Surgery for stress urinary incontinence in Australia: current trends from Medicare data

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To the Editor: The advent of midurethral slings (MUSs) has revolutionised surgery for female stress urinary incontinence. An MUS is a narrow, synthetic (usually polypropylene) tape that is surgically placed beneath the middle part of the urethra, traversing either the retropubic space or the obturator foramina to provide dynamic support in order to restore urinary continence.

Medicare Australia data from 1994 to 2008 (Box) show that there was a 75% increase in surgery for stress urinary incontinence over this period, from 4000 to nearly 7000 cases a year, reflecting the increasing popularity of MUSs as a result of lower morbidity and shorter hospitalisation (day surgery). The rapid uptake of MUSs since 1999 has been matched with a rapid decline, since 2001, in use of the Burch colposuspension procedure. Colposuspension is an open abdominal or laparoscopic procedure in which the bladder neck is fixed to the ipsilateral iliopectineal ligament on both sides. This operation is done via an abdominal incision or through operative laparoscopy. There has also been a decline in the use of pubovaginal fascial slings and a small increase in urethral bulking procedures. Very few needle suspensions are performed in Australia. There has been a significant increase in the number of urodynamics procedures performed (including uroflow, cystometry and urethral pressure profiles), which may also be a reflection of an increased number of women presenting for treatment. It should be noted that these Medicare data reflect trends within the private sector only, and our data are not age- or sex-specific. Nor do they distinguish between the specialties of gynaecology or urology in their use of MUSs or between different midurethral slings used in Australia.

Although Burch colposuspension and autologous pubovaginal slings were for many years considered the "gold standard" operations for stress incontinence, recent systematic reviews have shown MUSs to be just as efficacious and possibly more cost-effective. Regardless of debate about which operation may be best, surgery has become the most common operation performed for stress urinary incontinence in Australia. Data from the National Health Service in the United Kingdom show a similar trend.

However, changes in MUS use in Australia and internationally have not always been driven by good science. The remarkable popularity of the newer single-incision slings in the United States, despite very limited availability of clinical evaluation information, is of concern. Their popularity has been attributed anecdotally to the fact that insertion of a single-incision sling is an "office" procedure that attracts greater insurance reimbursement than procedures that are performed under anaesthesia or require hospital stays.

Surgery for stress urinary incontinence has moved rapidly towards a minimally invasive approach, making it more appealing to all patients, especially those who are older or medically unfit. At present, new devices to treat stress incontinence and other pelvic floor problems are being introduced and extensively used without adequate clinical evaluation by good prospective randomised trials. Changes in surgical practice should be driven by good scientific evidence of safety and effectiveness, rather than commercial interests or government budgets.

Competing interests: Peter Dwyer is principal investigator of several randomised controlled trials of procedures for alleviating stress urinary incontinence, including pubovaginal slings, Burch colposuspension, urethral bulking and MUSs. He is also principal investigator of an ongoing randomised controlled trial involving a minisling, for which he has received a research grant from American Medical Systems.

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