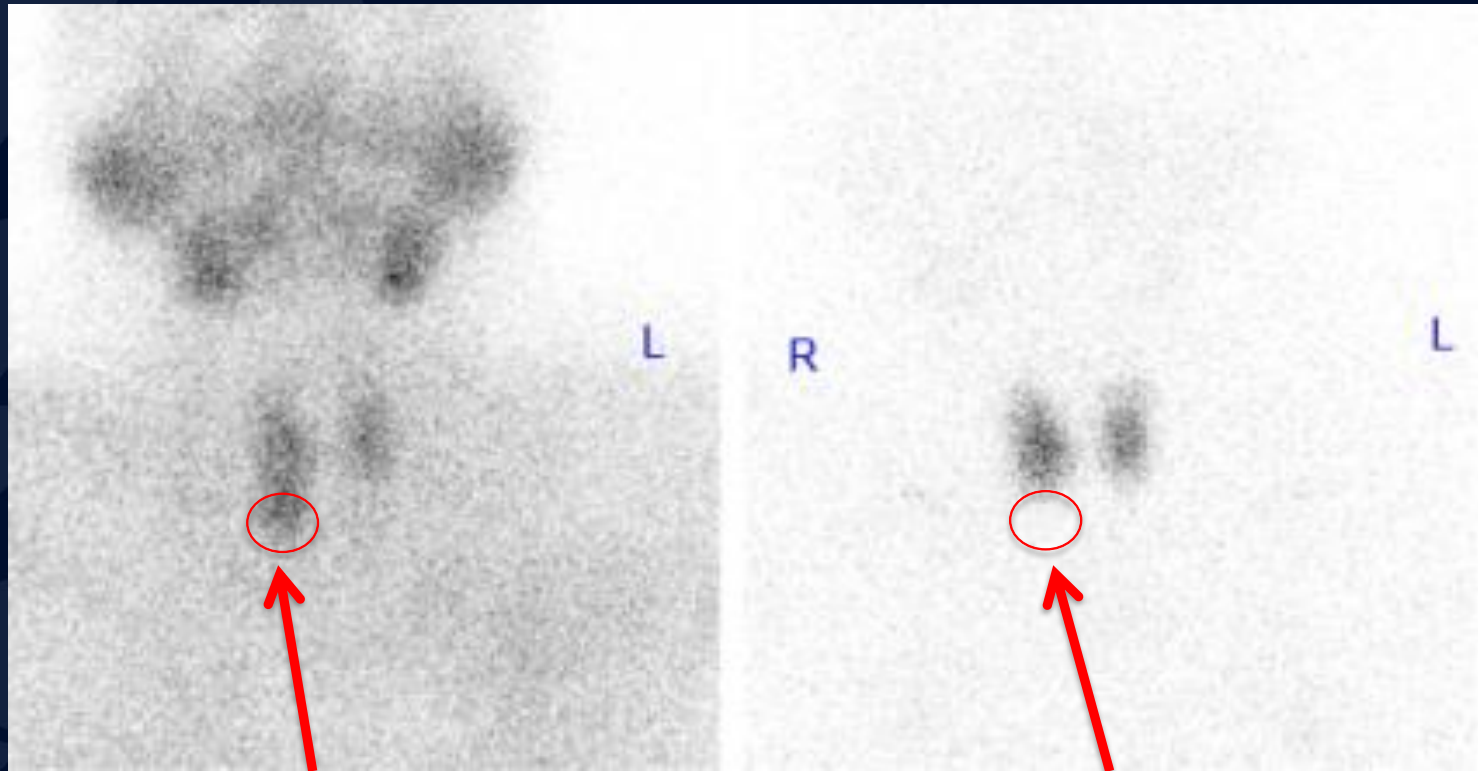
?

Parathyroid Adenoma

Planar images of neck

Sestimibi

I-123



Focal radiotracer uptake with Sestimibi

No focal uptake with I-123

Parathyroid Adenoma

- Enlarged parathyroid gland
- Normal cellular structure
- Causes 75-80% of primary hyperparathyroidism
 - Leads to symptomatic or asymptomatic hypercalcemia
- DDX
 - Thyroid adenoma
 - Parathyroid carcinoma
- Sporadic 95% of time
- Associated with MEN1 or MEN2a 5% of time
- Imaging
 - Ultrasound: can localize approximately 80% of time
 - I-123
 - Taken up by thyroid gland
 - Tc-99m Sestimibi
 - Taken up by thyroid **and** parathyroid tissue
 - Thyroid activity washes out on delayed images
- Treatment: surgery