

maintenance organization in Washington State. Along with questions about bladder symptoms, the survey covered medical, surgical, gynecologic and obstetric history, use of medications, depressive symptoms, quality of life, functional status and demographics. A total of 3,536 women (64% response rate) were included in the subsequent analysis.

Both the prevalence and the severity of urinary incontinence increased with advancing age, and mixed symptoms were more common than either stress or urge incontinence alone. Obesity and current major depression more than doubled the risk of having the condition, while other risk factors included a history of hysterectomy, parity, and greater medical comorbidity. Non-White women and those who had had only cesarean deliveries were less likely to report urinary incontinence.

The authors comment that the overall prevalence of 45% reported in this study falls between two recent estimates from studies of urinary incontinence in Norway (25%) and Britain (69%). Other than differences in study design, the variation between these estimates might be related to risk factors, overall health, and awareness of urinary incontinence in these populations.

Original article Melville JL *et al.* (2005) Urinary incontinence in US women: a population-based study. *Arch Intern Med* 165: 537–542

Urologic assessments using handheld computer technology

The transmission of digitized radiographic images is having a positive impact on diagnosis, treatment, and education in many fields of medicine. A team of urologists has now explored the possibility of using wireless networks, by sending CT images to a handheld computer (PDA).

Their pilot study was based on the diagnosis of 10 patients with suspected renal colic and another with renal trauma. An average of six CT images from each patient were compressed into JPEG files and uploaded to an email account on a secure server. These were then accessed on a cellular telephone, and transmitted to a PDA via a data cable. (Alternatively, images could be downloaded directly from the server using an integrated PDA-telephone, but

the models available at the time of the study lacked adequate display parameters.)

The CT images were displayed on the PDA and reviewed by a staff urologist, who gave a diagnostic interpretation for each patient. These results were compared with those given in the staff radiologist's report. The presence and location of calculi were correctly diagnosed in 8 of the 10 renal colic cases, and estimations of stone size agreed to within 1 ± 1 mm. All cases of hydronephrosis were correctly identified, as were 80% of cases of perinephric stranding. In addition, the renal trauma patient was accurately identified and staged.

The authors comment that the speed, quality, and quantity of transmitted images are expected to improve as advances are made in wireless data transfer and PDA screen image resolution, and they call for further studies in this area.

Original article Johnston WK III *et al.* (2005) Wireless teleradiology for renal colic and renal trauma. *J Endourol* 19: 32–36

Effect of androgen deprivation on cognitive performance

Salminen and colleagues from Finland have recently demonstrated that androgen deprivation, increasingly used as an adjuvant treatment in patients with prostate cancer, appears to affect some aspects of cognitive performance.

The researchers speculated that this therapy causes a reduction in serum estradiol which, in turn, brings about changes in cognitive function. They tested their hypothesis in 23 newly-diagnosed patients with prostate carcinoma who were due to undergo androgen deprivation treatment and radiotherapy. Hormone analysis and extensive cognitive testing were performed before treatment, at 6 months, and at 12 months.

As expected, the mean serum testosterone level fell significantly in response to treatment, from 14.8 nmol/l at baseline to a castration level (mean 0.43 nmol/l) at 3 months. This was accompanied by a fall in serum estradiol, from 0.096 nmol/l at baseline to 0.029 at 6 months. The levels of both these hormones remained low at 12 months.