

Editorial Comment

The conclusion of Lee's et al. study from Cleveland Clinic is that Epstein biopsy criteria predict for a high likelihood of organ-confined disease but are insufficiently robust to predict the presence of insignificant disease defined as organ-confined, Gleason low-grade, and minimal volume (≤ 0.5 cc).

The findings are supported by other studies (1-3). Epstein's criteria are highly predictive for organ-confined prostate cancer. The frequency varies from 91% to 97%. However, the predictive value for insignificant cancer varies from 37% to 84%. Jeldre's et al. concluded that Epstein's criteria might underestimate the true nature of prostate cancer in as many as 24% of European patients (1). Approximately 31% Korean patients who meet all the conditions of the contemporary Epstein's criteria for prediction of clinically insignificant prostate cancer may actually harbor prostate cancer with unfavorable pathological features (2). In the Middle East (Egypt), 46% of patients may present unfavorable cancer (3).

There are several causes for the discrepancies. Prostate cancers diagnosed in Asian, American, and European men may have innate differences associated with racial and/or environmental factors. However, methodological factors seem to be more important: among others, number of patients studied, number of cores of the biopsy, and criteria for volume evaluation. The last one was considered by Lee's et al. study from the Cleveland Clinic.

According to volume, the authors defined prostate cancer by two ways: classical and liberal. The classical definition considered a tumor volume < 0.5 cc; and the liberal definition any grade of volume. Using the liberal definition, the predictive value of Epstein's criteria for insignificant cancer was 58%; using the classical definition was 37%. In a similar study at our Institution (data not published), the frequency was 55% and 46%, respectively.

References

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RECONSTRUCTIVE UROLOGY

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The use of penile skin graft versus penile skin flap in the repair of long bulbo-penile urethral stricture: a prospective randomized study

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Objectives: To evaluate the use of penile circular skin graft versus flap as a ventral onlay for bulbo-penile stricture urethra.

Material and Methods: Between 2003 and 2009, 37 patients with bulbo-penile stricture were randomized to penile methods circular skin graft (PCG = 18) or flap (PCF = 19). Inclusion criteria included postinstrumentation or idiopathic stricture. Exclusion criteria were unhealthy skin and previous urethrotomy/urethroplasty. Patients had urethrogram at three weeks, three months, one year, and urethroscopy when needed. Any subsequent urethrotomy/urethroplasty was considered a failure. Chi-square and Student's t test were used for analysis.

Results: Patients' ages were 45.3 (range: 30-65) and 45.5 (35-60) yr in PCG&PCF respectively. Stricture length was 15.2 (10-22) & 14.1 (9-21) cm in PCG&PCF respectively. The stricture was postinstrumentation in 9 and 11 and idiopathic in 9 and 8 patients in PCG&PCF respectively. Mean follow up was 36.2 (12-60) and 37.1 (range: 13-24) months in PCG and PCF respectively. Operative time was significantly shorter in PCG than in PCF (203.3 and 281.6 min, respectively; $P = .000$). Early postoperative complications were similar in both groups. Superficial skin necrosis occurred only in the PCF group (3 cases). Late complications of mild postvoid dribbling occurred similarly in both groups. One patient in PCF had a urethro-cutaneous fistula at the level of fossa navicularis that was repaired later. Stricture recurred in 5 (27.7%) and 4(21%) patients in PCG and PCF, respectively ($P = .249$). Four patients had visual internal urethrotomy (2, 2), four needed anastomotic urethroplasty (2, 2) in PCG and PCF, respectively, and one needed buccal mucosal graft in the PCG group.

Conclusions: At intermediate follow-up, both penile circular graft and flap had similar and high success as a ventral onlay for repair of long bulbo-penile stricture with a low rate of complications.

Editorial Comment

Hussein et al. raise the bar in reconstructive urology research by completing a randomized clinical trial of distal penile fasciocutaneous skin flap urethroplasty vs. distal penile skin graft urethroplasty for non- lichen sclerosus strictures of the bulbo-penile urethra. They chose to compare two surgical techniques, which were similar in many ways but distinct in one important way. Similarities included the circumcising incision, the distal penile skin and the ventral onlay approach. The difference was in whether a graft or flap was used. The similarities in technique were likely helpful in recruiting patients. The similarities were also important in helping isolate the treatment effect of interest – flap vs. graft. Indeed, they did not detect a difference between the two groups in their primary outcome – a subsequent procedure to treat a stricture recurrence (21% for flap vs. 28% for graft). Here is where some additional planning could have strengthened the study. In order to detect a 10% difference at a significance level of $p = 0.05$ at a power of 0.8 they would have needed to randomize 353 patients to each arm of the study, rather than 19 patients as done here. Indeed, with only 19 patients in each arm they would have only been able to detect a massive difference between the recurrence rates. Additionally, the primary outcome of interest – need for additional procedures – introduces significant subjectivity into the success rates. A more objective outcome measure would have been preferable. Still, this study represents a great advance for the field of reconstructive urology and hope it will stimulate others to contribute randomized studies to the literature.

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