

Introduction

- The common cause of thyrotoxicosis particularly in a female is Grave's Disease.
- The response to treatment with thionamides is usually excellent.
- The commonest cause of treatment failure is poor drug adherence.
- We present a patient with thyrotoxicosis who did not respond to Carbimazole suggesting possibility of exogenous intake of thyroxine.

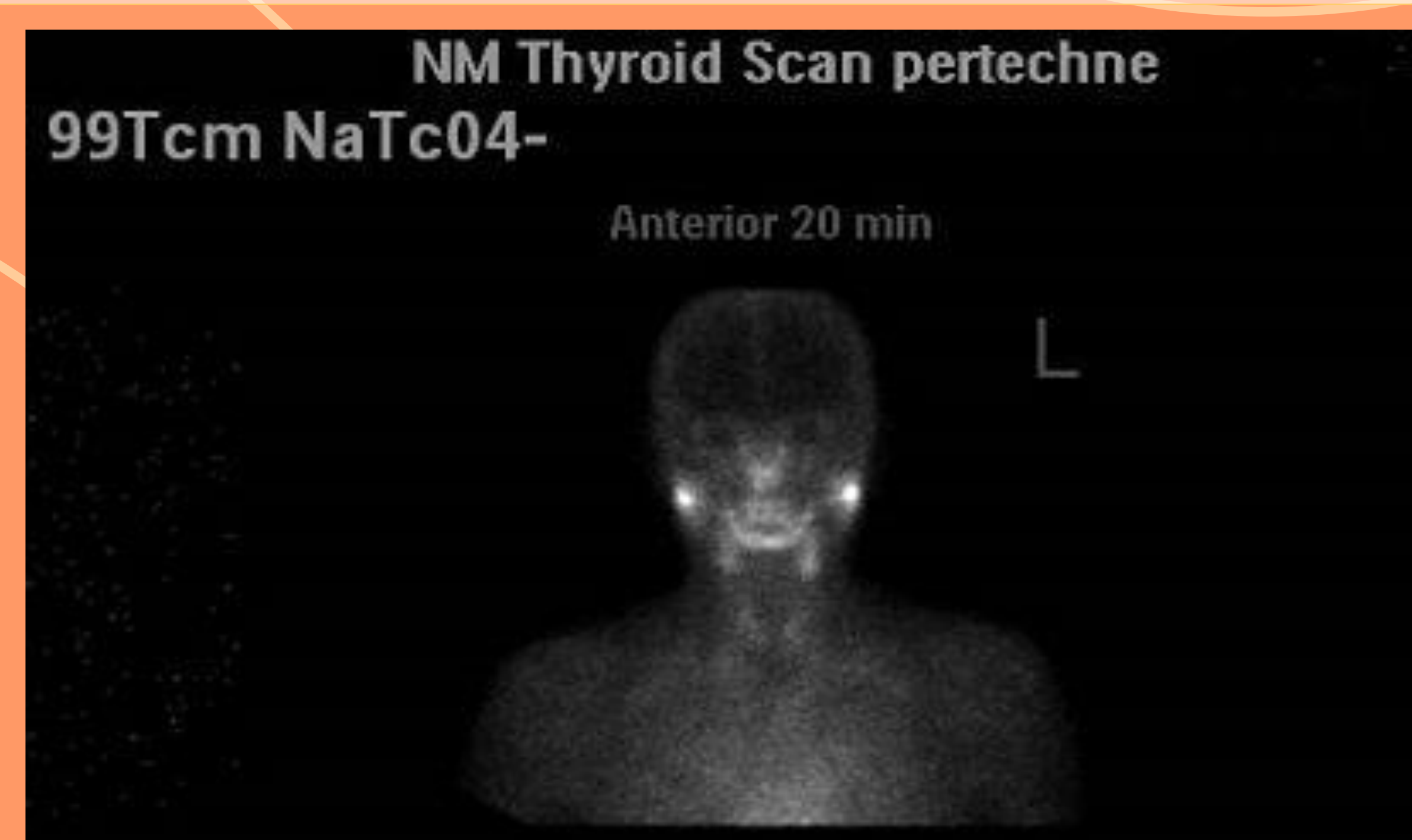
Case Presentation

- A 24 years old veterinary nurse presented to the cardiology outpatient clinic with palpitations, breathlessness, lethargy. There was no history of weight loss. She was clinically euthyroid.
- She had a past history of bulimia.
- Her ECG demonstrated sinus tachycardia with heart rate of 120 bpm.
- Thyroid functions test (TFT) done by GP was normal.
- She was initially treated with beta-blockers.
- She was subsequently admitted to hospital a month later with palpitations, breathlessness and intermittent chest pain. She was tremulous, had a small goitre but no eye signs.
- She was started on carbimazole 5mg tds and propranolol 80mg bd and referred to the endocrine clinic as an outpatient.
- The patient admitted that she was omitting carbimazole on occasions and the dose was increased to 60mg od.
- There was a suspicion of factitious thyrotoxicosis and that she was taking thyroxine surreptitiously.

Investigations

- US scan of thyroid gland revealed a normal size and echotexture.
- Anti-TPO and anti-TSH receptor antibodies were negative

	ft3	ft4	TSH
Oct 2010	2.1	15.3	
Dec 2010	46	75	0.01
Jan 2011	>46	>75	0.01
March 2011	>46.1	77.1	0.02
April 2011		175	



Thyroid Technetium Scan showing No Uptake

Discussion

- Although a negative thyroid uptake scan can occur in thyroiditis, the prolonged period of thyrotoxicosis suggests a diagnosis of factitious thyrotoxicosis.
- Antithyroid drugs proving ineffective, avoiding follow up in clinic are usually indicative of exogenous thyroid hormone abuse.
- Important indicators for the differentiation between a thyroid hormone abuse and an endogenous hyperthyroidism are a lack of technetium or radioiodine-uptake in the thyroid and suppressed levels of thyroglobulin.
- This case illustrates the importance of physicians correlating biochemical findings with clinical features and considering other causes of thyrotoxicosis when patients fail to respond to treatment.