

Continuous ambulatory peritoneal dialysis and uterovaginal prolapse

Malcolm J Dickson, Angela Railton

It has been estimated that 50% of parous women have some degree of genital tract prolapse and that 10–20% of these cause symptoms. Approximately 20% of women on gynaecological waiting lists for major surgery have prolapse and this rises to 60% of elderly women undergoing major gynaecological surgery (Cardozo, 1995). As the condition is very common it is extraordinary that there is so much uncertainty regarding the natural history of genital tract prolapse.

Of potential aetiological factors that have been assessed, parity shows much the strongest relationship to prolapse. Other associated factors are having had a hysterectomy, increasing age, chronic constipation, cigarette smoking and obesity (Mant et al, 1997). It can be argued that aetiological factors may be considered as entities that either predispose to genital tract prolapse in the future or precipitating factors. Such a predisposing factor is having given birth vaginally, where damage to the pelvic floor and pudendal nerve sustained during par-

tion result in deficient support to the pelvic contents. Having hypermobile joints and certain connective tissue disorders such as Ehlers–Danlos syndrome are also recognized predisposing factors, if somewhat uncommon (Norton et al, 1995).

Obesity, chronic coughs and habitual straining at stool are conditions that result in raised intra-abdominal pressure, and can be regarded as being precipitating factors in uterovaginal prolapse. It is presumed that it is raised intra-abdominal pressure that precipitates the prolapse, but this has never been demonstrated. In the case described, the prolapse is maximal when the dialysis fluid is present and is almost completely resolved when the fluid is removed which clearly indicates a direct relationship between genital tract prolapse and raised intra-abdominal pressure

The classical management of uterovaginal prolapse is a vaginal hysterectomy and pelvic floor repair. However, a vaginal hysterectomy would have involved entering the peri-

toneal cavity and the woman would have been unable to use continuous ambulatory peritoneal dialysis for renal support for some time, so surgery clearly was not an option.

From the authors' experience the use of vaginal ring pessaries for the treatment of uterovaginal prolapse is not uncommon although tends to be limited to women who would not be suitable for surgery. There is a paucity of references to vaginal ring pessaries in the world literature, and where they exist they allude to unusual complications of the device such as incarceration of small bowel rather than any comments regarding the efficacy or not of the device (Ott et al, 1993). As this woman was managed successfully with a vaginal ring pessary, it may be that more younger women might be successfully treated with such devices rather than undergoing surgery. **HM**

CASE REPORT

A woman in her mid-twenties had two consecutive pregnancies that were uncomplicated and in both occasions resulted in spontaneous vertex deliveries at term of healthy infants. Following the delivery of her second child she developed progressive renal failure resulting in complete anuria, consequent to renal artery stenosis. For renal support she received continuous ambulatory peritoneal dialysis (CAPD) for 12 months until she had a kidney transplant. She became pregnant 1 year after she received the transplant and had a successful pregnancy that resulted in a live infant delivered by caesarean section because of a breech presentation.

Three years after receiving it, the transplant failed because of rejection and the woman again required CAPD. This was given as the same regimen as before, which was four daily exchanges of 2 litres of fluid. Within a week of recommencing this regimen she developed a uterovaginal prolapse that was almost a complete procidentia. The prolapse was maximal when the dialysis fluid was present and would almost entirely resolve when the fluid was removed. The prolapse was treated satisfactorily with a 77 mm vaginal ring pessary. The woman was satisfied with her treatment and was symptom free at follow up 3 years later.

Cardozo L (1995) Prolapse. In: Whitfield CR, ed. *Dewhurst's Textbook of Obstetrics and Gynaecology for Postgraduates*. Blackwell Science, Oxford: 642–52

Mant J, Painter R, Vessey M (1997) Epidemiology of genital prolapse: observations from the Oxford Family Planning Association study. *Br J Obstet Gynaecol* **104**: 579–85

Norton PA, Baker JE, Sharp HC, Warenski JC (1995) Genitourinary prolapse and joint hypermobility in women. *Obstet Gynecol* **85**(2): 225–8

Ott R, Richter H, Behr J, Scheele J (1993) Small bowel prolapse and incarceration caused by a vaginal ring pessary. *Br J Surg* **80**(9): 1157

Dr Malcolm J Dickson is Specialist Registrar in Obstetrics and Gynaecology and **Dr Angela Railton** is Consultant in Obstetrics and Gynaecology in the Department of Obstetrics and Gynaecology, Hope Hospital, Salford M6 8HD

Correspondence to: Dr MJ Dickson