

Outcomes data of 46 men—the largest series reported to date—were retrospectively evaluated using a validated questionnaire (UCLA/RAND). Prior to surgery, most patients had SUI of moderate severity subsequent to treatment for prostate cancer, and refractory to nonsurgical management. Slings—polypropylene in most cases—were inserted through a perineal incision and anchored at one end to the pubic bone via titanium screws preloaded with polypropylene sutures. Suture tightening generated tension sufficient to compress the bulbous urethra. Tension was optimized during a cough test phase before the second side of the sling was anchored.

Thirty-seven percent of patients reported complete dryness during the average 24-month follow-up period. Symptom severity improved in a further 37% and overall satisfaction with the sling procedure was 70%. The rate of complication was low; one patient developed an infection, and two required analgesics for perineal/buttock pain. Erosion of the urethra was not reported by any sling recipient.

The authors assert that nonabsorbable slings are a safe and effective additional tool for management of men with SUI. They caution that, until long-term studies prove otherwise, slings should be considered as an alternative to AUS rather than a new standard.

**Original article** Rajpurkar AD *et al.* (2005) Patient satisfaction and clinical efficacy of the new perineal bone-anchored male sling. *Eur Urol* 47: 237–242

## Hypnosis helps children through VCUG

Diagnosis and management of vesicoureteral reflux requires voiding cystourethrography (VCUG). Children with vesicoureteral reflux, in which urine passes retrogradely from bladder to kidney, are typically subjected to four VCUGs. Many find the catheterization, intravesical instillation of contrast media and urination 'on demand' extremely distressing. Memories of this distress can compromise compliance during subsequent VCUGs.

Lisa Butler and co-workers tested whether hypnosis could minimize anxiety. Forty-four children with an average age of 7.6 years, most of whom were white females and had undergone three previous VCUGs, were

nonblindly randomized to either hypnosis or routine care prior to their next procedure.

During training in self-hypnosis, children were directed to imagine themselves floating comfortably. They were then instructed to absorb themselves in a competing imaginary situation by visualizing participation in a favorite activity. Parents and children were encouraged to practice this technique several times during each day prior to their next VCUG. Most members of the routine care group elected to participate in a standard recreational therapy session. Sessions focused on familiarizing the child with the phases of VCUG and practicing relaxation. Recreational or hypnosis therapists assisted each child during the procedure.

Hypnosis significantly improved four outcome measures: parental estimation of trauma relative to that experienced by their child during their previous VCUG; typical distress level during the procedure (observed by a research assistant); difficulty of conducting the VCUG (reported by medical personnel); and total procedural time, which was almost 14 minutes less. The authors suggest that hypnosis be used to cost-effectively and noninvasively minimize distress during pediatric VCUG.

**Original article** Butler LD *et al.* (2005) Hypnosis reduces distress and duration of an invasive medical procedure for children. *Pediatrics* 115: e77–e85

## Advances in preoperative nodal staging for bladder cancer

In their recent study, Deserno *et al.* have shown that ferumoxtran-10-enhanced MRI is superior to nonenhanced MRI in detecting metastatic lymph nodes in patients with bladder cancer. Importantly, this method does not rely on nodal size or shape to distinguish between benign and malignant nodes.

Fifty eight patients with bladder cancer underwent MRI before and 24–36 hours after intravenous injection of ferumoxtran-10 iron oxide nanoparticles. Precontrast images were interpreted on the basis of node size; round nodes larger than 8mm or oval nodes of axial diameter greater than 10mm were defined as malignant. Postcontrast images were interpreted by comparing them with the precontrast images; benign nodes show a homogenous decrease in signal intensity due

to the accumulation of iron oxide in the nodal macrophages, whereas metastatic nodes show either a heterogeneous decrease or no decrease in signal, since the normal macrophages are replaced with cancer cells.

By comparing the MRI results with histologic findings for 172 dissected nodes, the authors showed that the sensitivity of ferumoxtran-10-enhanced MRI was significantly better than that obtained using precontrast images alone (96% vs 76%,  $P < 0.01$ ) and that the negative predictive value was also significantly improved (98% vs 91%,  $P < 0.01$ ).

Noting that ferumoxtran-10-enhanced MRI could be used to identify metastases even in normal-sized nodes, the authors conclude that the technique allows superior preoperative nodal staging in patients with bladder cancer, compared with standard, nonenhanced MRI.

**Original article** Deserno WMLLG *et al.* (2004) Advances in preoperative nodal staging for bladder cancer. *Radiology* 233: 449–456

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## Four weeks of tadalafil for ED improves endothelial function

Endothelial impairment is an etiological factor common to cardiovascular disease and erectile dysfunction (ED). As the oral phosphodiesterase-5 inhibitor sildenafil (Viagra®; Pfizer, Walton-on-the-Hill, UK) has been shown to improve endothelial function in men with ED, Rosano *et al.* tested

the hypothesis that its long-acting counterpart tadalafil (Cialis®; Lilly, Basingstoke, UK) would have a similar effect in men at increased risk of cardiovascular disease.

Thirty-two men with a 10-year cardiovascular risk exceeding 20%, with or without ED, were randomized in a double-blind fashion to either 20 mg tadalafil every second day or to placebo. At the end of the 4-week study period, flow-mediated dilatation (FMD) of the brachial artery had improved significantly to 9.3% in the tadalafil group. No change in FMD was detected in those men that had received placebo. Interestingly, the improvement of FMD in the tadalafil group was maintained for at least 2 weeks after discontinuation of therapy. This sustained increase in FMD was inversely correlated with plasma levels of endothelin-1, a peptide hormone associated with vascular disease. ED status had no effect on outcomes, and only two men receiving the study drug reported adverse events.

The authors have shown that tadalafil has beneficial effects on endothelial function that are maintained following cessation of therapy. Together with the fact that this drug can be used chronically for ED, rather than requiring 'on demand' administration like sildenafil, these new findings make tadalafil worthy of further investigation by both urologists and cardiologists.

**Original article** Rosano GMC *et al.* (2005) Chronic treatment with tadalafil improves endothelial function in men with increased cardiovascular risk. *Eur Urol* 47: 214–222