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LETTER TO THE EDITOR

Hyperprolactinemia: An Unusual Cause of Erectile Dysfunction

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Hyperprolactinemia due to pituitary adenoma is a rare cause of erectile dysfunction (ED). In this Letter, one such case in which erectile dysfunction preceded detection of pituitary microadenoma for many years is reported.

A 35-year-old married man, not a known diabetic or hypertensive, presented with loss of libido and inability to achieve or maintain erection for the past 8 years. His morning erections were absent for the same duration. He was a non-smoker and non-alcoholic and there was no history of prolonged substance abuse. There was no history of local or spinal trauma. He had no prior history of any psychiatric illness. General physical examination revealed no gynecomastia, testicular atrophy or varicosities in scrotal area. Systemic and detailed neurological examinations were also normal. Routine hematological and biochemical investigations were within normal limits. Penile Doppler using high frequency probe showed normal corpora cavernosa and spongiosium without evidence of any obvious calcification. Cavernosal arteries were visualized and appeared normal, thus ruling out vascular cause of impotence. Contrast magnetic resonance imaging (MRI) of the brain was normal, with homogenous enhancement of the pituitary.

Four years after the onset of ED, he developed diminished vision in the right half of both eyes. On direct questioning, the patient revealed that he had intermittent accompanying headache, especially upon lifting heavy weights in the gymnasium. Repeat MRI scan showed a focal bulge on the left side of the pituitary gland, suggestive of microadenoma. Hormonal profile revealed serum prolactin levels as high (31.6 ng/ml; range = 3.0–18.6 ng/ml) and serum testosterone as normal (9.6 nMol/L; range for 20–50 year-old men = 4.56–28.2 nMol/L). Serum FSH was 4.01 mIU/ml (range = 1.55–9.74) and LH was 2.25 mIU/ml (range = 1.8–7.8). Thyroid hormone profile was normal. He was treated with tablet cabergoline 0.25 mg orally twice a week and then increased to 1 mg orally twice a week, after which significant improvement in both sexual function and visual deficits were reported.

Clinical presentation of pituitary adenomas may vary depending on the location and size of the tumor and its secretary activity. Adenomas are common during adulthood. Headaches, double vision or other visual disturbances are usual presentations of a pituitary adenoma. A prolactinoma is the most common pituitary adenoma leading to endocrine alterations with sexual consequences (e.g., amenorrhea, infertility, and gynecomastia).

It is generally recognized that endocrinopathy is the rarest of causes of ED (Zeitlin & Rajfer, 2000). Obtaining serum testosterone and prolactin with or without thyroid hormone profile has been advised as a cost effective screening tool to identify such cases. Hyperprolactinemia per se is a rare cause of ED (Miller, Howards, & McLeod, 1980) as well but men with hyperprolactinemia report sexual dysfunction frequently (Alfonso, Rieniets, & Vigersky, 2006). This case illustrates that ED can be the sole presenting feature of prolactin secreting pituitary tumors.

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