The authors found that relaxation mechanisms of urethral striated and smooth muscle during reflex bladder contractions are impaired in diabetes mellitus. They proposed that this defect coupled with bladder hypoactivity could result in inefficient voiding and bladder overdistention in diabetes mellitus. The authors also proposed that therapy with L-arginine might be useful for partially restoring the urethral relaxation mechanism in diabetes mellitus.

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RECONSTRUCTIVE UROLOGY

Sexual behavior and sexual function of adults after hypospadias surgery: a comparative study

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Purpose: We assessed sexual behavior and sexual function in adults operated on for hypospadias.

Materials and Methods: Long-term psychosexual adjustment was assessed with a standardized questionnaire which was mailed to 57 patients with hypospadias older than 18 years and 60 age matched normal control subjects.

Results: A total of 37 patients with hypospadias and 39 controls participated. Self-reported strength of libido on a scale of 1 to 5 was shown to be similar in the 2 groups. Patients with hypospadias did not have problems in achieving erection and average self-rated quality of erection ranging from 1 to 5 was the same as that of controls (mean value 4.5). Patients with hypospadias noted curvature in a downward direction in a significantly higher proportion compared to controls (40% vs 18%, respectively). There were 13 patients with hypospadias who had ejaculation difficulties, of whom 6 had spraying and 7 had only dribbling of ejaculate. Patients with hypospadias masturbated significantly less often, were significantly less sexually active and had a smaller total number of sexual partners compared to control subjects. Control subjects were significantly more completely satisfied with their sexual life compared to patients with hypospadias (76.92% vs 51.35%, respectively).

Conclusions: Sexual function of patients who underwent surgery for hypospadias in general is not affected. However, there is clearly a difference in certain aspects of sexual behavior between patients with hypospadias and controls. Followup and adequate counselling of patients who underwent surgery for hypospadias in adult life is necessary.

Editorial Comment

This is a nice paper dealing with late functional aspects after early hypospadias repair. Most of the previous papers are dealing with the results regarding general appearance and urethral function in the first few years after the reconstruction. Few authors, however, thought about consequences on sexual behaviour and sexual function in adulthood.

The authors studied 57 men between the age of 20 and 45 (mean age 27 yrs) who were treated surgically for hypospadias 2 to 15 yrs prior to the study. Several aspects of sexual behaviour and function were compared with an age matched control group of 39 men. There was no significant difference with regards to sexual function between the 2 groups. However, men with a previous surgery for hypospadias were less sexually active, with a smaller total number of sexual partners and a decreased overall satisfaction of their sexual life compared to control subjects. Whether this was related to a downward direction of the penis, ejaculation difficulties or a reduced penile size in a significantly higher proportion of the patients or whether some differences in hormonal values might have played a role could not be answered in this paper.

Despite some positive aspects in the outcome with regards to sexual function of patients with hypospadias repair we as reconstructive surgeons should be aware of possible improvements of surgical techniques such as penile length and diameter in order to avoid some of the problems in later sexual behaviour and cosmetics as here outlined.

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Incidence and location of prostate and urothelial carcinoma in prostates from cystoprostatectomies: implications for possible apical sparing surgery

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Purpose: Prostatic carcinoma (Pca) at cystoprostatectomy is usually an incidental finding with the majority thought to be clinically insignificant. Most studies have not specifically addressed the location of Pca or the incidence and location of in situ or invasive urothelial carcinoma (Uca) in prostates of cystoprostatectomy specimens. The frequency of involvement of the apex with these processes has clinical implications. Specifically urinary continence following orthotopic diversion may be enhanced by prostate apical sparing. In this study the pathological features of Pca and Uca, and the frequency of apical involvement were investigated in prostates from cystoprostatectomy specimens.

Materials and Methods: Whole mounted prostates from 121 consecutive cystoprostatectomy specimens were analyzed. Pca location, tumor volume, grade, stage, surgical margin and pelvic lymph node status of Pcas were assessed. Clinically insignificant Pcas had a volume of less than 0.5 cc without Gleason pattern 4, extracapsular extension, seminal vesicle invasion, lymph node involvement or positive surgical margins. Prostate involvement by Uca or urothelial carcinoma in situ (CIS)/severe dysplasia and its location were assessed.

Results: Of 121 prostates 50 (41%) had unsuspected Pca, of which 24 (48%) were clinically significant. Of Pcas 30 of 50 (60%) involved the apex, including 19 of 24 (79%) that were significant and 11 of 26 (42%) that were insignificant. Of 121 prostates 58 (48%) had Uca involving the prostatic stroma, noninvasive Uca or urothelial CIS/severe dysplasia in the prostatic urethra or periurethral ducts, of which 19 (33%) had apical involvement. Overall only 32 of 121 patients (26%) had no Pca or prostate Uca/CIS and only 45 (37%) had no clinically significant Pca or Uca/CIS in the prostate. However, 74 of the 121 patients (61%) had no prostatic apical involvement by Pca or Uca/CIS and 85 (70%) had no apical involvement by clinically significant Pca or Uca/CIS. Patients with prostatic apical involvement by invasive or in situ Uca uniformly had involvement of more proximal (toward the base) portions of the prostate.

Conclusions: The majority of prostates from cystoprostatectomies had no involvement of the prostatic apex by Uca or clinically significant Pca. Hence, most patients may be candidates for prostate apical sparing. However, involvement of the apex by Uca in any patient raises concern about procedures that leave portions of the prostate urethra after cystectomy in an effort to improve continence. In candidates for orthotopic neobladder reconstruction removing all of the prostatic urethra and sparing the remainder of the prostatic apex may allow improved preservation of urinary continence with an acceptable low risk of clinical Pca progression. Whether future strategies for preoperative exclusion of apical Pca and intraoperative assessment of more proximal prostate to help exclude apical urothelial disease may identify patients suitable for prostatic apical sparing remains to be determined. The impact on functional outcomes and cancer control also require additional study.

Editorial Comment

In older textbooks the preservation of the prostatic apex during cystoprostatectomies for transitional cancer of the bladder was regarded a standard technique. In order to improve nerve preservation and subsequently potency and furthermore to enable postoperative of fertility preservation not only of the prostatic apex but of half of the prostate was suggested by some authors. It is of note that the areas which are than preserved are the ones where the majority of prostatic tumors arise.

In the current study 41% of 121 patients undergoing cystoprostatectomy for transitional cell cancer had unsuspected prostate cancer. Half of them were clinically significant. In 60% of the unsuspected prostate cancers and in 33% of the transitional cell cancer invading the prostate the prostatic apex was involved. Overall tumor was found unsuspectedly in the prostatic apex in 40% (39/121 patients).

This is actually a very high rate of unsuspected tumor in the prostate and a substantial number were significant tumors. With this number in mind it is therefore very difficult to argue for either an apex or even a fertility preserving cystoprostatectomy. Even if the transitional cell cancers invading the prostate are excluded because they might be seen with a better staging of patients there is still the problem of unsuspected prostate cancer which may not be found despite more efforts in preoperative staging. Neither PSA nor imaging will be able to detect them all. Therefore only partial remove of the prostate in patients with transitional cell cancer of the bladder has to be an absolute exception and patients and surgeons must be aware of the substantial risk of later problems with a secondary prostate cancer.

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UROLOGICAL ONCOLOGY

Is there a role for surgery in the management of metastatic urothelial cancer? The M. D. Anderson experience

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Purpose: Although rarely curative, chemotherapy remains the mainstay of treatment for metastatic urothelial cancer. The role of surgery for metastatic disease is not well established for urothelial cancer, but is sometimes undertaken in the face of persistent or recurrent disease that can be surgically resected.