

activity were significantly more prevalent in patients with DLB compared to those with PD and AD. In contrast, 24-h frequency, maximum cystometric capacity, detrusor pressure at maximum flow rate, maximum flow rate, voided volume, and post-void residual were similar in the three groups and corresponded to values in the general elderly population.

#### Expert's comments:

Urinary incontinence has already been shown to be an early symptom in DLB, whereas in AD it occurs in an advanced stage of the disease [2]. In PD, LUTS deteriorate with duration and progression of motor symptoms [3]. Ransmayr and colleagues [1] compared LUTS and urodynamic findings in different neurodegenerative diseases. Detrusor overactivity was common and found in 92%, 46%, and 40% of the patients with DLB, PD, and AD, respectively. These findings have major implications for urologic treatment: Antimuscarinics are the gold-standard pharmacologic therapy of detrusor overactivity. However, muscarinic receptors are prominent in the central nervous system (CNS) and play an important role in memory, vigilance, problem solving, and stimulus and response processing [4]. Thus, differences in permeability of the blood-brain barrier and in receptor selectivity of the different antimuscarinics have to be considered. Nevertheless, CNS effects of antimuscarinics have been poorly investigated, and, so far, there is no prospective clinical trial in patients with neurodegenerative disease treated for overactive bladder symptoms.

In a postmortem brain morphology study in patients with PD, Perry and colleagues [5] found an increased AD-like pathology in patients with prolonged antimuscarinic exposure. Antimuscarinic treatment of 2 yr or more was associated with significantly increased densities of amyloid plaques and neurofibrillary tangles, compared with those cases with less than 2 yr of drug treatment. This raises the worrying question: Does chronic antimuscarinic therapy increase the risk of AD or accelerate AD pathogenesis?

Does this mean that we should avoid antimuscarinic treatment for overactive bladder symptoms in patients with neurodegenerative disease? Probably not, but we should be aware of potential effects such as precipitating or exacerbating delirium, confusion, and cognitive deterioration, and discontinue the treatment if appropriate. In addition, polypharmacy is very common in this group of patients, and many other drugs have antimuscarinic properties, which make these patients even more susceptible to CNS adverse effects. Thus, well-designed, adequately powered trials in the at-risk population, including neurogenic and older patients, are urgently needed.

*Conflicts of interest:* The author has nothing to disclose.

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#### Re: Is Kidney Surgery Going to be Minimally Invasive in All Cases?

Sulser T

*Eur Urol* 2007;52;1549–53.

#### Experts' summary:

Sulser presents a very interesting editorial about the role of minimally invasive surgery in the treatment of renal pathologies, asking if, actually, kidney surgery is going to be minimally invasive in all cases. His answer is simple and clear: no. Sulser investi-

gates the feasibility of minimally invasive surgery in radical and partial nephrectomy, nephroureterectomy, living donor nephrectomy, and pyeloplasty. He reports that in reconstructive surgery, including living donor nephrectomy and pyeloplasty, and in laparoscopy, such as robotic surgery, if performed by expert surgeon, minimally invasive surgery has reached equivalent results to open surgery. But he concludes that in oncologic surgery still today there are cases that cannot preclude open surgery.

#### Experts' comments:

The introduction of laparoscopy in urology in the beginning of the 1990s created a revolution in the surgical approach to urologic pathologies. Since then, laparoscopy has received increasing interest from urologists for the development of minimally invasive surgery, leading to the development and introduction, over the past several years, of robotic surgery [1]. These new surgical techniques have achieved, in some cases, similar perioperative features to open surgery, with greater benefits for the patients (less pain, shorter hospital stay, better aesthetic results). Nevertheless, these minimally invasive procedures have yet to be adopted by all urologists, someone of whom have never had the opportunity to train in laparoscopy. This cannot be accepted in 21st century medicine. The aim of every

urologist is to train and to use all of the most up-to-date surgical techniques. This includes developing the ability to perform laparoscopic procedures, and the judgment know when minimally invasive procedures should be used and when it is necessary to use the "old and traditional" open surgery. In making the choice of a surgical method, the urologist must never forget that the aim is the best results for the patient—not merely following the mode of the moment [2].

**Conflicts of interest:** The authors have nothing to disclose.

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#### Re: Medical Therapy to Facilitate Urinary Stone Passage: A Meta-analysis

John M Hollingsworth MD, Mary AM Rogers PhD, Samuel R Kaufman MA, Timothy J Bradford MD, Sanjay Saint MD, John T Wei MD, and Brent K Hollenbeck MD

*Lancet* 2006;9542:1171–9.

#### Expert's summary:

The Hollingsworth paper assessed the effect of alpha blockers and calcium channel blockers pooled data on facilitating stone passage after ureteric colic. Only nine randomised controlled trials were identified (four from Turkey, two from the same unit in Italy, and one each from Iran, Greece, and the United States) and included a total of 693 patients followed for a minimum of 1 wk. Using the Mantel-Haenszel fixed-effects model, Hollingsworth and his colleagues concluded that these drugs conferred a 65% greater likelihood of stone passage, thus avoiding more expensive treatments. With a weighted event rate of 47% for no medical therapy and one of 78% in

the medical therapy cohort, the pooled risk ratios were 1.54 and 1.9 for alpha blockers (four studies) and calcium channel blockers with steroids respectively, with a number needed to treat of 4. Nonsteroidal drugs were given to both control and treatment groups in seven studies.

#### Expert's comments:

The lifetime risk of urinary stone disease is expected to increase in the future, with changing diets, sedentary lifestyles, and the increasing prevalence of obesity and with it, metabolic syndrome. If one takes the conclusions of this meta-analysis at face value, one can make a strong argument for emergency room physicians and urologists to initiate the use of these well-tolerated drugs routinely for patients presenting with acute ureteric stone colic. This argument can be made both in regard to patient quality of life (QOL) and health economics, especially in the context of cheaper generic drug availability. However, the largest group in any single arm in these nine studies was only 48 patients, while mean stone size varied from 3.86–7.8 mm, and follow-up varied