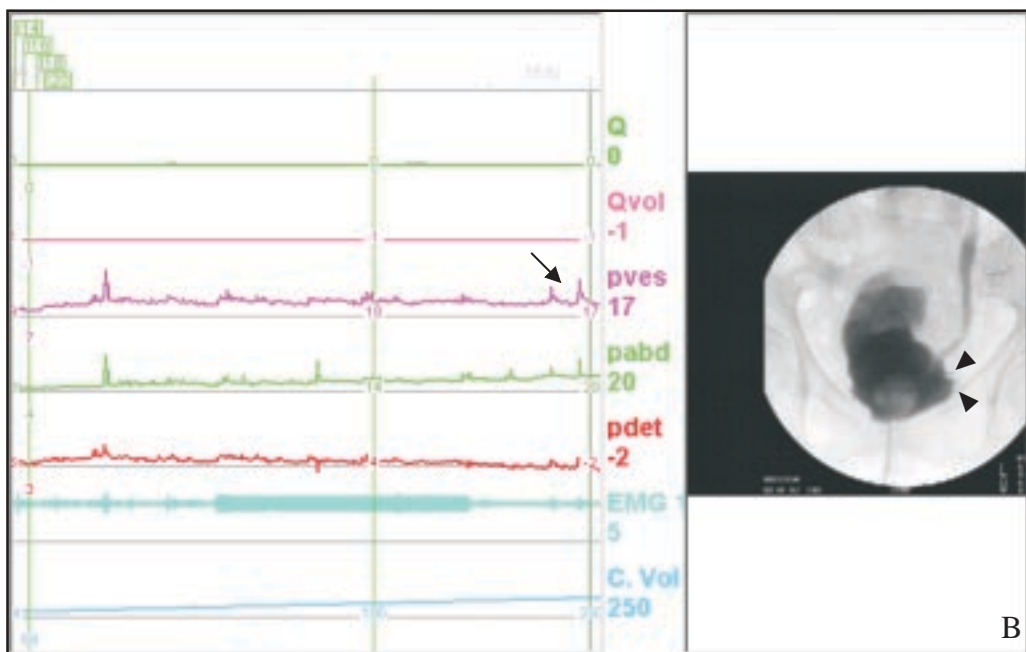
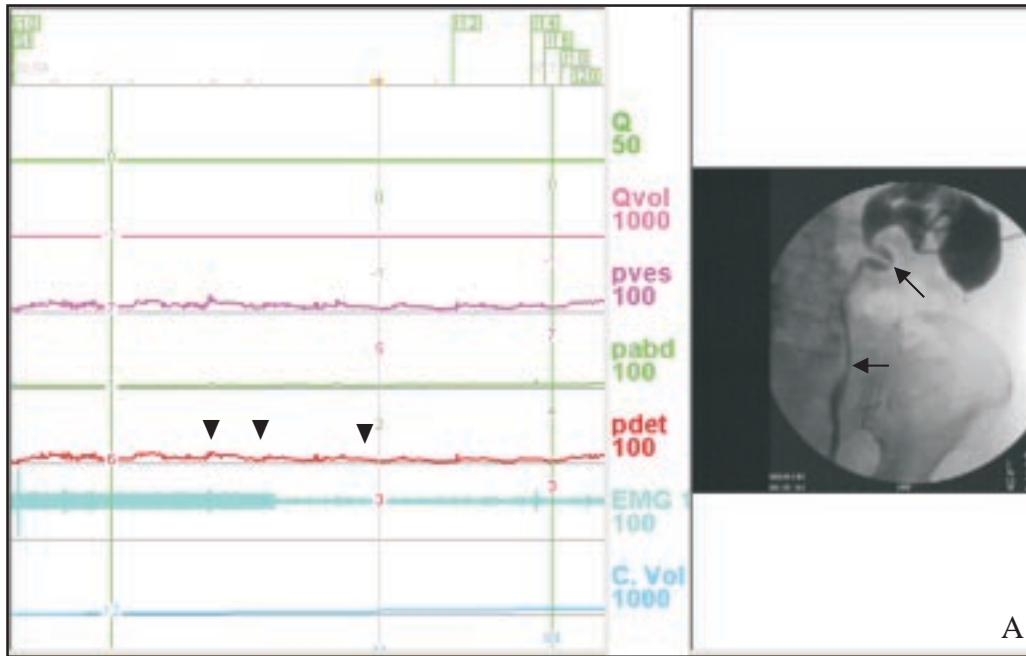


Contracted Bladder after Enterocystoplasty and Hydronephrosis

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BRIEF HISTORY

A 70-year-old woman had received radical hysterectomy and radiotherapy for her invasive cervical cancer 15 years previously. She had suffered from recurrent urinary tract infections and irradiation cystitis associated with intractable urinary incontinence as well as severe miction pain over the last 3 years. Although augmentation enterocystoplasty was performed 1 year ago to increase her bladder capacity, the symptoms had persisted and she had undergone an episode of acute pyelonephritis together with gross hematuria recently.

CLINICAL INVESTIGATION

An emergency percutaneous nephrostomy using an 8 Fr pigtail catheter was carried out. She was treated with antibiotics and her condition was stabilized. Renal function and urine output returned to normal after two weeks of treatment.

VIDEOURODYNAMIC STUDY

The urodynamic studies were made up of two parts: (A) A Whitaker test of the upper urinary tract and (B) a pressure flow study of the lower urinary tract. During the Whitaker test, normal saline at a rate of 10 mL/min was infused into the pigtail catheter; intrapelvic pressure and intravesical pressure were measured and the differential pressure was calculated electronically. The renal pelvis and ureter were patent

(arrows) and the intrapelvic pressure remained low (arrow heads) despite an increase in the infusion rate to 20 mL/min. During the pressure flow study, the augmented bladder was infused with normal saline at the rate of 30 mL/min with the intra-abdominal pressure monitored by an intrarectal balloon catheter. The intravesical pressure remained low at a bladder capacity of 250 mL (arrows). Residual contrast media in right ureter was noted and no stricture was found at the ureterovesical junction (arrow heads). However, the patient felt lower abdominal pain at this capacity and the study was terminated.

CLINICAL DIAGNOSIS AND MANAGEMENT

Augmentation enterocystoplasty is a procedure used to treat a contracted bladder and intractable urinary incontinence. Although this procedure works, recurrent urinary tract infections and difficult urination are issues that need to be solved. This is especially true among older patients who cannot perform clean intermittent self-catheterization (CISC) smoothly and who have a lack of adequate abdominal pressure, which results in poor voiding. Recurrent urinary tract infection will cause the augmented bladder to contract again and even may result in obstructive uropathy. Urgent urinary diversion and antibiotic treatment are able to solve the problem; however, investigations after the event might not discover any abnormality. This patient should be instructed to perform CISC regularly and long-term antimicrobial prophylaxis may also be necessary.