Letter to the Editor

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Re: Penetrating Ureteral Trauma

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Int Braz J Urol, 33: 142-150, 2007

To the Editor:

Penetrating ureteral injuries from external violence is rare, as evidenced by this report of 20 reported injuries over an 8 year period from Sao Paulo by Fraga et al. This article is another in a long line of papers, emphasizing that a high index of suspicion is needed to reliably diagnose ureteral injuries. Again, the majority of penetrating ureteral injuries are diagnosed intra-operatively, with direct exploration the most accurate method. Ureteral peristalsis is not a reliable indication of viability or of adequate vascularity. The most reliable way to determine ureteral viability is by incision and monitoring for a bleeding edge. Intravenous indigo carmine is also helpful in identifying ureteral injury by extravasation of blue dye from the injury site. Another method to test ureteral integrity is by cystotomy and retrograde injection of blue dye by pediatric feeding tube.

Although none of the patients studied here underwent imaging prior to surgical exploration, intravenous urography is often the primary imaging study employed to evaluate ureteral integrity, yet results can be very variable. IVU findings suggestive of ureteral injury are incomplete visualization of the entire ureter, ureteral deviation or dilatation, urinary extravasation, hydronephrosis, and delayed or non-visualization of the injured renal unit. One-shot IVU, however, has little value for assessing ureteral integrity. (1)

For the unstable patient, the method of "damage control" was not employed or mentioned in this article on ureteral injuries. Typically, when the patient is too unstable to undergo lengthy ureteral reconstruction, a "damage control" approach of temporary cutaneous ureterostomy over a single "J" ureteral stent or pediatric feeding tube should be performed (2). An alternative method of last resort is ureteral ligation, proximal to the injury, followed by a percutaneous nephrostomy tube when stable. Intraoperative placement of a nephrostomy tube is time consuming and more difficult then one appreciates – it should be avoided. Definitive reconstruction is delayed until the patient has stabilized from his other injuries.

References

1. Brandes SB, Chelsky MJ, Buckman RF, Hanno PM: Ureteral injuries from penetrating trauma. J Trauma. 1994; 36: 766-9.
2. Coburn M: Damage control and urologic injuries. Surg Clin N Am. 1997; 77: 821-34.

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Re: Perineural Invasion by Transitional Cell Carcinoma of the Bladder in Patients submitted to Radical Cystectomy: What is the Prognostic Value?

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Int Braz J Urol, 33: 161-166, 2007

To the Editor:

The paper by Antunes et al. is an excellent contribution to a controversial issue: the importance of perineural invasion as a prognostic factor for bladder cancer after radical cystectomy. The relationship between perineural invasion and prognosis has been demonstrated to be poor in a number of malignancies. Particularly in the prostate, perineural invasion may have importance as a predictor of extraprostatic extension. In the bladder, controversy exists on whether the pathologic features of vascular (blood and/or lymphatic), and perineural invasion have any role as prognostic indicators. In a study cited by Antunes et al., on univariate analysis lymphatic, blood vessel and perinerual tumor invasion showed strong prognostic significance. However, on multivariate analysis only blood vessel invasion, invasion depth and regional lymph node status were independent prognostic factors (1). In another paper also cited by Antunes et al., univariate analysis revealed that vascular invasion, lymphatic invasion, and perineural invasion were significant prognostic predictors of overall survival. However, only the tumor stage and vascular invasion proved to be independent prognostic predictors of disease-specific survival on multivariate analysis (2). Independent of the controversy, in my opinion vascular and perineural invasion in vesical cancer should be commented on the pathology report.

References

1. Leissner J, Koeppen C, Wolf HK: Prognostic significance of vascular and perineural invasion in urothelial bladder cancer treated with radical cystectomy. J Urol. 2003; 169: 955-60.
2. Hong SK, Kwak C, Jeon HG, Lee E, Lee SE: Do vascular, lymphatic, and perineural invasion have prognostic implications for bladder cancer after radical cystectomy? Urology. 2005; 65: 697-702.

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Re: Dorsal Onlay Buccal Mucosal Graft Urethroplasty in Long Anterior Urethral Stricture

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Int Braz J Urol, 33: 181-187, 2007

To the Editor:

In this review of 43 patients with long anterior urethral stricture, the authors evaluated urethral reconstruction using dorsal onlay buccal mucosa graft with very high success rate.

I agree that ventral graft revascularization seems less reliable then dorsally securing a graft with quilting stitches to the corpora cavernosa. From a personal experience, dorsal onlay provides better visualization and less bleeding, especially for bulbar urethral part.

However, there are some issues that should be point out. It is unusual that idiopathic stenosis was the most frequent cause of stricture in their series; I suppose that most of these are uncovered lichen sclerosis and infectious etiology. I think that "simple technique" could be applied before for ventral grafting; dorsal onlay grafting, especially in very long strictures is a very sophisticated method, which requires great experience and dexterity to ensure successful outcome without serious complications. Despite great experience, the authors mentioned the need for blood transfusion in two patients, which proves that in the hands of less experienced surgeons this can be a very dangerous procedure. The authors mentioned 16 cases of panurethral strictures and the stricture length ranged from 3-9 cm; I wonder are these cases of very short penises or the stricture did not involve whole anterior urethra. In panurethral stenoses, the graft should be as long as the penis in erect state, otherwise, postoperative ventral penile curvature as well as penile shrinkage could occur. Thus, inlaying should be in stretched or even better in erect penis.

Normal urethral stricture limits, which are determined during surgical reconstruction based on macroscopic aspect only, are not always sufficient to determine normal urethral part. Microscopic studies on presumed healthy urethral ends showed structural changes, fibrosis, which is probably the cause of residual anastomotic stenoses.

Also, we use postoperative suprapubic urinary drainage in all of our patients. Repaired urethral part is stenting by 10F fenestrated stent for 7 days for two reasons: postoperative graft wetting as well as to enable evacuation of sperm in young patients due to nocturnal ejaculations. Since the sperm is the main reason for infection, we advise to all of our patients to void once after ejaculation in order to clean urethra.

Despite these few criticism and comments, I nevertheless congratulate the authors for their experience with dorsal onlay buccal mucosa graft urethroplasty in long anterior urethral strictures.

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Re: Results of Novel Strategies for Treatment of Wilms' Tumor

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Int Braz J Urol, 33: 195-203, 2007

To the Editor:

Multimodality treatment, including chemotherapy, has resulted in a significant improvement in the survival of children with Wilms' tumor (WT), from approximately 30% in the 1930s to more than 85% in the modern era (1). This excellent work by Tucci and associates shows the results of treatment of 53 children with WT, that were treated according to protocols of the Brazilian Wilms' Tumor Study Group, exception made to16 cases with stage I tumor, who received a short duration postoperative treatment with vincristine. This group of patients showed a disease-free survival rate of 100% in a median time of 101 months. On the other hand, the overall and disease-free survival of 10 patients with recurrent WT at 5 years was only 42.8%.

The results of this report are comparable to others in the literature, that support the use of less-aggressive adjuvant chemotherapy for patients with low stage disease (1,2) . As most children in this group had favorable histology, no conclusion can be obtained regarding the influence of this important aspect, since favorable histology seems to be another factor that enables stratification of patients for a reduced chemotherapy in all stages of the disease, including stage-1 (2).

The authors also describe unsuccessful results of re-treatment of children who relapse after initial treatment. More recent works, however, show a significant improvement of long term survival (up to 60%) in such patients who are treated with intensive-dose salvage chemotherapy regimes including ifosfamide, carboplatin and etoposide, as well as autologous hematopoietic stem-cell rescue (3).

Further improvement in adjuvant therapy regimes can also be obtained by neoadjuvant chemotherapy, that concomitantly enables a technically easier and safer surgical removal of the tumor, without the risks and hazards of tumor spilage (4,5).

The aim of clinical trials nowadays is to reduce chemotherapy for children with low-risk tumors, therefore reducing its side effects, and to improve it in patients with high-risk Wilms' tumor, including those with anaplastic, bilateral and recurrent tumors (1,6).

References

1. Spreafico F, Bellani FF: Wilms' tumor: past, present and (possibly) future. Expert Rev Anticancer Ther. 2006; 6: 249-58.
2. Dome JS, Cotton CA, Perlman EJ, Breslow NE, Kalapurakal JA, Ritchey ML, et al.: Treatment of anaplastic histology Wilms' tumor: results from the fifth National Wilms' Tumor Study. J Clin Oncol. 2006; 24: 2352-8.
3. Green DM, Cotton CA, Malogolowkin M, Breslow NE, Perlman E, Miser J, et al.: Treatment of Wilms tumor relapsing after initial treatment with vincristine and actinomycin D: a report from the National Wilms Tumor Study Group. Pediatr Blood Cancer. 2007; 48: 493-9.
4. Duarte RJ, Denes FT, Cristofani LM, Odone-Filho V, Srougi M: Further experience with laparoscopic nephre-

ctomy for Wilms' tumor after chemotherapy. BJU Int. 2006; 98: 155-9.
5. Mitchell C, Pritchard-Jones K, Shannon R, Hutton C, Stevens S, Machin D, et al.: Immediate nephrectomy versus preoperative chemotherapy in the management of non-metastatic Wilms' tumour: results of a randomised trial (UKW3) by the UK Children's Cancer Study Group. Eur J Cancer. 2006; 42: 2554-62.
6. Gommersall LM, Arya M, Mushtaq I, Duffy P: Current challenges in Wilms' tumor management. Nat Clin Pract Oncol. 2005; 2: 298-304.

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Re: Prevalence and Associated Factors of Enuresis in Turkish Children

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Int Braz J Urol, 33: 216-222, 2007

To the Editor:

In this article, the authors aimed to determine the prevalence and associated factors of enuresis in Turkish children and tried to identify common methods of enuresis management. The sample was drawn using a short but detailed and clear questionnaire distributed to the parents of 1,500 school children aged 6-12 years, covering five schools selected randomly, with a high response rate (89%).

Although their overall prevalence of nocturnal enuresis is apparently comparable with previously published epidemiological surveys, the importance of the study is that it demonstrates that enuresis is a frequent disorder in childhood, also in Turkey, although many medical doctors and parents still underestimate this issue. The traditional concept is that most cases of enuresis are caused by a developmental immaturity of voiding control, and most enuretic children will ultimately acquire normal control with increasing age.

The authors stated that the prevalence of enuresis decreased with age; of the 6-year-old children, 30.8% still wetted their beds, while none of those aged 12 years did so. These results might suggest a very high spontaneous resolution rate but the figures have to be interpreted with caution since only a small number of children in the age group 6 and 12 (n = 13 and 34 respectively) are a major limitation of this study.

The authors refer to the classical study of Forsythe et al. which dates from 1974 showing a spontaneous cure rate of 14% annually between the ages of 5 and 9, and 16% between 10 and 19 years (1). Recently however, Yeung et al. reported no significant drop in prevalence after the age of 10 (2). As age increases there are an increasing proportion of enuretic patients with more severe bedwetting. Enuretic children aged more than 10 years and adolescents, have significantly more daytime urinary symptoms and incontinence compared to younger children (3). Patients with severe symptoms are much more likely to have persistent problems into adulthood. Consequently, it seems that spontaneous cure only applies to patients with rather mild enuretic symptoms. This argues against an expectant and conservative approach towards enuresis. Therefore we are convinced that these recent findings have major clinical implications for both primary and secondary care centers. First of all, enuresis in children aged more than 10 years and adolescents is complex in nature and also in treatment, and therefore these patients should be referred instantly. Second, children with severe or not monosymptomatic nocturnal enuresis have a much lower spontaneous cure rate than generally accepted, making a policy of waiting with appropriate treatment not longer defendable.

References

1. Forsythe WI, Redmond A: Enuresis and spontaneous cure rate. Study of 1129 enuretis. Arch Dis Child. 1974; 49: 259-63.
2. Yeung CK, Sihoe JD, Sit FK, Bower W, Sreedhar B, Lau J: Characteristics of primary nocturnal enuresis in adults: an epidemiological study. BJU Int. 2004; 93: 341-5.
3. Yeung CK, Sreedhar B, Sihoe JD, Sit FK, Lau J: Differences in characteristics of nocturnal enuresis between children and adolescents: a critical appraisal from a large epidemiological study. BJU Int. 2006; 97: 1069-73.

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REPLY BY THE AUTHORS

Previous studies demonstrated that the prevalence of enuresis tends to decrease with increasing age, and it was more common in boys than in girls. Similarly, in the present study, 30.8% of the children were wetting their beds at 6-years-old whereas none of them was wetting their beds at 12-years-old. However, as outlined in the discussion section, a small number of children in the groups of 6-years-old (n = 13) and 12-years-old (n = 34) was the limitation of our study.

Dr JL Dehoorne states that enuresis prevalence did not decrease after 10-years-old and with the increasing age the prevalence of severe enuresis increases, referring to the study of Yeung et al. On the other hand, in our study, severe enuresis (bedwetting everyday) rate was 33%, nevertheless, enuresis prevalence decreased with increasing age. Similarly, Serel et al. (1) reported severe enuresis prevalence as 26% and enuresis prevalence at age 7 and 12, as 15.1% and 4% respectively. Kanaheswari

et al. (2) demonstrated that the prevalence of bedwetting 2 or more times a week was 54.4%. In their study, they concluded that the rate of enuretic children decreased significantly with increasing age.

We believe that enuresis prevalence decreases as the child grows, however, severe enuresis is a different situation that could be managed separately.

References

1. Serel TA, Akhan G, Koyuncuoglu HR, Ozturk A, Dogruer K, Unal S, et al.: Epidemiology of enuresis in Turkish children. Scand J Urol Nephrol. 1997; 31: 537-9.
2. Kanaheswari Y: Epidemiology of childhood nocturnal enuresis in Malaysia. J Paediatr Child Health. 2003; 39: 118-23.

Re: Prevalence and Associated Factors of Enuresis in Turkish Children

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Int Braz J Urol, 33: 216-222, 2007

To the Editor:

Authors investigated the prevalence of nocturnal enuresis and associated factors of enuresis in Turkish children. The response rate was 89% and overall prevalence of nocturnal enuresis and diurnal enuresis were 17.5% and 1.9%, respectively. Some factors were associated with enuresis. They concluded that the prevalence of nocturnal enuresis in Turkish children was not different form others and that families do not have sufficient attention about enuresis.

First of all, it is hopeful to follow the standardization of terminology of lower urinary tract function in children and adolescents 1, to make it easier to compare studies and decrease confusion among researchers. The report 1 recommended that the ambiguous term diurnal enuresis should be avoided. Second, when conducting a questionnaire survey, it must be important to use a validated and reliable questionnaire. The major problem, here, is whether the questionnaire was a validated and reliable one or not, to evaluate lower urinary tract symptoms in children. Most of the questionnaire surveys have the same drawbacks as this one: the use of unvalidated questionnaires and no comparative data. Sureshkumar et al. reported the validity and reliability of a questionnaire 2.

Third, there is no consensus about a simple question that should complete the questionnaire; parents, children or both? In general, it is not so straightforward to evaluate nocturnal enuresis and overactive bladder symptoms accurately in children. For children, it is too difficult to assess the presence of urgency and to count the episodes of nocturnal enuresis and the frequency of daytime voiding. On the other hand, as authors concluded, parents may be unable to report their child's frequency of daytime voiding, presence of urgency and incontinence, and even episodes of nighttime urinary incontinence until

they have a chance to observe the child at home and complete a bladder diary. A bladder diary could be an important adjunctive measure to objectively assess these and other parameters.

In conclusion, terminology and a bladder diary could be a useful tool when a questionnaire survey about lower urinary tract symptoms in children was conducted.

References

1. Neveus T, von Gontard A, Hoebeke P, Hjalmas K, Bauer S, Bower W, et al.: The standardization of terminology of lower urinary tract function in children and adolescents: report from the Standardisation Committee of the International Children's Continence Society. J Urol. 2006; 176: 314-24.
2. Sureshkumar P, Cumming RG, Craig JC: Validity and reliability of parental report of frequency, severity and risk factors of urinary tract infection and urinary incontinence in children. J Urol. 2006; 175: 2254-62.

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Re: Surgical Technique Using AdVance™ Sling Placement in the Treatment of Post-Prostatectomy Urinary Incontinence

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Int Braz J Urol, 33: 231-237, 2007

To the Editor:

The publication of this article follows the recent increase in interest for new minimally invasive solutions in the treatment of post-prostatectomy incontinence (PPI). The authors present a new technique to treat PPI using a polypropylene monofilament mesh via a transobturator approach. The surgical technique is described in detail and so far, 4 patients have been treated. There is no information about postoperative outcomes.

Patient selection was restricted to mild to moderate PPI, using 3 pads/day on average. Although the artificial urinary sphincter (AUS) is considered the gold standard in the treatment of PPI, there is a need for more minimally invasive treatment options for two reasons. First, many patients do not want to undergo a surgical intervention associated with a reoperation rate up to 37% within 10 years (1). Second, many patients suffer from a mild to moderate incontinence due to an intrinsic sphincter deficiency (ISD) which can be well treated with a less invasive treatment and lower morbidity. Furthermore, if treatment fails an AUS can be implanted in a second stage.

Minimally invasive procedures for PPI consist of bulking agents, readjustable periurethrally implanted balloons (ProAct®), perineal bone-anchored male slings (Invance®), readjustable retropubic slings (Argus®) and the newly presented transobturator sling (Advance®). Except the AUS all minimally invasive procedures have the limitation that compression can only be exerted in one direction which has to be similarly appropriate for continence and micturition (2-5). This limitation applies also to the transobturator sling.

After radical retropubic prostatectomy the Retzius' space is scarred due to dissection of the prostate. One major advantage of the transobturator approach is that bladder perforation can be avoided which is more likely using the retropubic approach.

The most important issue in male slings seems to be finding the force of compression on the urethra to develop continence and to enable micturition. In this context the transobturator sling shifts the bulbar urethra cranially and serves more as a suspension rather than a compression. The idea behind this sling is to mimic the rectourethralis muscle. Interestingly, after placing the sling a minimal gap remains between the sling and the bulbar urethra giving the impression that the urethra is less or not compressed. A sophisticated tensioning of the sling is not necessary during the procedure.

It should be considered that the transobturator sling is not readjustable. Further studies are needed to determine whether there is a need for a readjustable sling to maintain continence in the course of several months.

Despite these limitations, the transobturator sling poses a promising option in the field of minimal invasive treatment of post-prostatectomy incontinence.

References

1. Venn SN, Greenwell TJ, Mundy AR: The long-term outcome of artificial urinary sphincters. J.Urol. 2000; 164: 702-6.
2. Comiter CV: The male perineal sling - a viable alternative to the artificial urinary sphincter. Nat.Clin.Pract.Urol. 2006; 3: 118-9.
3. Hubner WA, Schlarp OM: Treatment of incontinence after prostatectomy using a new minimally invasive device: adjustable continence therapy. BJU Int. 2005; 96: 587-94.
4. Romano SV, Metrebian SE, Vaz F, Muller V, D'Ancona CA, Costa de Souza EA, Nakamura F: An adjustable male sling for treating urinary incontinence after prostatectomy: a phase III multicentre trial. BJU Int. 2006; 97: 533-9.
5. Trigo-Rocha F, Gomes CM, Pompeo AC, Lucon AM, Arap S: Prospective study evaluating efficacy and safety of Adjustable Continence Therapy (ProACT) for post radical prostatectomy urinary incontinence. Urology. 2006; 67: 965-9.

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