

# Primary hyperparathyroidism in pregnancy

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## Case 1

Pregnancy trimester	13th	21th	25th
Ca total (8,80 - 10,20 mg/dl)	11,0	11,67	8,9
Ca ionized (4,2 - 5,2 mg/dl)		5,8	4,7
Phosphorus serum (2,70 - 4,50 mg/dl)		3,42	
PTH (15,00 -65,00 pg/ml)		74,37	18,87
Urine collection Ca (100,0 - 320,0 mg/24h)		571	
Urine collection phosphorus (0,4 - 1,3 g/24h)		1,0	

Table 1. Results of the first patient

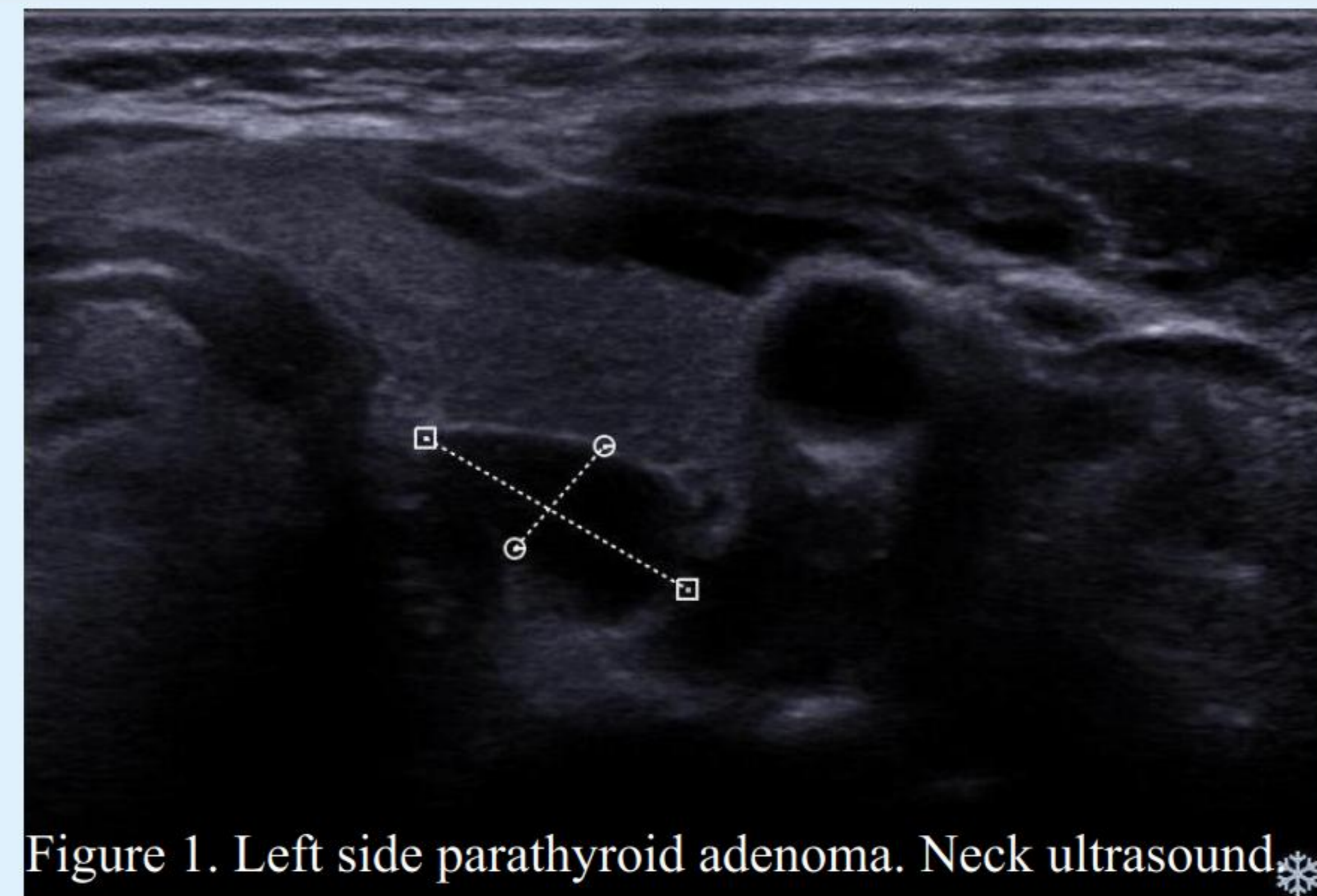


Figure 1. Left side parathyroid adenoma. Neck ultrasound.

Patient: 29-years-old women in 21th week of her second pregnancy

Symptoms: Weakness, abdominal pains, vertigo

Final diagnosis: Primary hyperparathyroidism

Treatment: Operation in 24th gestation week due to biochemical deterioration

Outcome: Birth of a healthy baby girl in 40th gestation week (Apgar 10 in first and third minute).

Frozen section pathology and intraoperative PTH assay confirmed diagnosis of parathyroid adenoma and curative procedure

## Case 2

	Before pregnancy	6 <sup>th</sup> week of pregnancy	After miscarriage
Ca total (8,80 - 10,20 mg/dl)	10,861	11,39	11,1
Phosphorus serum (2,70 - 4,50 mg/dl)			2,57
Urine collection Ca (100,0 - 320,0 mg/24h)			588
Urine collection phosphorus (0,4 - 1,3 g/24h)			0,94
PTH (15,00 -65,00 pg/ml)			109

Table 2. Results of the second patient.

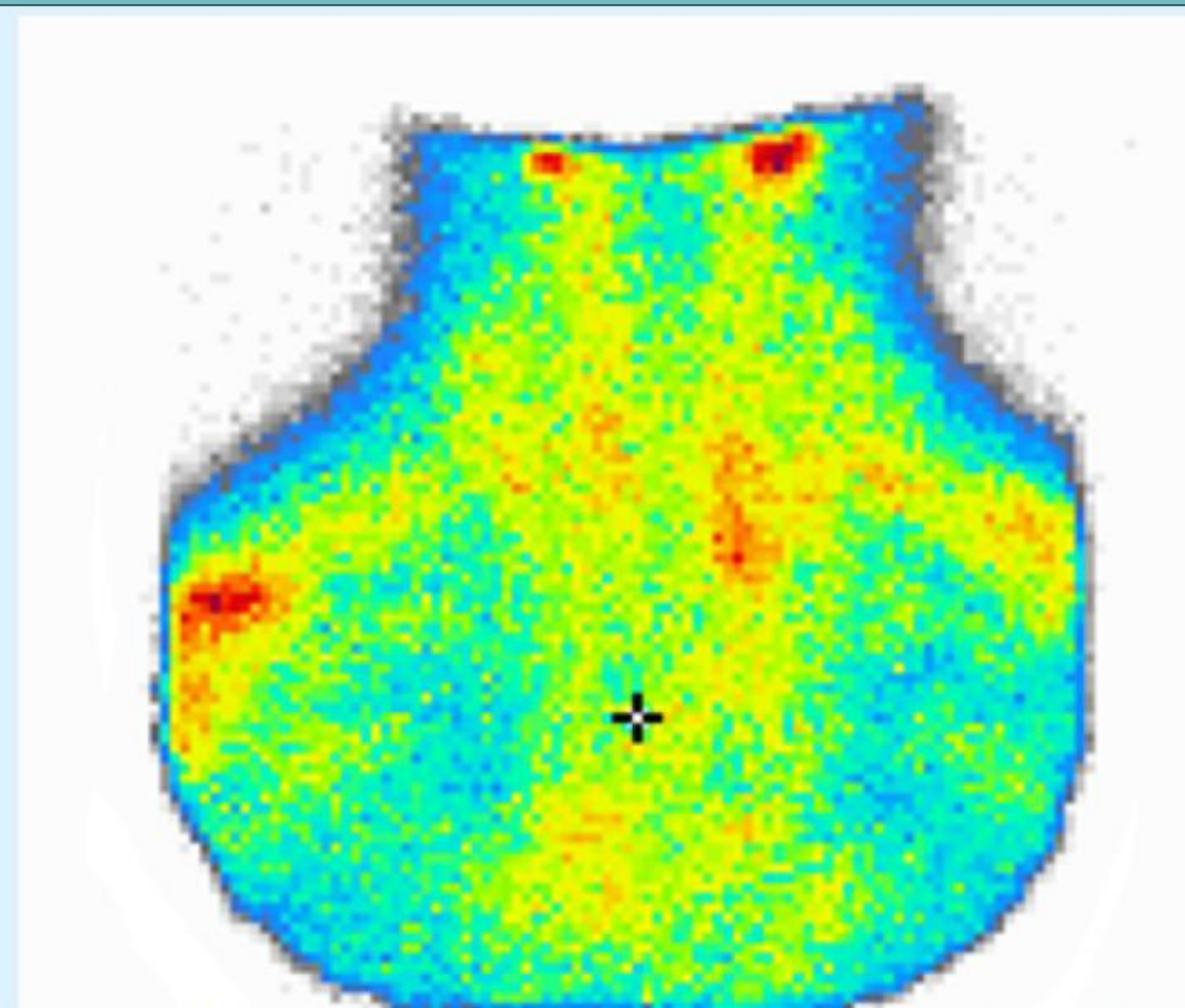


Figure 2. Parathyroid adenoma. Sestamibi scintigraphy of the neck.

Patient: 28-years-old women with hypercalcemia and history of pregnancy loss in 9th gestation week

Symptoms: None

Diagnosis: Primary hyperparathyroidism

Treatment: Operation

Outcome: Frozen section pathology and intraoperative PTH assay confirmed diagnosis of parathyroid adenoma and curative procedure

## Issues

- physiological changes in women's body during pregnancy hamper diagnostics of calcium-phosphorus balance
- symptoms are unspecific and could be mistaken as complaints naturally present during pregnancy
- limited diagnostic procedures: computed tomography and sestmibi scintigraphy are contraindicated in pregnancy
- high rate of both maternal and fetal complications
- conservative or operative treatment: no equivocal guidelines