

CT urography protocol is possible. Since CT urography is still an evolving technique we believe that further improvement of an optimized protocol will be developed very soon.

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UROGENITAL TRAUMA

Traumatic rupture of the urinary bladder: is the suprapubic tube necessary?

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Background: Although surgical principles are well accepted for the treatment of an intraperitoneal or extraperitoneal rupture of the urinary bladder, the type and number of drainage catheters needed to obtain a satisfactory outcome with minimal patient morbidity have yet to be determined.

Methods: This was a retrospective review of data on injured patients with the diagnosis of an intraperitoneal or extraperitoneal rupture of the urinary bladder from penetrating or blunt trauma.

Results: Of the 51 patients identified, 28 were treated with suprapubic and transurethral catheters, whereas 23 received a transurethral catheter only. Complications and catheter duration times were similar regardless of type of bladder injury or drainage catheter used ($p > 0.5$).

Conclusion: These data suggest that there are similar outcomes and complication rates for patients treated with suprapubic and transurethral catheters versus transurethral catheter only. Transurethral catheters alone seem effective in draining all types of bladder injuries.

Editorial Comment

For many years, by habit, many of us have been placing suprapubic tubes (SPT) at the time of open bladder repair. However, this is only one of many papers that advocate using only a urethral catheter alone in these patients (1-3). It appears that using a urethral Foley catheter alone allows for low complications with minimal morbidity. The rate of urinary tract infection, in this study at least, is identical between both groups. In no cases in this small group of 51 patients did a patient seem to “require” the SPT (either as a “safety valve” or to facilitate irrigation).

Although I agree that most bladder injuries may be treated with urethral catheterization alone, there are some theoretical benefits to using a SPT. Patients with SPTs get their urethral catheters removed 11 days earlier in this series (with continued drainage via SPT), which may be more comfortable for the patient. Also, the suprapubic catheter allows for a theoretic “safety valve” if the urethral catheter becomes clogged or inadvertently dislodged, although this was not necessary in this series.

There are probably some uncommon cases where a suprapubic tube would be prudent. In cases of severe ongoing hematuria which is observed in the operating room, or in cases of truly devastating bladder injuries (such as close range shotgun wounds to the bladder), an SPT might help to maximize bladder drainage, especially in the unrepairable or unreliably repaired bladder. Otherwise, the data is clear: after bladder repair, consider using just a urethral catheter. We tend to use a 2-way catheter, as we feel that continuous bladder

irrigation is improper in a recently repaired bladder, but the authors of this study place a 3 way Foley and do use continuous bladder irrigation when necessary.

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Straddle injuries to the bulbar urethra: management and outcomes in 78 patients

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Purpose: We describe our experience with blunt straddle injuries to the anterior urethra and identify factors that may affect patient outcome.

Materials and Methods: We reviewed the San Francisco General Hospital Urologic Trauma data base to identify men with blunt straddle injury. We analyzed presentation and initial management, location and length of urethral stricture, surgical options, and long-term outcome after reconstruction.

Results: Of 78 patients, 40% presented to the emergency department acutely and 60% presented 6 months to 10 years after injury complaining of obstructive symptoms, of whom 30% reported at least 1 episode of urinary retention. Initial acute management was suprapubic cystostomy in 81% of cases and primary realignment in 19%. Urethral strictures were predominantly located in the proximal bulb. Mean stricture length was significantly longer in men with delayed presentation (2.7 vs 1.8 cm, $p < 0.05$). No relationship was found between stricture length and the mechanism of injury or initial management technique. However, patients who had undergone primary realignment required complex flap or graft urethroplasty at a greater rate compared with men who had undergone suprapubic diversion ($p = 0.054$). Transperineal urethroplasty was required in 92% of patients with the majority undergoing end-to-end anastomosis. The success rate was 95% at a mean followup of 25 months (range 10 to 180). Recurrent stricture occurred in 4 men with prior urethral manipulation and it was managed successfully by direct vision internal urethrotomy alone.

Conclusions: After blunt straddle injury to the perineum the primary morbidity is anterior urethral stricture, for which suprapubic cystostomy is appropriate initial management. The majority of patients require surgery but with careful preoperative planning and adequate resection of fibrotic tissue the long-term success rate can approach 95%. If it arises, recurrent stricture responds well to direct vision internal urethrotomy alone.

Editorial Comment

Acute, blunt posterior urethral injuries, I believe, have ample data in the literature to support early endoscopic realignment over a catheter instead of suprapubic tube placement. I was surprised to see that in this series, acute realignment of significant acute blunt anterior urethral injuries was certain no better and potentially worse than suprapubic urinary diversion.

Seventy-eight patients are reported here, of which roughly half present acutely and half present long after the injury (all of these late cases had urethral stricture). Nine percent of those treated with urinary diversion required urethroplasty and 17% of those treated with primary catheter realignment needed surgery ($p =$ not significant). More importantly, the length of the stricture seemed to be much longer on those managed with a urethral catheter ($p < 0.5$). The reason for this is unclear, and explanations involving “damage to the corpora spongiosum” are usually invoked in the literature. No matter what the reason, the data appears reasonably robust to suggest that acute catheter realignment of these injuries is not a good idea.

Of note, this article, which deals with blunt injury, should not be confused with previously printed works concerning penetrating anterior urethral trauma. This, too, is controversial with some advocating immediate repair and others advocating suprapubic diversion alone.

Although it will be psychologically difficult for me to avoid early urethral realignment of anterior strictures over a catheter (as I so strongly believe that it helps greatly in posterior urethral stricture) this and other series seem to indicate that suprapubic diversion may be the better option.

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PATHOLOGY

Fat invasion in ten-core prostate needle biopsies: incidence, biopsy and clinical findings

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Background: Presence of prostate cancer in the periprostatic adipose tissue signifies an advanced disease if seen on radical prostatectomy (stage pT3a). The significance of fat invasion on needle-core biopsies has not been well studied. The aim of the study is to investigate the incidence of the fat involvement and the associated clinical and biopsy findings on ten-core needle biopsy.

Design: From 07/00 to 12/01, 1,017 patients demonstrated prostate cancer on ten-core needle biopsy in our centralized Urological Pathology for the Calgary Health Region. The clinical and pathology data for all patients have been collected in our prostate cancer database. Fat involvement on one or more biopsy cores has been reported in 23 patients. Only one patient had undergone a radical prostatectomy in our institution until 09/03. All biopsies reported as positive for fat involvement and the prostatectomy specimen were reviewed.

Results: The incidence of fat involvement on needle biopsy was 2.2%. Most common site of fat involvement was the prostatic base (83%) and in 9/23 (39%) patients' fat involvement was present in more than one site. The patients mean age was 70.1 years (range 57-83). Digital rectal examination and ultrasound findings were abnormal in 14/24 (58%) and 12/24 (50%) patients, respectively. Mean serum PSA was 52.3 ng/ml (median 15.55) and mean PSA density was 2 .1 (median 0.45). Prostatic carcinoma was bilateral in 19/23