

# Unilateral Graves Disease in an adolescent: Case report

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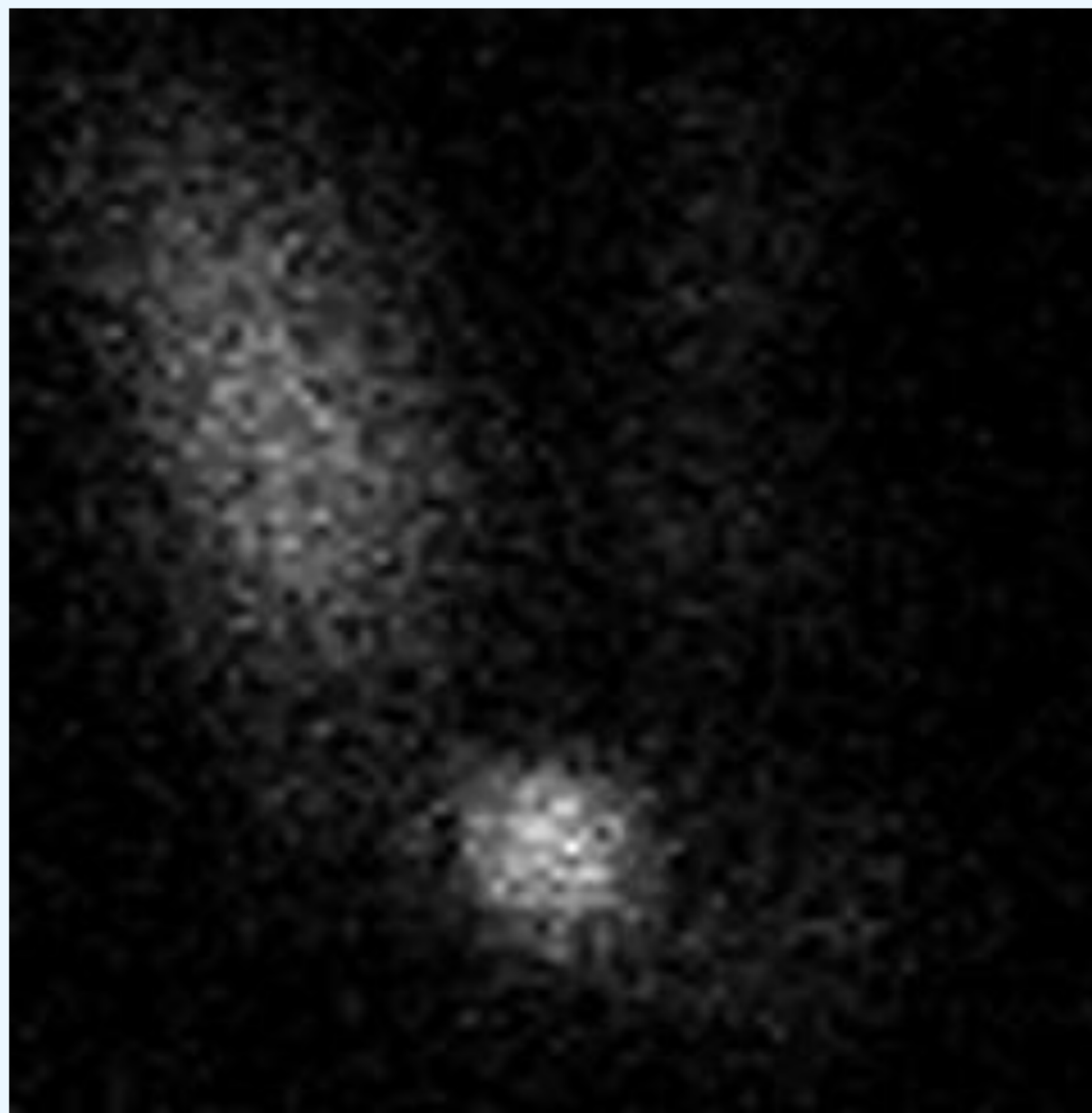
## Background

Graves disease is a rare autoimmune thyroid disease that characterized by hyperthyroidism, diffuse goiter and ophthalmopathy. It generally involved both lobes of the thyroid, unilateral involvement was rare.

## Case Report

A 18 year old girl presented with weakness, alopecia, menstrual irregularity. In physical examination moist skin, increased pulse rate (116/min) and enlargement of the right lobe of the thyroid was determined. Her blood pressure was 130/ 88 mmHg, weight was 60 kg (0,39 SDS), height was 158,5 cm (-0,71SDS), BMI was 23,88 (0,70 SDS). No eye signs were detected. Thyroid function tests were TSH 0,19 mU/L, free T4 2,08 ng/dl, free T3 5,43 pg/ml, thyroid microsomal antibody 724 mU /L, thyroglobulin antibody 468 mU/L, TSH receptor antibody was elevated. Other laboratory investigation was normal. Tc99m pertechnetate scintigraphy revealed that uptake of the radioisotope was increased in the right lobe of the thyroid gland. In ultrasonography a non-nodular, enlarged, and heterogeneous right lobe was shown. The left lobe of the thyroid was shown as normal size in ultrasonography and suppressed in scintigraphy. Unilateral Graves disease was considered. Methimazole and propranolol were started.

Picture 1. Uptake of the radioisotope in thyroid gland



## Conclusions

To our knowledge unilateral involvement of the thyroid gland is a rare presentation of Graves' disease. Functional or structural differences of the two lobes may be responsible. We reported a case of Graves' disease presenting with unilateral involvement of the thyroid gland.