

preoperative protocol for the MDCT examination in order to demonstrate this anatomic variation which will allow usefull information for conservative renal surgery and endopyelotomy.

Dr. Adilson Prando
*Department of Radiology
Vera Cruz Hospital
Campinas, São Paulo, Brazil*

UROGENITAL TRAUMA

Self-expanding metallic stent placement for renal artery dissection due to blunt trauma

Inoue S, Koizumi J, Iino M, Seki T, Inokuchi S
Department of Emergency Medicine, Tokai University School of Medicine, Isehara
City, Kanagawa, Japan
J Urol. 2004; 171: 347-8

Case Report: No abstract available

Editorial Comment

Reports in the literature concerning the successful treatment of blunt renal artery injury with endovascular methods are rare (3 cases in the literature). Endovascular treatments are very tempting, because open repair can be both dangerous and futile, with a high rate of post-surgical thrombosis. Also, most patients with open arterial repairs would be treated with anticoagulants to decrease the potential for postoperative thrombosis, although this is often not possible in a trauma population. The authors of this case report discuss a patient with a traumatic intimal tear of the renal artery which caused both renal hypoperfusion and renovascular hypertension, who was treated with placement of a wallstent in the artery. Renal perfusion improved immediately and the hypertension subsided. The authors gave heparin 10,000 IU for 48 hours followed by aspirin and the phosphodiesterase III inhibitor (cilostazol) for 3 months. The patient suffered no bleeding, which was surprising as she had liver and bilateral lung contusions. Although these authors show that endovascular treatment of significant traumatic renal artery stenosis is possible I believe that (although tempting) it likely remains impractical for the majority of out trauma patients whom we are unwilling to fully anticoagulate after their injury. Interventional radiology physicians also remain wary of placing stents in injured vessels because of the concern of artery rupture or stent migration, causing catastrophic bleeding (although these authors advocate both endoluminal ultrasound and the use of a long stent to make sure the entire injured portion is stented properly). Perhaps the future will bring an endoluminal arterial stent technology that won't require systemic anticoagulation. Until then, this potentially risky treatment will remain experimental at best.

Dr. Richard A. Santucci
*Assistant Professor of Urology
Wayne State University
Detroit, Michigan, USA*

Management of trauma to the male external genitalia: the usefulness of American Association for the Surgery of Trauma organ injury scales

Mohr AM, Pham AM, Lavery RF, Sifri Z, Bargman V, Livingston DH

Department of Surgery, University of Medicine and Dentistry of New Jersey - New Jersey Medical School, Newark, 07103, USA

J Urol. 2003;170 (6 Pt 1): 2311-5

Purpose: Injury to the male external genitalia is rare and, therefore, there are little data in the literature regarding the options for nonoperative management and outcome. To assist in defining the indications for nonoperative management the usefulness of the American Association for the Surgery of Trauma (AAST) organ injury scales for these injuries was examined.

Materials and Methods: We retrospectively reviewed the medical records of 116 male patients with trauma to the external genitalia in a 10-year period and classified injuries according to the organ injury severity scales (scrotum, testis, penis and urethra) of the AAST. Based on AAST grading management and outcome was reviewed.

Results: Mean patient age was 28 years and 79% of the injuries were due to gunshot wounds. A total of 87 patients (75%) underwent surgery, while 27 penile injuries and 8 scrotal/testicular injuries were managed nonoperatively. There were 54 scrotal explorations, 33 testicular injuries and 20 orchiectomies (bilateral in 1) for a testicular salvage rate of 39%. Documented followup by the trauma or genitourinary service was achieved in 47 of 110 survivors. No patient reported impotence or difficulty with fertility.

Conclusions: The AAST grading for male external genital trauma readily characterizes patients with high grade injuries that require operative management as well as select patients in whom injury can be safely managed nonoperatively.

Editorial Comment

The AAST organ injury severity scale has been previously validated for only 1 of the 9 genitourinary systems that are described (kidney). This report of 116 male patients with external genital injury (penile, testicular, urethral and scrotal) seems to indicate that this organ injury severity scale does generally correlate to the severity of injury and the need for surgery. Although larger, perhaps multicenter, trials will be required to provide the required statistical power to convincingly validate all 5 grades of the 4 scales examined (penis, testicle, scrotum, urethra), this study showed a trend towards nonoperative management of lower grade penile, scrotal and testicular injuries. Nonoperative management was possible in 100% Grade I, 75% Grade II, 29% Grade III, and 0% Grade IV penile injuries. Likewise, nonoperative treatment was possible in 66% Grade I, 83% Grade II, 0% Grade III and 0% Grade IV scrotal injuries. Finally, nonoperative treatment of 22% Grade I, 35% Grade II, 9% Grade III and 0% Grade IV testicular injuries was possible. Urethral injuries were uncommon, but generally required repair except in a few cases.

From this we can see that minor penile injuries are most amenable to conservative management, followed by scrotal injuries and then testicular injuries. The treatment of urethral injuries remains controversial in the literature, and a trend towards operative repair in this series mirrors modern thinking on this subject.

Although this series had a large volume of penetrating (and thus more “serious”) testicular injuries, their testicular salvage rate of 33% seems very low, and it is possible that more judicious tubule debridement and capsular closure even in those testicles with up to 60% destruction might have improved their outcome. This low rate of salvage also likely reflects the fact that many patients were simply not operated on, leaving only the worse cases for exploration.

The conclusion is that the AAST injury severity scale for male external genitourinary injuries now has some initial validation, but more work must be done. Also, the trend towards nonoperative management of injuries of all varieties may be finding some support among serious but selected external genital injuries.

Dr. Richard A. Santucci
Assistant Professor of Urology
Wayne State University
Detroit, Michigan, USA

PATHOLOGY

Benign urothelial papilloma of the bladder: a review of 34 de novo cases

Magi-Galluzzi C, Epstein JI

The Cleveland Clinic Foundation, Cleveland, OH, and The Johns Hopkins Hospital, Baltimore, MD, USA

Mod Pathol. 2004; 17 (suppl 1): 165A

Background: Urothelial papilloma of the bladder is an uncommon entity that represents less than 3% of papillary urothelial neoplasms, when using restrictive diagnostic criteria. The biologic potential of urothelial papilloma of the bladder is uncertain as there are only limited studies published on this issue.

Design: We retrospectively studied 34 patients who were diagnosed with urothelial papilloma of the bladder at one of our institutions between 1989 and 2002. Six cases were in-house and the remaining 28 were referred from other institutions as consults to one of the authors. In all cases, the diagnosis of papilloma was the first manifestation of urothelial neoplasia. All histologic slides were reviewed and met the diagnostic criteria of the 1998 WHO / ISUP classification system.

Results: The mean age of the patients at diagnosis was 57.8 (range, 23-87 years). The male-to-female ratio was 2.4:1 (24 males and 10 females). The tumor size ranged from one 2X to one 40X microscopic field. Some of the distinctive histological features seen were changes in the umbrella cells: vacuolization (4); prominence with cytological atypia (2); eosinophilic cuboidal morphology (1); hobnail morphology (1); and mucinous metaplasia (1). Also noted in 3 cases was prominent edema of the fibrovascular stalks mimicking polypoid cystitis. Follow-up was available in 26 cases with a mean follow-up for those without evidence of progression of 28.9 months (range, 3-127 months). Three patients (8.8%) developed recurrent papilloma 4, 15 and 18 months after the initial diagnosis of papilloma; one of these patients also showed progression to noninvasive low grade urothelial carcinoma at the time of recurrence (15 months). Three patients (8.8%) progressed to higher grade disease: 2 to noninvasive low grade urothelial carcinoma (11 and 15 months after the original diagnosis) and 1 to a papillary urothelial neoplasm of low malignant potential at 104 months and a noninvasive low grade urothelial carcinoma at 141 months from the initial diagnosis of papilloma. None of the patients demonstrated progression to either lamina propria (T1) or muscularis propria (T2) invasion. Two patients died for unrelated causes. None of the patients died of bladder cancer.

Conclusions: Patients with urothelial papillomas have a low incidence of recurrence and rarely progress to develop urothelial carcinoma. It seems reasonable to avoid labeling these patients as having cancer. It remains to be studied whether and when patients with papillomas who have no evidence of recurrence or progression no longer need to be followed.