The ovarian remnant syndrome presenting with acute urinary retention

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Summary: The case of a woman presenting with acute urinary retention, which, on investigation, proved to be due to the ovarian remnant syndrome, is reported. This syndrome is rare, with only 36 previously published cases. To our knowledge none has so far presented in this manner.

Introduction

We report a patient who presented with acute urinary retention. Clinically she had a lower abdominal mass consistent with a large ovarian cyst, but she had previously had a bilateral oophorectomy.

Subsequent investigation and research revealed this was a unique case of the ovarian remnant syndrome. This is a little known entity with only 36 previously published cases. To our knowledge none has presented in such a relatively sudden manner with acute retention.

Case report

A 35 year old woman presented with a history of acute urinary retention of 12 hours duration. Five years previously she had a right salpingo-oophorectomy for an ectopic pregnancy and this was followed two years later by a complete pelvic clearance for pelvic inflammatory disease. There was histological confirmation of excision of an ovary on both occasions. During the 3 years since her second operation she complained of frequency, nocturia, stress incontinence and increasing lower abdominal distention and discomfort.

On examination a large lower abdominal mass was found, which persisted following catheterization and drainage of 1500 ml of urine. Ultrasonography confirmed the presence of a large unilocular cyst arising from the pelvis (Figure 1), and an intravenous urogram showed mild bilateral hydronephrosis. At

laparotomy a thin walled cyst containing 2 litres of fluid was found occupying the pelvis and lower abdomen. It was densely adherent to the rectum, sigmoid colon and pelvis rendering complete excision impossible. The anterior and lateral cyst wall were excised and the residual cavity drained. Histology showed a simple lutein cyst.

A radiation ovarian ablation was performed using 1500 cGy (1500 rads) in divided doses and for the first time the patient experienced menopausal symptoms. At follow-up a year later she had no further urinary problems and there was neither clinical nor sonographic evidence of cyst recurrence. In addition her plasma oestriol levels had fallen to the postmenopausal range for the first time.

Figure 1 Longitudinal ultrasound scan of the pelvis showing the large transonic cyst.

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Discussion

The ovarian remnant syndrome is an uncommon condition, first described by Kaufmann in 1962.¹ Since then 26 cases have been documented, but none presenting with acute retention.

It occurs where oophorectomy is performed for endometriosis and pelvic inflammatory disease, when remnants of ovarian cortex are left adherent to the peritoneal surface of the pelvis and later become functional, in spite of being deprived of their usual vascular supply.^{2,3} Presentation usually occurs between 1 and 5 years after surgery and a history of more than one pelvic exploration is common. The patients have no menopausal symptoms, but complain of pelvic pain, cyclical dyspareunia and, rarely, urinary or gastrointestinal symptoms. Early renal

failure due to obstructive uropathy has been described.⁴ A pelvic mass is usually palpable.

Though our patient had experienced 3 years of symptoms, she did not deem them serious enough to bring to medical attention. Consequently the sudden onset of acute urinary retention, in itself a relative rarity in a 35 year old female, was the first indication of a significant problem.

Ultrasonography is extremely useful in diagnosis and appearances vary from multiple small cysts filled with coagulum and thrombus, to large unilocular cysts.⁵ Plasma oestriol levels are also helpful. The residual cysts are frequently encased in dense fibrous adhesions, making complete excision impossible or hazardous. Literature review recommends deep X-ray ovarian ablation as the treatment of choice.

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