

anastomosis, Bissada *et al.* have proposed an alternative approach: retubularization of bowel segments used in the augmented bladder or urinary reservoir.

The authors treated a series of 29 patients who required conversion to an intestinal urinary conduit following enterocystoplasty, continent cutaneous diversion, or formation of an orthotopic neobladder or augmented rectal bladder. In each case, the conduit was formed by retubularizing bowel segments that had been included in the original procedure. Ureteral anastomoses were either preserved (10 patients) or were reimplanted (19 patients). Follow-up was for 12 to 130 months (mean 42 months).

There were no significant complications during the procedure or early postoperatively. During follow-up, small bowel intestinal obstruction occurred in one patient, two patients developed ureteral obstruction with hydronephrosis and one patient required simple cystectomy for pyocystitis.

The authors conclude that this tissue-conserving method is safe, effective and applicable after a range of reconstructive procedures.

**Original article** Bissada NK *et al.* (2004) Urinary conduit formation using retubularized bowel from continent urinary diversion or intestinal augmentations: I. A multi-institutional experience. *Urology* 64: 485–487

## Correction of congenital penile curvature: long-term results

Congenital penile curvature can cause severe sexual and psychological problems. Lee and colleagues have evaluated the long-term outcome of its surgical correction by corporeal plication.

Over a 10-year period, 106 patients aged 17–31 years were treated for congenital penile curvature. The angle of curvature—whether ventral, lateral, or both—was between 30° and 90° and all patients had difficulties with vaginal penetration and/or had psychological problems. In each case, an attempt was made to correct the curvature by first inducing an artificial erection and then placing one or two pairs of nonabsorbable, longitudinal plication sutures through the tunica albuginea on the convex side. The tension of the sutures was then adjusted until the penis appeared straight. Patients were followed up for a mean of 69.3 months.

Of the 68 patients who completed the post-operative evaluation, excellent penile straightening was achieved in 62 (91%) patients and a 'good' result (<15° residual curvature) was recorded in the remainder. Erectile function was unaffected in all but one of the patients. Shortening of the penis was reported by 26 (38%) patients but this caused dissatisfaction in only one case and overall patient satisfaction with the procedure was high.

Lee *et al.* conclude that corporeal plication was an effective and durable means of correcting penile curvature in these patients. They note, however, that patients considering surgery should be made aware of the potential drawback of penile shortening.

**Original article** Lee S-S *et al.* (2004) Congenital penile curvature: long-term results of operative treatment using the plication procedure. *Asian J Androl* 6: 273–276

## Incidence of vesicoureteral reflux in siblings

Siblings of children with vesicoureteral reflux (VUR) are at increased risk of developing the condition, but it is unclear whether all siblings should be screened. Some studies have shown a lower incidence of reflux in siblings over 5 years of age, and it has been suggested that cystogram screening should not be performed in these children unless they have a history of UTI or abnormal ultrasound. Ataei and colleagues have prospectively studied the incidence and severity of reflux in 40 siblings of 34 index patients, comparing the results from children aged 0–6 years with those over 6 years of age.

Once the index patients had been diagnosed with VUR, their siblings were screened with an awake vcuG or by direct radionuclide cystography. VUR was diagnosed in 17 (42.5%) of the siblings and the prevalence was similar in younger and older children. Seven children in this group had a history of symptomatic UTI. All but one of the VUR-positive children were further investigated by DMSA scintigraphy, which revealed abnormalities in 11 (68.8%) cases.

These findings challenge the view that older siblings are unlikely to suffer from reflux, and the authors suggest that children over 6 years of age will benefit from screening for the

### GLOSSARY

#### UTI

Urinary tract infection

#### VCUG

Voiding cystourethrogram

#### DMSA

Dimercaptosuccinic acid

condition, whether or not they have symptoms of UTI. The development of renal scarring in children with VUR may then be prevented using prophylactic antibiotic treatment or early ureteric reimplantation.

**Original article** Ataei N *et al.* (2004) Screening for vesicoureteral reflux and renal scars in siblings of children with known reflux. *Pediatr Nephrol* **19**: 1127–1131

## End-fire ultrasound probes in prostate cancer diagnosis

Transrectal ultrasound-guided biopsy is a widely accepted procedure in prostate cancer diagnosis, although little is known about the effects on the detection rate of different types of ultrasound equipment. Paul *et al.* hypothesized that end-fire ultrasound probes, which facilitate sampling in the most lateral part of the peripheral zone, would be superior to side-fire probes in the detection of smaller tumors. Their retrospective study comparing these two types of probe has recently been published.

A total of 2,625 patients underwent a first-time, systematic sextant biopsy using the Kretz Combisone side-fire probe, the Bruel & Kjaer Medical side-fire probe or the ATL HDI end-fire probe. The side-fire probes limited the prostate biopsy to a sagittal axis, whereas the end-fire probe allowed sampling in any section.

The overall prostate cancer detection rate (35.2%) was similar using all three probes. In a subgroup of patients with a PSA level of 4–10 ng/ml, however, the detection rate using the end-fire probe (31.3%) was statistically significantly higher than with either of the side-fire probes ( $P=0.01$ ). This was also the case in a further subgroup of patients with nonpalpable cancer.

In summary, the end-fire probe provided a higher prostate cancer detection rate in two patient subgroups, compared with the side-fire probes. The authors suggest that this was due to improved visualization of the lateral peripheral zone, in which most peripheral zone tumors occur.

**Original article** Paul R *et al.* (2004) Influence of transrectal ultrasound probe on prostate cancer detection in transrectal ultrasound-guided sextant biopsy of prostate. *Urology* **64**: 532–536

## Measuring urinary tract stones by computed tomography

The determination of urinary tract stone size is an important step in planning appropriate treatment. Although the introduction of computed tomography (CT) has improved the accuracy of such measurements, standard axial CT images may not allow precise estimations in the craniocaudal plane. Nadler *et al.* have investigated the use of coronal imaging as an additional approach.

The team reviewed CT images from 102 patients (151 stones) who had undergone routine abdominal imaging over a 9-month period. Axial images were used to measure the length and width of each stone. Measurement of craniocaudal length and width was then carried out using reconstructed, contiguous coronal images. Finally, the total area of each stone was calculated using both the axial and coronal images.

Significant differences were found between the axial and coronal measurements of stone size. The mean greatest stone dimension on axial imaging was 4.87 mm, compared with 6.51 mm on coronal imaging ( $P<0.0001$ ). Axial imaging also underestimated the mean stone area and overestimated craniocaudal length by comparison with the coronal measurements.

Concluding that axial imaging does not allow accurate measurement of stone dimensions, the authors recommend the addition of routine coronal imaging in this setting.

**Original article** Nadler RB *et al.* (2004) Coronal imaging to assess urinary tract stone size. *J Urol* **172**: 962–964

## Advanced refractory prostate cancer: new treatment trial

Men with metastatic, androgen-independent prostate cancer have a median survival of 1 year or less. Current treatment with mitoxantrone plus prednisone or hydrocortisone palliates bone pain in some patients, but no available therapies prolong survival. Phase I and II studies have shown improved survival in patients receiving docetaxel plus estramustine; Petrylak and colleagues have investigated this in a randomized, phase III trial.

A total of 770 men with metastatic, hormone-independent prostate cancer were prospectively enrolled in the study. Of 674 eligible patients, half were assigned to receive docetaxel plus