

An unexpected cause of hyperthyroidism

A 44-year-old woman from central Europe was referred to the acute medical unit with an 18-day history of palpitations, weight loss, diarrhoea and anxiety. She denied any neck pain. Her medical history included endometriosis and a hiatus hernia, but she was on no regular prescribed medications. Blood tests showed a thyroid-stimulating hormone level of <0.02 mIU/litre (normal range 0.27–4.2 mIU/litre) and a free thyroxine level of >100 pmol/litre (normal range 10.5–22 pmol/litre), with normal levels of C-reactive protein. Thyroid peroxidase and thyroid-stimulating hormone receptor antibodies were not detected. This was followed by a normal neck ultrasound and absence of reuptake of tracer on her radioactive iodine uptake scan (**Figure 1**).

On further questioning, with the aid of an interpreter, the patient revealed that she had been taking over-the-counter iodine supplements for a number of months to treat her endometriosis (**Figure 2**). This is an example of the Jod–Basedow phenomenon (iodine-induced hyperthyroidism), a rare cause of thyrotoxicosis seen after administration of exogenous iodine.

Author details

¹Acute Medical Assessment Unit, Galway University Hospital, Galway, Ireland

Bryan J Renton¹

Oisín Ó Domhnaill¹

Author details can be found at the end of this article

Correspondence to:

Bryan J Renton;
bryan.renton@hse.ie

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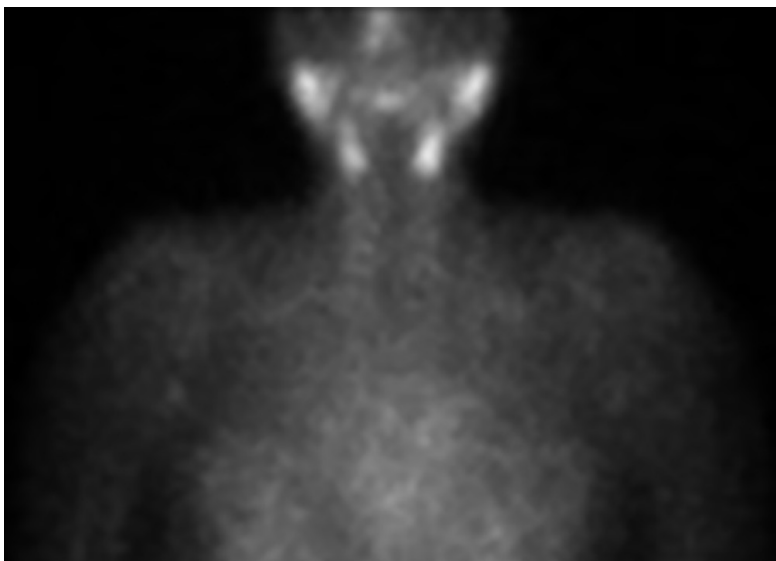


Figure 1. Radioiodine uptake scan illustrating an absence of radiotracer uptake.



Figure 2. 'Roztwór wodny jodu', also known as Lugol's iodine, containing 5% iodine and 10% potassium iodide.