

## **A Case of Pheochromocytoma presenting with Polymyalgia Rheumatica. Society for Endocrinology, Clinical Update 2007**

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This case is suitable for inclusion with Disorders of the Adrenal Gland.

A 65 year old man presented to his general practitioner (GP) complaining of pain and stiffness in his upper arms and neck. He was found to have a raised erythrocyte sedimentation rate (ESR) >80mm/hr and was diagnosed with Polymyalgia Rheumatica (PMR). His GP commenced oral prednisolone. Initially the symptoms improved, however attempts at reducing his steroid dose were unsuccessful. Over the following year the patient remained on 15mg prednisolone, experienced 2 stone weight loss, developed proximal myopathy and osteoporosis. An underlying malignancy was suspected and during investigation a computed tomography (CT) scan of the abdomen revealed a 3cm mass in the left adrenal gland.

On physical examination he was normotensive, cachectic, had proximal myopathy and no evidence of endocrinopathy or cutaneous manifestations of endocrinopathy. ESR was 73mm/hr and all other laboratory blood tests were normal. There was no evidence of hypercortisolaemia and urinary catecholamines were within the normal range on three separate collections. However urinary normetanephrines were elevated. Magnetic resonance imaging (MRI) of the adrenal gland confirmed the presence of a 3.8cm lesion suggestive of a pheochromocytoma and 123-I-metaiodobenzylguanidine scintigraphy (MIBG) demonstrated uptake in the left adrenal gland consistent with pheochromocytoma. There was no uptake elsewhere.

Following commencement of appropriate alpha and beta blockade in preparation for laparotomy the patient experienced an improvement in his symptoms of proximal muscle weakness. Histology of the adrenal gland excised confirmed a pheochromocytoma with no unusual histologic features. His postoperative recovery was uneventful and he is now asymptomatic off medication with a normal ESR and urinary metanephrine level.

Two points in this case should be highlighted. Firstly, pheochromocytoma is known to have a number of paraneoplastic manifestations, one of which is a raised ESR which resolves on removal of the tumour. In this case the patient had been diagnosed with PMR on the basis of symptoms and a raised ESR. This may have been attributable to the underlying pheochromocytoma and may be more appropriately classed as part of the polymyalgia syndrome. Secondly the case also demonstrates the benefit of measuring urinary metanephrines rather than relying on catecholamines alone.