Delay of 12+ Weeks to Time of Cystectomy Increases Mortality

Mortality Increases When Radical Cystectomy Is Delayed More Than 12 Weeks: Results From a Surveillance, Epidemiology, and End Results-Medicare Analysis.


Delay of >12 weeks from diagnosis of muscle-invasive bladder cancer to cystectomy is associated with higher overall and disease-specific mortality.

**Objective:** Test the impact of delay in time to cystectomy and mortality in a national database.

**Participants/Methods:** Using a linked Surveillance, Epidemiology, and End Results (SEER)-Medicare dataset, 441 patients were indentified who underwent radical cystectomy for stage II bladder cancer within 4 to 52 weeks of diagnosis and who did not receive preoperative chemotherapy. Survival models were constructed to test the potential association between time from diagnosis to cystectomy and mortality.

**Results:** Compared to patients who received a cystectomy within 8 weeks, those whose cystectomy was delayed beyond 12 weeks from time of diagnosis at endoscopic resection had worse overall and disease-specific mortality. Other variables associated with worse overall survival included increasing age and increasing comorbidities.

**Conclusions:** Delaying radical cystectomy beyond 12 weeks from the time of diagnosis is associated with worse overall and disease-specific mortality.

**Reviewer's Comments:** Muscle-invasive bladder cancer can present one of the biggest challenges to urologists. We know it is a lethal disease, and the best option for management involves radical cystectomy. We also know that this is a potentially morbid operation, made more complex by advanced age and comorbidities of the typical bladder cancer patient. Therefore, it can be difficult to get a patient from diagnosis of muscle invasive bladder cancer to the point of getting their cystectomy. Several studies from single institutions have shown an association between delays in this process and worse outcomes. In the present study, the authors sought to ask the same question but at the national level to account for potential differences across regional and institution-specific variations in practice. Their results again confirm that it is important to move a patient as expeditiously as possible from diagnosis to cystectomy, since a delay of >12 weeks is associated with worse overall and disease-specific mortality. The study is well done, within the limits of any national database study. Limitations that are true for all such studies include the fact that it only looks at Medicare-eligible patients, cannot account for details on the source of any delay to surgery, and inherent potential inaccuracies of using claims data to assess procedure details and outcomes. It is also important to bear in mind that this study specifically does not address the issue of neoadjuvant chemotherapy and its role in invasive bladder cancer, since the time period of the study precedes the growing utilization of that approach, and that particular population was specifically excluded from analysis. These issues not withstanding, this study serves as another reminder that muscle-invasive bladder cancer is a potentially lethal disease in which any undo delay from diagnosis to definitive therapy should be avoided whenever possible.

**Additional Keywords:** Mortality

**print tag:** () Refer to original journal article.
**Socioeconomic Factors Influence Outcome in Men With Localized Prostate Cancer**

*Effect of Socioeconomic Factors on Long-Term Mortality in Men With Clinically Localized Prostate Cancer.*

Tewari AK, Gold HT, et al:

_Urology; January 22 (epub ahead of print):_

Differences in survival between black and white men with clinically localized prostate cancer are not significant after adjusting for socioeconomic factors.

**Objective:** To determine what factors influence the effect of race on outcomes among men with clinically localized prostate cancer.

**Design/Participants:** Retrospective cohort study of >2000 black and white men diagnosed with clinically localized prostate cancer between 1990 and 2000 in a single provider network.

**Methods:** Data on tumor stage, grade, PSA, age, socioeconomic factors, comorbidities, patient demographics, and treatment options were collected and analyzed for their association with all-cause and prostate cancer-specific mortality.

**Results:** Mean follow-up was 73 and 77 months for blacks and whites, respectively. Blacks tended to live in lower-income areas, were more likely to have a PSA >10, were less likely to undergo prostatectomy, were more likely to undergo radiation therapy, and had higher comorbidities. Blacks had worse prostate-specific and overall mortality compared to whites. However, when the risk of overall or cancer-specific death was adjusted for either socioeconomic factors or for tumor risk factors, these differences were no longer apparent.

**Conclusions:** Overall and cancer-specific survival differences between blacks and whites with clinically localized prostate cancer were no longer apparent after adjusting for differences in socioeconomic factors.

**Reviewer's Comments:** Many investigators now recognize and accept that black men with prostate cancer tend to have worse outcomes when compared to white men. What is not clear is why this observation has been made across many different studies. Theories have included differences in access to health care, differences in treatment modality, differences in other underlying comorbidities, differences in genetics of the host, and differences in the aggressiveness of the cancer itself. Any and all of these may influence outcome, making studying this intriguing question very complex and difficult. It also probably explains why many of the reported outcomes are conflicting and contradictory. The study by Tewari et al suggests that any differences in outcomes between blacks and whites with clinically localized prostate cancer may have as much to do with socioeconomic factors as anything else. The study is generally well done, accepting all usual limitations of a retrospective cohort study. Perhaps the biggest potential question is that out of necessity, income was estimated based on geographic location rather than individual patient data. This is a function of how the database was set up so it was unavoidable, but nevertheless may explain differences between this study and others that have attempted to address the same question. Irrespective of this, this study strongly suggests that, as a nation, we still have a long way to go in ensuring the optimal care to all of our citizens.

**Additional Keywords:** Mortality

**print tag:** () Refer to original journal article.
Antegrade, Laparoscopic Approaches Have Higher Success but More Complications

Retrograde, Antegrade, and Laparoscopic Approaches for the Management of Large, Proximal Ureteral Stones: A Randomized Clinical Trial.
Basiri A, Simforoosh N, et al:
J Endourol; 22 (December): 2677-2680

Weighing risks versus benefits, ureteroscopy comes out ahead for large proximal ureteral stones.

Objective: To compare retrograde (URS), antegrade (PCN), and laparoscopic (LAP) approaches to management of larger proximal ureteral calculi.

Design: Prospective, randomized clinical trial.

Participants: 150 patients with stones >15 mm in size over a 20-month time period.

Methods: For URS, the authors used a semi-rigid ureteroscope and a pneumatic lithotripter. A Double-J ureteral stent was left in only 10% of patients; the remainder had a 5F ureteral catheter for 48 hours. For LAP, a 3-port approach was used, and an electrocautery hook was used to open the ureter. A Double-J ureteral stent was left in place in 64% of patients. For PCN, the authors used a rigid nephroscope through an upper or middle calyx, and a ureteral stent was left in 8% of patients. The authors do not report on use of a nephrostomy tube at the end of the procedure. Postoperative success was defined by plain radiography and ultrasound.

Results: Stone-free results at discharge were 56% for URS, 64% for PCN, and 88% for LAP. At 3-week follow-up, stone-free rates were 76% for URS, 86% for PCN, and 90% for LAP. Prolonged urinary leakage was noted in 18% of PCN patients and 16% of LAP patients. Operative time was 2 times longer with PCN and 3 times longer with LAP than with the URS approach. Hospital stay was 10 times shorter with URS compared to the other approaches.

Conclusions: URS has not only a lower success rate but also a lower complication rate, operating time, and hospital stay.

Reviewer’s Comments: The authors are to be commended: it is a challenge to get consent from patients to be randomized to procedures that vary greatly in the degree of invasiveness and risk. The study is limited by the choice of technology, which one would anticipate could impact initial stone-free results. The authors did not use flexible endoscopy - either flexible ureteroscopy as an adjunct to the ureteroscopic approach or flexible cystoscopy/ureteroscopy as an adjunct to the antegrade percutaneous approach. Pneumatic lithotripsy has been demonstrated to lead to greater stone migration and larger stone fragments. Intraoperative ultrasound may have facilitated identification of the "missed stone" in the laparoscopic group. The authors did not stratify results based on severity of hydronephrosis - it is our practice to consider the antegrade approach if we anticipate that the severity of hydronephrosis will preclude manipulation of the flexible ureteroscope for stone retrieval. The authors report a high secondary procedure rate in all groups in this study (10% to 20%), underscoring the challenge of the large ureteral calculus. Most importantly, it tempers the enthusiasm of prior reports of laparoscopic ureterolithotomy. In summary, the addition of a flexible ureteroscope and decreased reliance on pneumatic lithotripsy may have placed ureteroscopy more solidly as the frontrunner for large proximal ureteral stones.

Additional Keywords: Laparoscopy

print tag: () Refer to original journal article.
Real-Time Visualization Does Not Help With Pain During Cystoscopy in Females

Impact of Real-Time Visualization of Cystoscopy Findings on Procedural Pain in Female Patients.
Patel AR, Jones JS, Babineau D:
J Endourol; 22 (December): 2695-2698

Although watching on the video monitor may not alleviate pain during cystoscopy, the value of engaging the patient in the endoscopic findings should not be underestimated.

Background: Men tolerate office cystoscopy better when they view the video monitor during the procedure.

Objective: To evaluate the impact of visual distraction with real-time endoscopic visualization on pain during rigid cystoscopy in females.

Design: Prospective, randomized clinical trial.

Participants: 100 women undergoing diagnostic in-office rigid cystoscopy.

Methods: A 17F cystoscope was introduced using the obturator and water-soluble lubricant. No local anesthesia was used. The study group watched the cystoscopy on the video tower, while the control group did not. Pain scores were rated at the end of the procedure using a 100-mm pain analog scale.

Results: 27% of women reported no pain with rigid cystoscopy. There was no significant difference in median pain scores for those who watched the video tower (n=19) compared to those who did not (n=10).

Conclusions: Real-time visualization does not impact procedural discomfort during female cystoscopy.

Reviewer's Comments: The authors present a well-designed and well-conducted randomized, prospective clinical trial to evaluate the impact of video-endoscopic visualization on procedural pain during rigid cystoscopy in females. They do not report if a power analysis was conducted - it is possible that a type 2 error may be encountered due to small sample size. The authors have previously reported decreased pain scores in men undergoing flexible cystoscopy when patients are allowed to visualize cystoscopic findings on the video tower. As the authors note, the lack of a difference in pain scores in women may be related to use of rigid cystoscope or positioning in a lithotomy as opposed to supine position. It would be helpful to document at what point during the procedure the women reported the most discomfort - if during insertion, this would support the hypothesis that use of an obturator during blind insertion of the cystoscope eliminates the value of visualization during the procedure. Alternatively, if discomfort was reported during filling with irrigant, was this more common in women with voiding dysfunction, and did it correlate with the volume of irrigant instilled or patient's bladder capacity? It would be important to exclude patients who have previously undergone cystoscopy - as pre-procedural anxiety has been reported to correlate with procedural pain. It would be interesting to repeat the study in men using a television show as a sham control - is it distraction that diminishes pain, or is it "visual feedback" that facilitates relaxation as the scope is passed through the bulbar, membranous, and prostatic urethra?

Additional Keywords: Real-Tim Visualization

print tag: (Refer to original journal article.)
Tamsulosin Appears Safe, Effective in Pediatric Refractory Voiding Dysfunction

Effect of Tamsulosin on Systemic Blood Pressure and Nonneurogenic Dysfunctional Voiding in Children.

VanderBrink BA, Gitlin J, et al:
J Urol; 181 (February): 817-822

Tamsulosin appears to be safe and effective in the treatment of children with refractory voiding dysfunction characterized as bladder neck dysfunction.

**Objective:** To evaluate the efficacy and safety of tamsulosin, a uroselective alpha 1A-adrenergic antagonist, in the treatment of dysfunctional voiding in children.

**Participants/Methods:** 23 children were identified with lower urinary tract symptoms without anatomic or neurological abnormalities and were refractory to conservative strategies. All had bladder neck dysfunction suggested by increased post-void residual volumes (PVR) or abnormal uroflowmetry in the absence of pelvic floor activity. The patients received tamsulosin daily. Blood pressure (BP), uroflow, and PVR were monitored before and after tamsulosin therapy.

**Results:** Duration of treatment averaged 7 months, with 20 months average follow-up. Significant improvement was noted with therapy with regard to decreased PVR, increased flow rate, and uroflow pattern. The number of voiding and incontinent episodes also decreased significantly with treatment. BP did not change significantly, and no adverse clinical events (dizziness or hypotension) were observed. In a small number of patients, a uroflow study was performed after discontinuation of tamsulosin. In those patients, the residual volume and flow rates did not deteriorate, but about half reverted from a normal flow curve to an abnormal pattern.

**Conclusions:** Tamsulosin appears to be safe and effective in the treatment of children with refractory voiding dysfunction characterized as bladder neck dysfunction.

**Reviewer's Comments:** Many pediatric urologists are using tamsulosin to treat voiding dysfunction. This study shows it to be beneficial and safe in this setting. Since the drug is "off label" for this use, the authors are prudent in recommending this therapy in refractory cases where bladder neck dysfunction is suggested by either increased PVR or abnormal uroflow studies.

**print tag:** Refer to original journal article.
Urodynamics Show Improved Bladder Storage After Augmentation Is Persistent

Are Urodynamic Studies Really Needed During Bladder Augmentation Follow-Up?

López Pereira P, Moreno Valle JA, et al:

*J Pediatr Urol;* 5 (January): 30-33

Urodynamics may not be necessary after augmentation cystoplasty unless hydronephrosis or incontinence does not resolve.

**Objective:** To evaluate clinical and urodynamic outcomes of bladder augmentation (BA) for neurogenic bladder.

**Design/Participants:** Retrospective study performed in 32 patients with poor bladder compliance who underwent BA (22 ileum, 7 colon, 3 ureter). Mean age at augmentation was 11 years (range, 2 to 18 years), mean follow-up was 12 years (range, 10 to 15 years), and mean age at end of follow-up was 22 years (range, 12 to 33 years).

**Methods:** Imaging, metabolic, and cystoscopic assessments were performed and special focus placed on urodynamic evaluation done preoperatively, 1-year post-BA, and at the end of follow-up.

**Results:** Urodynamics at 1-year post-BA showed a significant increase in bladder capacity (396 vs 106 mL) and decrease in end-filling pressures (10 vs 50 cmH2O) compared to preoperative levels. The capacity continued to increase at the end of follow-up, but end-filling pressure remained unchanged. Phasic contractions were seen in approximately half the patients, which appeared to be clinically insignificant. Renal insufficiency was seen in 1 patient with insufficiency preoperatively as well.

**Conclusions:** BA improves both bladder capacity and pressure, which is sustained over time. The authors suggest that urodynamic studies are not necessary after augmentation unless hydronephrosis or urinary incontinence does not improve.

**Reviewer’s Comments:** The authors provide long-term urodynamic follow-up in a small number of patients who underwent BA with various substrates. A significant increase in bladder capacity and decrease in end-filling pressures were noted and sustained over time. The authors make a reasonable argument for basing follow-up urodynamics on clinical or radiographic changes (incontinence or hydronephrosis). Although these patients can be spared urodynamics, the need for long-term follow-up, especially with regard to cancer surveillance, cannot be underemphasized.

**Additional Keywords:** Urodynamics

**print tag:** () Refer to original journal article.
Cost Containment Remains Significant Issue in Modern Health Care


Patel M, O'Sullivan D, Tulikangas PK:

*Int Urogynecol J Pelvic Floor Dysfunct*; 20 (February): 223-228

Cost containment remains a significant issue in modern health care. Least expensive alternative options are being selected to a more extensive degree at this time.

**Objective:** To analyze, on a cost basis, related costs and charges for 3 types of sacral colpopexy (open, laparoscopic, and robot-assisted techniques).

**Design/Methods:** Retrospective analysis of 3 different approaches for repair of apical vaginal prolapse inclusive of concomitant prolapse repair such as paravaginal defect or Burch, posterior colporrhaphy, and cystoscopy. Other types of common colpopexy and prolapse procedures including hysterectomy and incontinence procedures were excluded. Based on coding, the authors identified 71 cases for eligibility, of whom 56 were excluded due to a variety of issues, including time of apical stabilization, conversion of procedure, or other coding-related issues. Basic demographic information was related to surgery. Estimated costs and charges were derived using coding records. Charges were based on cost data from hospitals' operation analysis system. Total costs were those related to patient care including nursing, and patient care system costs were social workers, technicians, and supply-based costs in maintenance. A cost-accounting system was used to formulate costs associated with each type of procedure. The 3 specific comparison procedures were the sacral colpopexy via either open, laparoscopic, or robotic-assisted techniques. These were specific to the hospital and not to hospital plus individual or society. Costs were adjusted to the consumer price index.

**Results:** 15 comparable cases were chosen (5 from each group). Baseline criteria were similar among approaches. Overall, there were no significant differences in demographics or surgical variables associated with the groups. When evaluating hospital charges only, the minimally invasive sacral colpopexy (laparoscopic or robotic) was most expensive as compared to the open procedure, which was least expensive. Direct costs were higher per robot-assisted procedure as compared to the open procedure, but there were significant differences actually between the robot and laparoscopic sacral colpopexy. Overall, charges associated with procedures included $24,161 for the robot-assisted procedure, $19,308 for the laparoscopic procedure, and $13,149 for the open procedure. When charges were adjusted, laparoscopic and robotic procedures again were noted to be similar. Open procedures were associated with the least costs of $6816 versus laparoscopic ($11,093) and robot-assisted ($12,525); however, this was not felt to be statistically significant. Profits, however, were highest for the robot-assisted approach, laparoscopic intermediate to the open, which had the least profits.

**Conclusions:** The least expensive approach from both the cost and charge standpoint was the open procedure based on simple costs/charge fee-based structures.

**Reviewer's Comments:** Cost/charge-based calculations yield open procedure to be the least expensive alternative for repair of apical prolapse. The open procedure is the most economically feasible in the current health care delivery environment.

**Additional Keywords:** Estimated Hospital Costs

**print tag:** () Refer to original journal article.
Primary Closure Represents Best Method of Urethral Reconstruction

Reconstruction of Urethral Erosion in Men With a Neurogenic Bladder.

Meeks JJ, Erickson BA, et al:
BJU Int; 103 (February): 378-381

Primary closure is a reasonable way to proceed with reconstruction of the urethra in select individuals.

Objective: To analyze catheter-induced urethral complications in males with neurogenic voiding dysfunction requiring long-term catheter management to assess best practice management in this difficult population.

Design/Participants: Retrospective review of a series of men undergoing elective reconstruction of the urethra after long-term catheterization for neurogenic indications including neurogenic paraplegia (n=9) and quadriplegia (n=2).

Methods: All men had a long-term indwelling Foley catheter at some point in their management; however, 8 of these 11 men had had a suprapubic tube catheter placed 2 months prior to urethral reconstruction. Sterile urine was documented in all men prior to reconstruction. Sexual activity was present in 9 of 11 men. All patients wished reconstruction for cosmetic reasons as well as functional reasons.

Results: This is the largest reported series to date of urethral reconstruction in men with neurogenic voiding. Studied men had a median age of 45 years, with a range of 26 to 52 years. All patients underwent reconstruction by a reconstructive surgeon over a 3-year period. Techniques involved included primary closure of the urethra in 6, substitution urethroplasty with penile skin in 3, penile skin flap in 1, and buccal mucosa graft in 1. One individual required a prostate approach due to severity of the disease. In general, the length of erosion was significant, with a median length of 6 cm (range, 4 to 10 cm). Repair was successful in 7 men at the median follow-up of 25 months. Of those eroded, median length nuance at defect was 2 cm. All recurrences occurred early in the series and usually occurred within 1 month. There was no relationship of erosion to specific technique. The authors believed that traction on the catheter during and postoperatively led to erosion in patients who failed. The authors described recurrence of lesion as any presence of postoperative erosion at the sight of reconstruction.

Conclusions: The feasibility of catheter-induced urethral erosion reconstruction is possible in men with significant urethral loss due to catheter-related trauma. The authors suggested that primary closure appears to be the best reconstructive method for the majority of individuals due to length of the defect and poor surrounding tissues.

Reviewer’s Comments: Neurogenic urethral reconstruction is complicated by comorbidities and the problem of perineal pressure and possibly compromised repair. In this series, primary closure of the urethra resulted in very good results. Prior series have reported somewhat higher degrees of urethral fistula using this, however. Urethral substitution also appeared to be technically feasible in select patients.

Additional Keywords: Urethral Erosion

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On-Demand Vardenafil Dosing Yields Similar Results to Nightly Dosing

Effect of Nightly Versus On-Demand Vardenafil on Recovery of Erectile Function in Men Following Bilateral Nerve-Sparing Radical Prostatectomy.
Montorsi F, Brock G, et al: 
Eur Urol; 54 (October): 924-931

Physicians should re-examine or reconsider the current practice of prescribing nightly PDE5 inhibitors following nerve-sparing radical prostatectomy as it appears that on-demand use has a similar outcome.

**Background:** Nerve-sparing radical prostatectomy (NSRP) continues to evolve. However, the risk of developing erectile dysfunction (ED) remains significant. The presumed neuropraxia occurring during surgery results in reduced nitric oxide release and a continuous state of constriction of the penile vascular smooth muscle, which is thought to lead to a hypoxically induced fibrosis and apoptosis of important cellular contents of the penis. To prevent the onset of postoperative ED, the concept of stimulating oxygenation by pharmacological stimulation was devised. Phosphodiesterase type 5 (PDE5) inhibitors have largely replaced the initial prostaglandin injections for this purpose.

**Objective:** To investigate the effect of early postoperative dosing with vardenafil administered either nightly or on-demand compared with placebo on the recovery of erectile function (EF) following NSRP.

**Design/Methods:** Randomized, double-blinded, multicenter parallel group study conducted at 87 centers across the globe from 2004-2007. Patients underwent bilateral NSRP with normal preoperative EF, with an International Index of Erectile Function (IIEF) EF domain 26. Within 2 weeks of surgery, patients received either 9 months of treatment with 10 mg of nightly vardenafil or 9 months of treatment with flexible-dose on-demand vardenafil or 9 months of a nightly placebo. The primary efficacy was the percentage of subjects with an IIEF score >22 after a 2-month washout period.

**Results:** 997 men were screened, 628 were randomized, and 423 completed this study. Completion rate was comparable among all 3 groups. A significantly greater proportion of patients in the vardenafil on-demand group had EF scores 22 compared to those in the placebo group. The proportions of patients with IIEF scores 22 were 24.8% for placebo, 32.0% for vardenafil nightly, and 48.2% for vardenafil on-demand groups. There was a significant difference among all groups. The primary efficacy variable was not met! There was no significant difference between treatment groups in the percentage of patients with an IIEF score 22 at the end of the washout period. There were also no significant differences among the 3 treatment groups in the proportion of men with IIEF scores 17 or 26.

**Conclusions:** The results clearly show that nightly dosing with vardenafil did not have any effect beyond that of on-demand use. Interestingly, this study showed that on-demand use during the double-blind treatment period was associated with significantly greater scores compared with placebo or with those in the nightly group. It also suggests that prophylaxis with PDE5 inhibitors does not add appreciably to EF recovery.

**Reviewer's Comments:** This study suggests that physicians re-examine or reconsider the current practice of prescribing nightly PDE5 inhibitors following NSRP as it appears that on-demand use has a similar outcome.
Is Age a Factor for Endothelial Function in Erectile Dysfunction?

Penile and Systemic Endothelial Function in Men With and Without Erectile Dysfunction.

Vardi Y, Dayan L, et al:

Eur Urol; August 7 (epub ahead of print):

Penile endothelial indices are significantly higher in men without erectile dysfunction compared to men with erectile dysfunction.

**Background:** Current data suggest that endothelial dysfunction is the link between erectile dysfunction (ED) and systemic diseases such as endothelial-based systemic diseases like diabetes mellitus, hypertension, atherosclerosis, and smoking. In these diseases, the ability of the arteriolar smooth-muscle cells to relax is impaired, and ED results as a result of inadequate endothelial-dependent vasodilation and/or insufficient blood flow to the corpora.

**Objective:** To compare systemic and penile endothelial function in subjects with and without ED using a veno-occlusive plethysmography device.

**Participants/Methods:** 59 men aged 20 to 70 years participated in the study who had not used a phosphodiesterase type 3 (PDE5) inhibitor over the past 6 months. ED was scaled according to the International Index of Erectile Dysfunction (IIEF) EF domain score.

**Results:** The basal penile blood flow was significantly lower in the ED group compared to the control group. However, baseline forearm blood flows were comparable in both groups. Regarding indices of endothelial function in the forearm, the maximum blood flow and the measured area under the curve in the control group were comparable to those in the ED group. However, penile endothelial indices were significantly higher or better in the control group compared to the ED group, and penile vascular resistance was significantly higher in the ED group than in the control group. Using a multivariate analysis, the only variable that could influence presence of endothelial dysfunction was the group effect or ED versus the control group. The age difference being substantial between groups was not a factor.

**Conclusions:** The vascular component of erection has 2 cardinal constituents: a myogenic one and an endothelial one. Preservation of the endothelial function is fundamental to the erectile process. Commonly used methods for assessing endothelial function relies on post-ischemic reactive hyperemia, and the results in blood flow are thought to be considered related to secreted factors from proper endothelial function. Men with ED have lower baseline penile blood flow than those without ED, which probably indicates presence of a corporal vasculopathy, whereas the reactivity of penile blood flow in the ED group was reduced compared to the control group suggesting an impact of endothelial function in men with ED.

**Reviewers' Comments:** It is well known that age can affect systemic and penile endothelial function, and this impact may simply reflect the age effect. In a substudy analysis looking at men in both groups with similar ages, they found that the effect of the impaired endothelial cell function remained in those younger men with ED compared to younger men without ED, suggesting that age is not a major factor.

**Additional Keywords:** Endothelial Function

**print tag:** () Refer to original journal article.
ADT Not Linked to Increased Cardiovascular Mortality

Cardiovascular Mortality and Duration of Androgen Deprivation for Locally Advanced Prostate Cancer: Analysis of RTOG 92-02.


Side effects of androgen deprivation therapy require close monitoring, but the apparent risk of cardiovascular death may have been overestimated.

Background: Androgen deprivation therapy (ADT), especially luteinizing hormone-releasing hormone agonists, has been around for >20 years, and the issue is no longer whether or not they reduce the risk of death from prostate cancer. The current issue is potential side effects, some minor and some major, that may occur with long-term use of these products. The largest concern has to be whether or not ADT increases cardiovascular mortality.

Objective: To determine whether or not ADT increases cardiovascular mortality.

Design/Methods: Researchers analyzed retrospectively the risk of mortality from cardiovascular causes from the randomized trial RTOG 92-02. This trial primarily compared the impact of short-term (4 months) versus long-term (28 months) ADT in men with locally advanced prostate cancer receiving radiation treatment.

Results: Median age was 70 years, and follow-up was approximately 8.1 years. During this trial, 185 cardiovascular deaths occurred, and 765 total deaths (24%) occurred from the total of 1554 men who began the trial. At 5 years, there was no significant difference in cardiovascular deaths between long-term (5.9%) and short-term (4.8%) ADT arms. Age, diabetes, and previous cardiovascular disease were predictors of cardiovascular mortality, but ADT duration was not associated with cardiovascular mortality regardless of how the definition of heart disease was perceived.

Conclusions: ADT may not increase the risk of cardiovascular death in men with locally advanced prostate cancer.

Reviewer's Comments: Significantly more patients in the long-term ADT arm (30%) began the trial with a history of cardiovascular disease compared to the short-term arm (25%; P =0.03), but there was still no difference in cardiac deaths with ADT. In addition, all randomized trials or prospective studies completed thus far have currently been unable to find a significant or consistent increased risk of cardiovascular mortality with ADT. However, it is true that ADT may cause weight gain, glucose changes, and possibly triglyceride increases, so this may increase the risk of metabolic syndrome and heart disease, especially in a high-risk cardiac patient. Regardless, as long as cardiovascular disease is the #1 cause of death in men with and without prostate cancer, I have always believed that men treated for localized or locally advanced prostate cancer need to do whatever is needed to reduce their risk of cardiovascular disease and death to as close to zero as possible.

Additional Keywords: Cardiovascular Mortality

print tag: () Refer to original journal article.
Weight Lifting, Aerobic Exercise Reduce Fatigue After Radiation Tx for PCa

Randomized Controlled Trial of Resistance or Aerobic Exercise in Men Receiving Radiation Therapy for Prostate Cancer.
Segal RJ, Reid RD, et al:
J Clin Oncol; 27 (January 20): 344-351

Weight lifting after radiation therapy improves or maintains multiple health parameters such as quality of life, lipids, muscle mass, and strength.

**Background:** Previous studies found that weight lifting about 3 times a week reduced fatigue from androgen deprivation therapy (ADT) and improved quality of life in patients with advanced prostate cancer (PCa). Men with more localized or locally advanced tumors had not been evaluated adequately using a similar protocol to determine if side effects could be reduced in this group.

**Objective:** To determine the impact of aerobic exercise compared to weight lifting in men receiving radiation therapy for PCa.

**Design/Methods:** 121 participants were placed in 1 of 3 groups for 24 weeks: usual care (n=41), aerobic exercise (n=40), or weight lifting (41). The exercise groups were asked to commit 3 days a week for approximately 45 minutes per session. This randomized controlled trial included patients receiving radiation therapy with and without ADT. The primary end point was fatigue, as measured by the validated Functional Assessment of Cancer Therapy scale.

**Results:** There was an 85% adherence to the protocol, and approximately 60% of participants in each group were on ADT. Aerobic exercise ($P =0.01$) and weight lifting ($P =0.004$) both significantly reduced fatigue over the short-term (12 weeks), but weight lifting had more significant ($P =0.002$) long-term effects on this end point. All of the following were significantly improved with weight lifting compared to usual care: quality of life, fitness, lower- and upper-body strength, triglycerides, and maintaining (not increasing) body fat. Prostate-specific antigen, testosterone, and hemoglobin did not improve significantly with aerobic or resistance (weight lifting) exercise.

**Conclusions:** Both resistance and aerobic exercise mitigated fatigue in men with PCa receiving radiotherapy and should be encouraged in this population.

**Reviewer's Comments:** How many prescriptions are given to cancer patients who experience fatigue, weakness, depression, and even anemia?! These medications carry serious side effects including some with an increased risk of a cardiovascular event. If aerobic and resistance exercise were emphasized to all patients during and after radiation therapy, I wonder what the side effect rate would be just 1 year after this was implemented? Hmmm, sounds like a win-win situation from all angles. And, for the politically correct micro-dissecting doctor bashers out there, yes of course I am also implying that physicians want their patients to do well after treatment for more than just improving their side effect numbers.

**Additional Keywords:** Radiation Therapy

**print tag:** () Refer to original journal article.
A single, immediate post-resection intravesical instillation of epirubicin significantly reduces the risk of recurrence in low- to intermediate-risk superficial bladder cancer patients.

**Objective:** To test whether intravesical chemotherapy immediately after transurethral tumor resection (TUR) can reduce the risk of recurrence in superficial bladder cancer.

**Design/Participants:** This was a prospective randomized multicenter trial that enrolled 305 patients (of which 219 remained for analysis after exclusions) who had grade 1-2, Ta/T1 superficial bladder cancer.

**Methods:** Patients were randomized to either a single, immediate post-resection instillation of epirubicin versus a no-treatment control. Patients with high-grade disease, muscle invasive disease, or carcinoma in situ were excluded. The primary end point was recurrence-free survival.

**Results:** At a median follow-up of 3.9 years, there were fewer recurrences in the epirubicin group (62%) relative to control (77%). On multivariate analysis, this translated into a 44% reduction in risk for recurrence compared to control. Sub-group analyses suggested that the maximal benefit was seen in patients with a solitary lesion, no history of recurrence, or those who had a low overall recurrence risk score.

**Conclusions:** Single, early post-TUR instillation of epirubicin reduced the risk of recurrence in patients with low- to intermediate-risk superficial bladder cancer.

**Reviewer's Comments:** The most troubling aspect of patients with superficial bladder cancer centers on the risk of recurrence and/or progression. In those patients who do not have high-grade disease or associated carcinoma in situ, the main problem is recurrence, as the risk of progression is generally, though not universally, low. A variety of strategies have been employed to try and positively impact on the risk of recurrence, but the one that has the best level I evidence supporting it is a single, immediate, post-resection instillation of chemotherapy. The body of literature supporting this approach was again confirmed in this phase III study by Gudjonsson and colleagues. The study is well designed and executed and consistent with other reports in the literature. The one caution for the reader is not to over interpret the sub-group analyses that were undertaken by the authors. The finding that the maximal benefit was seen in the lowest risk patients (ie, those with a solitary tumor, no history of recurrence, or low overall recurrence risk score) is based on a sub-group analysis of the entire group. Such analyses, by their very nature, should be considered hypothesis generating at best. So, while provocative, that particular finding will need to be validated by a trial specifically designed to test it.

**Additional Keywords:** Transurethral Resection

**Print tag:** (Refer to original journal article.)
Objective: To determine risk factors for recurrence and cancer-specific death in patients after radical nephroureterectomy for upper tract urothelial carcinoma.

Design/Methods: This was a collaborative effort to pool the retrospective data from 12 institutions using standardized criteria and pathologic re-review at each institution. The target population was patients who had undergone radical nephroureterectomy (either laparoscopically or via an open approach) for upper tract urothelial carcinoma. Risk factors for recurrence and cancer-specific death were determined using univariate and multivariate analyses. Patients with incomplete data or pathology not available for re-review were excluded from the cohort.

Results: 1363 patients were included in this retrospective cohort study. The estimated recurrence-free and cancer-specific survival at 5 years for the group as a whole was 69% and 73%, respectively. On multivariate analysis, risk factors that were associated with both worse recurrence-free and cancer-specific survival included high grade, advancing T stage, sessile architecture, lymph node metastases, and lymphovascular invasion. In addition, patient age was also associated with worse cancer-specific survival.

Conclusions: Radical nephroureterectomy provided durable local control and cancer-specific survival in patients with localized upper tract urothelial carcinoma.

Reviewer's Comments: Well designed, prospective studies on upper tract urothelial carcinoma have been severely hampered by the relative rarity of the disease compared to other tumor types. Similarly, most retrospective cohort studies in the literature are limited by small numbers and the absence of standardized approaches to defining risk factors and outcome. The study by Margulis et al overcomes many of the disadvantages in single-institution studies in this disease by developing a collaborative arrangement between 12 academic centers to pool data using standardized definitions of various risk factors and pathologic re-review of all the specimens. While not a prospective trial, this is the best and most powerful type of analysis that we are likely to get at least for the foreseeable future to determine risk factors for tumor recurrence and survival. The analyses presented in this paper suggest the most important factors include tumor grade, stage, architecture, lymph node status, and lymphovascular invasion. These data will be important in any future trial design in this disease and will offer useful information for clinicians and patients who are trying to make difficult decisions about multi-modal therapy, such as with chemotherapy. This study also highlights that, in lower risk disease, radical surgery does well in terms of local control and outcomes, but that we still have significant room for improvement in patients with higher risk features.

Additional Keywords: Radical Nephroureterectomy

print tag: () Refer to original journal article.
**New Balloons Provide Superior Radial Dilation for Percutaneous Renal Tracts**

*Radial Dilation of Nephrostomy Balloons: A Comparative Analysis.*

Hendlin K, Monga M:

*Int Braz J Urol; 34 (September-October): 546-551*

In vitro studies predict that the Bard X-Force and Cook Ultraxx percutaneous nephrostomy balloons provide superior radial dilation force over the Boston Scientific balloon.

**Background:** Balloon dilation has been reported to fail in 17% of patients undergoing percutaneous nephrolithotomy (PCNL), and in up to 25% of patients with a prior history of renal surgery.

**Objective:** To compare the ability of percutaneous nephrostomy balloons to expand under different radial constrictive forces.

**Design:** In vitro engineering comparison.

**Methods:** Three 30F nephrostomy balloons were tested: Bard X-Force (30 ATM), Cook Ultraxx (20 ATM), and Boston Scientific Amplatz Trackmaster (17 ATM). The balloons’ abilities to inflate across a range of constrictive forces (2g to 122g) were tested at low pressure (4 ATM), medium pressure (10 ATM), and burst pressure.

**Results:** All balloons required high inflation pressures to reach 90% of their expected diameters when high constrictive forces were encountered. The Bard and Cook balloons outperformed the Boston Scientific balloon with regard to reliability of reaching this diameter with a low coefficient of variance. None of the balloons were able to achieve sufficient radial dilation at 4 ATM, though 10 ATM sufficed under lower constrictive forces (up to 42g).

**Conclusions:** If faced with fascial or retroperitoneal scarring, the Bard X-force and Cook Ultraxx may provide superior radial dilation.

**Reviewer's Comments:** In vitro engineering studies help identify which endourologic instrumentation may perform best in which clinical situation. In this study, though the Bard and Cook balloons proved superior, we do not know what the exact radial constrictive forces encountered are in the face of retroperitoneal scarring—is 122g a reasonable estimate or is it setting the bar too high? Similarly, although the authors hypothesize that the ability to dilate at lower pressures may minimize the risk of renal trauma, this hypothesis has not been tested.

**Additional Keywords:** Balloon Dilation

**print tag:** () Refer to original journal article.
Prior Open Renal Surgery Does Not Impact Subsequent PCNL

Percutaneous Nephrolithotomy: Primary Patients Versus Patients With History of Open Renal Surgery.

Kurtulus FO, Fazlioglu A, et al:
J Endourol; 22 (December): 2671-2675

Prior open renal surgery should not be considered a contraindication to percutaneous nephrolithotomy, as it neither impacts efficacy nor complication rates.

Objective: To evaluate the impact of prior open renal surgery on percutaneous nephrolithotomy (PCNL).

Design: Retrospective chart review.

Participants: 328 patients undergoing PCNL from 2003 to 2007; 142 had a history of prior open renal surgery through a flank incision (open group).

Methods: After initial access was obtained, all patients underwent initial fascial dilation with an 8F to 10F coaxial dilator. Balloon dilation was performed initially; however if this was unsuccessful, fascial dilators ranging from 8F to 20F were used. If balloon dilation after fascial dilation failed, Amplatz dilators were utilized.

Results: No significant difference was noted in the open group and control group in need for multiple tracts, operative time, transfusion rates, hospital stay, complication rates, or residual stones. Balloon dilation alone was successful in 50% of patients with prior open surgery compared to 83% with no prior open surgery. Fascial dilation to 20F facilitated balloon dilation in an additional 45% of patients with prior open surgery, such that only 4% required rigid dilation to 30F. One patient with a prior history of open surgery underwent conversion to an open surgery due to inability to access the tract.

Conclusions: PCNL is safe, even in the face of prior open surgery.

Reviewer's Comments: The authors do not characterize the open surgery group based on the type of surgery they underwent. Specifically, one might anticipate greater distortion of the collecting system with an open anatrophic nephrolithotomy as compared to an open pyelolithotomy, and it may have been informative to evaluate the type of surgery as a confounding variable. The authors comment that preoperative abdominal CT scan was used selectively in patients with prior open surgery to help plan the optimal percutaneous access. It would be helpful for them to delineate what information was identified in the CT scans and in what percentage of patients was their approach modified by the preoperative imaging. The authors do not identify the type of balloon utilized or maximum inflation pressure—new balloons that can dilate to 30 ATM are effective regardless of retroperitoneal scarring. The authors had a high rate of transfusion in both groups (15%), and it is interesting that although a higher percentage of patients in the prior open surgery group required rigid fascial dilation (50% vs 17%), there was no difference in bleeding.

Additional Keywords: Percutaneous Nephrolithotomy

print tag: () Refer to original journal article.
Cephalosporins Not Appropriate for UTI Prophylaxis With VUR


Cheng CH, Tsai MH, et al:
Pediatrics; 122 (December): 1212-1217

Trimethoprim-sulfamethoxazole has lower rates of antibiotic resistance than cephalosporins when used as prophylaxis for vesicoureteral reflux.

**Objective:** To evaluate the bacterial antimicrobial resistance pattern of urinary tract infections in children with vesicoureteral reflux (VUR) on antibiotic prophylaxis (ABX).

**Design/Methods:** A retrospective review of children receiving ABX for VUR in 2 hospitals was performed. Children received trimethoprim-sulfamethoxazole (TMS), cephalexin (CLX), cefaclor (CFR), or a sequence of different antibiotics in alternating fashion. Antibiotic sensitivities were considered with the index and subsequent breakthrough infections.

**Results:** 324 patients were identified, with 109 on TMS, 100 CLX, 44 CFR, and 71 with alternative monotherapy. Breakthrough infection rate was similar between the 2 hospitals (20% vs 25%). *Escherichia coli* was the most common index pathogen, but was significantly less common when receiving ABX. Cephalosporin ABX was more likely associated with extended-spectrum beta-lactamase-producing organisms with breakthrough infections than was TMS. Antimicrobial susceptibilities to nearly all antibiotics decreased with cephalosporin and alternative monotherapy ABX, but were minimally decreased with TMS ABX.

**Conclusions:** Cephalosporin ABX is associated with higher rates of extended-spectrum beta-lactamase-producing or multi-drug resistant pathogens other than *E coli* for breakthrough infections. TMS is the preferred ABX agent for VUR.

**Reviewer's Comments:** The increased incidence of multi-drug-resistant organisms in breakthrough infections of children with VUR is sobering. It is unfortunate that Furadantin was not assessed, as other studies have implied that, like TMS, it too induces less resistance. In an era when the role of ABX in VUR is in question, it seems prudent to avoid as much of the morbidity associated with the treatment as possible. With the exception of neonates or other causes of hepatic immaturity precluding TMS treatment, TMS should be viewed as a first-line agent and penicillin/cephalosporins avoided.

**Additional Keywords:** Antibiotic Prophylaxis

**print tag:** () Refer to original journal article.
Bilateral Extravesical Ureteral Reimplant Can Be Performed as Short-Stay Procedure

Bilateral Extravesical Ureteral Reimplantation in Toilet-Trained Children: Short-Stay Procedure Without Urinary Retention.

Palmer JS: Urology; 73 (February): 285-288

Bilateral extravesical ureteral reimplant can be performed as a short-stay procedure without urinary retention.

Objective: To evaluate the efficacy of a critical pathway for short-stay (either same-day or 1-day) hospitalization after bilateral extravesical ureteral reimplant in toilet-trained children with vesicoureteral reflux.

Methods: All toilet-trained children undergoing bilateral ureteral reimplant were considered. The modified surgical technique focused on limited ureteral dissection (as distal as possible for effective tunnel length), limited ureteral mobilization, and preservation of the obliterated umbilical arteries. Criteria for early discharge included every 2-hour voiding after removal of urethral catheter, toleration of regular diet, pain control with oral analgesics, ambulating, and parental agreement with patient discharge.

Results: 84 patients were included (64 girls, 20 boys) and underwent bilateral extravesical ureteral reimplant using the critical pathway described. Age range was 2 to 13 years (mean, 4.6 years). All were discharged according to plan (78 on postoperative day 1, and 6 on the same day). All patients were able to void spontaneously with no instances of urinary retention, acute urinary tract infection, or re-hospitalization.

Conclusions: Bilateral extravesical ureteral reimplant can be performed in toilet-trained children as a short-stay procedure (same-day or 1-day hospitalization) without postoperative urinary retention.

Reviewer's Comments: Extravesical ureteral reimplant has always been an attractive method for repairing reflux. The minimization of postoperative bladder spasms and hematuria contributes to the ability for a rapid recovery. But the possibility of urinary retention has kept this out of the mainstream for bilateral cases. The author has refined the technique to minimize this risk and push the envelope for outpatient application. Although relatively poorly understood, the changes in the procedure have been efficacious and the pathway has proven effective in accomplishing its goals. This article goes a long way toward encouraging surgeons to broaden their use of this appealing technique.

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Multiple Other Syndromes Associated Historically With Development of PBS

Antecedent Nonbladder Syndromes in Case-Control Study of Interstitial Cystitis/Painful Bladder Syndrome.

Warren JW, Howard FM, et al:
Urology; 73 (January): 52-57

IC/PBS has long been anecdotally associated with multiple other syndromes and conditions. The authors in this article do a lucid analysis showing the relationship of multiple other syndromes with the development of IC/PBS in a chronic timeframe.

Objective: To assess possible pathogenesis contributors in interstitial cystitis/painful bladder syndrome (IC/PBS).

Methods: This was an attempt to assess pre-existing or antecedent nonbladder-related syndromes that might indicate patients at risk for the development of IC/PBS as compared to matched controls. Patients with IC/PBS were recruited nationally. These cases were identified by date of onset of their syndromes, which was defined as the index date. Control patients were also selected at random and underwent matching based upon demographics such as sex, age, and region and interval between index date and interview. All patients were assessed for 24 non-bladder syndromes before index date assigned. These syndromes ran the spectrum from inflammatory bowel disease and insulin-treated diabetes to asthma and endometriosis, fibromyalgia, and irritable bowel syndrome.

Results: Those patients with IC/PBS had greater prevalence as compared to controls for 11 syndromes prior to index development of their IC. The coalescence of multiple syndromes with this diagnosis was significantly higher in the case population as compared to the controlled population (78% vs 45%). Those syndromes more significantly present in IC patients included fibromyalgia, IBS, sicca syndrome, migraine, panic, endometriosis, vulvodynia, asthma, depression, diabetes, multiple allergies, and chronic fatigue syndrome. Individuals with both IC and PBS associated with fibromyalgia, chronic fatigue syndrome, sicca syndrome, or irritable bowel syndrome, were more likely to have other syndromes including pelvic pain, depression, allergies, and migraine headaches. Syndrome clusters of symptoms/disease entities also appeared to be associated with fibromyalgia and chronic widespread pain syndrome.

Conclusions: There is a significant correlation between IC/PBS and antecedent syndrome presentation. Even within this correlation, certain syndromes were much more common including fibromyalgia/chronic fatigue, sicca, and irritable bowel syndrome. The authors considered that, in patients with IC/PBS, most have a systemic syndrome that is not simply confined to the bladder and is probably representative of a generalized body disorder.

Reviewer’s Comments: Multiple other entities are associated historically and contemporaneously with the development of IC. The authors in this article do a lucid analysis showing the relationship of multiple other syndromes with the development of IC/PBS in a chronic timeframe. This gives pause to the consideration that IC/PBS is really representative of a systemic issue rather than simply a bladder/pelvic floor disorder component.

Additional Keywords: Antecedent Nonbladder Syndromes

print tag: () Refer to original journal article.
Endometrial Involvement of Urinary Tract Varied; Tx Must Be Individualized

Endometriosis of the urinary tract remains an enigma that is very difficult to diagnose and extremely difficult to treat adequately.

**Objective:** To assess a single institutional experience of patients undergoing treatment for urinary tract endometriosis.

**Design/Methods:** Retrospective analysis of patients diagnosed between 1993 and 2008 at a single institution in South America for purposes of accessing patient demographics, and treatments as well as organ involvement in patients with endometriosis.

**Results:** The authors identified 12 patients in their institution during this timeframe, which represents the largest recorded experience published by Hispanic investigators. Patients tended to be young with a mean age of 37.75 years. Seven patients had ureteral involvement, of which 2 were bilateral with essential equivalence between right- and left-sided distribution (2 left, 3 right). Of those with bladder involvement, 5 were identified by cystoscopy and 4 of 5 by biopsy. Reviewing the therapy treatment required laparoscopic hysterectomy and partial cystectomy in 1 patient. Three patients required open exploratory laparotomy with transvesical resection and/or transurethral resection in 3 patients. The patient who underwent transurethral resection actually required 2 subsequent resections due to recurrence of her disease. MRI was used to establish diagnosis in those patients with ureteral involvement. Of the 7 with ureteral involvement, 5 required ureteroneocystostomy, which was bilateral in 1; laparoscopic ureterolysis was performed in 2 and end-to-end anastomosis in 1 patient. The patient who underwent bilateral re-implantation required right kidney autotransplantation due to recurrent ureteral relapses.

**Conclusions:** Surgery remains the treatment of choice despite recommendations to initiate medical therapy first. However, this finding does remain uncommon even in very large teaching hospitals. Depths and extent of lesion appears to affect overall treatment, although partial cystectomy appears to be a reasonable alternative for patients with significant bladder involvement. The authors concluded that initial technique for ureteral involvement depends on location and extent of involvement.

**Reviewer's Comments:** It has been traditionally recommended that hormonal therapy be embarked upon; however, because of large endometrial deposits, the extent of involvement of the urinary tract can be problematic and may not respond to medical therapy. Surgical removal of endometrial deposit is dependent upon location and depth of involvement; however, most bladder involvement, both personally and in the case of the authors, does appear to respond best to complete transmural resection of the involved area of the bladder for purposes of control of local symptomatology.

**Additional Keywords:** Diagnostic, Therapeutic, & Clinical Aspects

**print tag:** () Refer to original journal article.
Weight Loss Improves Sexual Function in the Morbidly Obese Male

Sexual Dysfunction Is Common in the Morbidly Obese Male and Improves After Gastric Bypass Surgery.

Dallal RM, Chernoff A, et al:
J Am Coll Surg; 207 (December): 859-864

The average morbidly obese male suffers profound sexual dysfunction, and sexual function improves substantially after bypass surgery to a level that reaches or approaches age-based norms.

Background: Obesity is noted to be a risk factor for male sexual dysfunction, as many of the comorbidities associated with obesity also impact sexual dysfunction. This is a relevant topic, as one third of adult men in the U.S. have a body mass index (BMI) >30 and 3% are morbidly obese.

Objective: To see if massive weight loss following gastric surgery was associated with an improvement of male sexual dysfunction. In addition, the authors attempted to assess the degree with which the morbidly obese male suffers with sexual dysfunction.

Participants/Methods: Patients undergoing a Roux-en-Y gastric bypass between 2003 and 2007 were enrolled. Using the Brief Male Sexual Function Inventory (O'Leary Scale), the authors assessed the various domains of sexual function.

Results: 97 men with a mean age of 47.9 years and an initial BMI of 51.4 (range, 36 to 89) underwent gastric bypass surgery. Preoperatively, diabetes and hypertension were present in 51% and 70%, respectively, and 46% either were current smokers or had a history of smoking. Follow-up rate was 95%. The rates of excess weight loss at 1 and 2 years were 60% and 66%, respectively, and the mean BMI fell from 51.4 to 31.8 and mean weight from 342 to 224 pounds. The presence of triggered diabetes and hypertension decreased to 21% and 40% during this same time period. Baseline sexual function was lower than in published reference controls. Postoperative sexual function scores significantly increased in all domains. The amount of weight loss predicted the degree of improvement in all domains independent of the presence of improvement in diabetes or hypertension.

Conclusions: This is the first study to examine male sexual function using validated measures in a substantial number of morbidly obese patients. The average morbidly obese male suffers profound sexual dysfunction, and sexual function improves substantially after bypass surgery to a level that reaches or approaches age-based norms. The authors state that underlying mechanism of obesity-related sexual dysfunction is likely multifactorial, as there are high rates of diabetes, metabolic syndrome, and hypertension in the morbidly obese and these comorbidities relate to sexual dysfunction. Diabetes and hypertension were present preoperatively in a high percentage of patients and after 19 months of follow-up, 60% of diabetics and 40% of the hypertensive no longer required treatment.

Reviewer's Comments: Gastric bypass surgery, unlike other types of therapies for surgery, induces substantial weight loss that can have marked impact on sexual function and can be a motivating factor for patients to undergo lifestyle alterations.

Additional Keywords: Reversal

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Long-Term PDE5 Inhibitor Use May Improve Erectile Function

Objectives: To investigate an improvement and maintenance of erectile function and penile arteriogenic reactivity after daily PDE5 inhibitor treatment for a year.

Design/Participants: This is a 24-month open-labeled parallel group, prospective randomized study of 154 men with erectile dysfunction (ED). The different PDE5 inhibitors were taken nightly and the dose was either a standard dose or a devised optimum treatment dose based on results of nocturnal penile tumescence rigidity testing (RigiScan).

Methods: Group 1 was treated with either 25 mg of sildenafil or 5 mg of vardenafil nightly. The second group was treated at the lowest dose of sildenafil or vardenafil that provoked an erectile event as documented by RigiScan testing. Patients who did not experience rigidity via RigiScan despite the highest dose of either drug were excluded. Additionally, patients were washed out prior to treatment and prescriptions were paid for by and initiated for a year by the patient and then a 4 week washout period prior to retesting. Patients were also classified and identified as having arteriogenic ED based on a peak systolic flow velocity of <35 cm per second.

Results: Between February 2004 and 2006, 74 men were randomized to group 1 and 80 into group 2. After 1 year, 64% of men were still taking nightly low-dose sildenafil or vardenafil and had an erectile function domain score in the normal range versus 75% of men in group 2. After the subsequent 4-week washout phase, both groups continued to show an improved EF domain score. Thirty-five percent of group 1 still had a score in the normal range, whereas 62% of men in group 2 had a normal score.

Conclusions: Use of sildenafil or vardenafil nightly as a therapeutic regimen for improving spontaneous erectile function in men with arteriogenic ED is promising, but requires further investigation. The present treatment regimen offered the possibility of a persistent improvement in spontaneous erectile function for a significant proportion of men with mild-to-moderate arteriogenic ED. The authors assume that improved endothelial function is one of the explanations for the results in this trial, which also suggests that another possible response is a persistent improvement of erectile function by increasing tissue oxygenation via the erectile process.

Reviewer's Comments: The authors state that this was randomized, but there are certain significant potentials for bias in this trial because of a lack of blinding and the fact that patients had to supply their own medications. However, in general this is an interesting report about recovery following erectile dysfunction treatment.

Additional Keywords: PDEF Inhibitor

print tag: () Refer to original journal article.