SHORT REPORTS

Endoscopic Teflon injection for a refluxing ureteric stump after simple nephrectomy

Persistence of vesicoureteric reflux into adult life is unusual nowadays given the aggressive investigation of childhood urinary tract infections. We report a case in which a simple nephrectomy performed for apparent end stage calculous disease of the kidney was complicated by the discovery, postoperatively, that the renal abnormality was due to unrecognised vesicoureteric reflux.

Case history

A 43 year old man underwent right simple nephrectomy for a chronically infected non-functioning kidney containing a large staghorn calculus. At operation the right ureter was found unexpectedly to be grossly dilated and was ligated with catgut. As a result of limited surgical access in an obese patient this ligature slipped off during application and the ureter could not be retrieved for religation. In the immediate postoperative period large quantities of urine drained from the tube drain placed in the loin wound. Although drainage stopped temporarily with bladder catheterisation, it recurred after removal of the catheter. A cystogram confirmed gross vesicoureteric reflux into a cavity in the loin (figure).

To avoid reoperation in an obese patient we elected to stop the reflux by an endoscopic subureteric injection of Teflon (Polytef) paste. Ten days after nephrectomy 4 ml Teflon paste was injected cystoscopically to occlude the refluxing ureteric orifice and a subsequent cystogram confirmed complete cessation of reflux. Drainage from the loin stopped immediately and the patient made an uneventful recovery. He remained well at clinical follow up.

Comment

While it is normal surgical practice to ligate the ureteric stump after simple nephrectomy, an unligated stump will usually fibrose rapidly and will not reflux. In our patient, however, the ureter had probably been grossly dilated and refluxing for years. Failure to ligate the ureter resulted in reflux into the nephrectomy cavity which

Postoperative cystogram showing free vesicoureteric reflux into nephrectomy cavity.

did not stop spontaneously as a result of ureteric fibrosis, even when the bladder was emptied by a period of catheterisation. This unusual problem could have been rectified by reoperation and excision of the lower ureter with ligation close to the bladder. The short stature and obesity of the patient, however, would have made this a difficult procedure with considerable morbidity.

Subureteric injection of Teflon paste has been described for vesicoureteric reflux in children.¹ Nevertheless, though Teflon has been used to produce partial occlusion of the urethra in cases of stress incontinence,^{2,3} it has not to our knowledge been used to produce deliberate total occlusion of a ureter.

We believe that by using this technique the patient was spared further major surgery. This simple technique can be recommended for unusual cases of ureteric reflux, both in children and in adults, especially when the reflux occurs after simple nephrectomy or partial nephroureterectomy for congenital duplications.

- 1 O'Donnell B, Puri P. Treatment of vesicoureteric reflux by endoscopic injection of Teflon. *Br Med J* 1984;289:7-9.
- 2 Politano VA. Periurethral Teflon injection for urinary incontinence. *Urol Clin North Am* 1978;5:415-22.
- 3 Sculman CC, Simon J, Wespes E, Germeau F. Endoscopic injections of Teflon to treat urinary incontinence in women. *Br Med J* 1984;288:192.

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Screening of patients with retinitis pigmentosa for hereditary ataxia polyneuritis (Refsum's disease)

Retinitis pigmentosa may be associated with a wide range of metabolic and neurological abnormalities, including hereditary ataxia polyneuritis (Refsum's disease).¹ This condition is characterised by a raised plasma concentration of phytanic acid,² retinitis pigmentosa, polyneuropathy, ataxia, deafness, and anosmia. Hereditary ataxia polyneuritis is a disabling and potentially lethal disease but can be treated by diet or plasmapheresis.³ We suggest that hereditary ataxia polyneuritis should be considered in all cases of retinitis pigmentosa.

Patients, methods, and results

Fifty two patients with retinitis pigmentosa entered the study. All fasted before attending for examination. Plasma samples were sent for lipid profile, fatty acid screen, and phytanic acid assay. Phytanic acid and fatty acids were detected and estimated as described^{3,4}; cholesterol and triglyceride concentrations were estimated using the standard Technicon autoanalyser II enzymatic method.

Of the 52 patients, 19 were male and 33 female. In 17 some abnormality was detected on neurological examination. Seven were deaf, of whom three had no other neurological signs and four had additional abnormalities (group 1). Neurological abnormalities without deafness were present in 10 patients (group 2) (table). Using the criterion of retinitis pigmentosa in the presence of two other neurological abnormalities associated with hereditary ataxia polyneuritis, we suspected the disease in six patients (cases 5, 26, 40, 42, 44, and 45), the suspicion being strongest in cases 40, 42, and 45. One patient (case 42) was found to have a plasma phytanic acid concentration of (1.1 mmol/l (34 mg/100 ml); normally less than 0.03 mmol/l (1 mg/100 ml)), and a diagnosis of hereditary ataxia polyneuritis was made.⁵ Statistical analysis of the lipid and fatty acid data for the patients with retinitis pigmentosa showed no significant difference from those of a normal population.

In case 42, a 40 year old woman, the patient gave a history of anosmia,