

Society for Endocrinology, Clinical Update 2007

A ping-pong ball filled with mushroom soup

Alwani RA, Feelders RA, van den Berge JH, De Herder WW

Abstract

A 57 year-old woman was referred to the Erasmus Medical Centre Rotterdam with a 5-month history of polyuria and polydipsia (4L/day). Based on the results of the water deprivation test she was diagnosed with central diabetes insipidus and subsequently treatment with desmopressin was initiated. Furthermore patient complained of decreased vision of the left eye. Computerized perimetry showed a visual field defect in the lateral upper quadrant of the left eye. Laboratory tests revealed hypogonadotropic hypogonadism.

On Magnetic Resonance Imaging (MRI) an 18 mm cystic pituitary mass was seen suggestive of a pituitary adenoma. The lesion expanded suprasellar and there was slight compression of the optic chiasm. During transsphenoidal surgery the cystic pituitary mass appeared as a ping-pong ball. After incision, yellowish-white purulent fluid with the same colour and consistency of mushroom soup gushed out of the capsule. Blood and pituitary fluid cultures were negative for bacteria. Histologic examination of pituitary gland tissue showed chronic inflammation of the pituitary with an inflammatory infiltrate composed predominantly of lymphocytes along with some plasma cells and eosinophils. Thus the diagnosis of lymphocytic hypophysitis (LYH) was established.

LYH is a rare autoimmune disorder, predominantly affecting women during the late pregnancy or in the postpartum period. It typically presents as an enlarging sellar mass with or without a thickened infundibulum. A cystic appearance of LYH, as was seen in our patient is uncommon and only a few cases have been reported in literature.