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Delayed tendon reflex (a video demonstration)

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DESCRIPTION

A 50-year-old woman who was a homemaker presented to us with a history of gradual weight gain over the last 3 years, and on examination was found to have a puffy face (figure 1) along with marked coarsening of her skin (figure 2). On neurological examination the most remarkable finding was a delayed tendon reflex prominent in the biceps and tendo Achilles (video 1).

Video 1 Delayed tendon reflex prominent in biceps and tendo Achilles. 10.1136/bcr.04.2009.1797v1

This was a classical presentation and the diagnosis was obvious.

Her thyroid hormone profile revealed a thyroid-stimulating hormone level of 151.79 μ IU (normal 0.35–5.50) along with a total T3 of 0.31 ng/ml (normal 0.60–1.81) and total T4 of 1.00 (normal 5.60–13.70).

In an excellent review of the delayed tendon reflex it has been shown that the rate of muscle relaxation depends on the rate of calcium reaccumulation in the endoplasmic reticulum, and this rate is slowed in hypothyroidism.^{1 2}

However, the caveat is that there are various reasons identified that can cause a delayed ankle relaxation such as diabetes mellitus, chorea, advanced age, anorexia nervosa, pregnancy and even peripheral oedema,^{1 3} and the diagnosis of hypothyroidism has to be based on other clinical features and laboratory confirmation as in our patient.



Figure 1 Facial puffiness.



Figure 2 Skin coarsening.

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Competing interests None.

Patient consent Obtained.

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