

Men's Health

Signs, Symptoms and Treatment Options for Erectile Dysfunction and Stress Urinary Incontinence



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To encourage open dialogue amongst participants and to safeguard their privacy expectations, the use of audio or video recording devices of any kind during this presentation is strictly prohibited.





Understanding erectile dysfunction and your treatment options





Erectile dysfunction

What is it?
Who has it?
What causes it?

Erectile dysfunction (ED)

What is it?

 The persistent inability to achieve or maintain an erection firm enough to have sexual intercourse

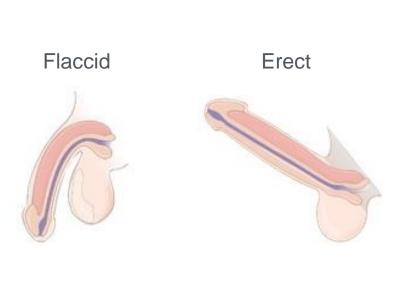
How prevalent is it?

- Approximately 1 in 5 American men ≥ 20 years old experience ED in their lifetime¹
- More than half of men over 40 have some degree of ED²
- Affects approximately 39 million American men³



Erection process⁴

- When aroused, the nerves surrounding the penis become active
- Muscles around the arteries then relax and more blood flows into the penis
- The additional blood makes the penis stiff and hard, or erect
- This erection tightens the veins so the blood can't leave the penis, enabling the penis to remain erect



Causes and comorbidities associated with ED⁵

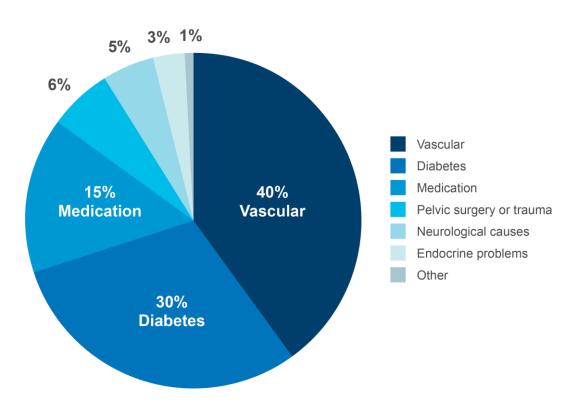
Correlates positively with overall poor health

Top three physical causes are:

- Vascular
- Diabetes
- Medication

Can be a result of or precursor to:

- Prostate Cancer Treatment
- Diabetes
- Heart Disease



ED can affect quality of life⁶⁻⁸

ED can have a broad negative impact on the health-related quality of life.

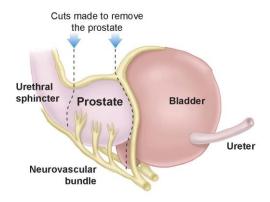




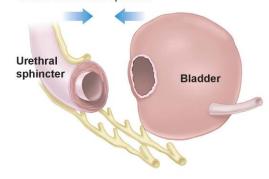
Erectile dysfunction and prostate cancer treatment

Erectile dysfunction as a result of prostate cancer treatment

- The nerves that provide stimulation for an erection lie very close to the prostate and may be injured during prostate cancer treatment²²
- Prostate cancer treatments can affect a man's ability to get an erection on a temporary or permanent basis²²

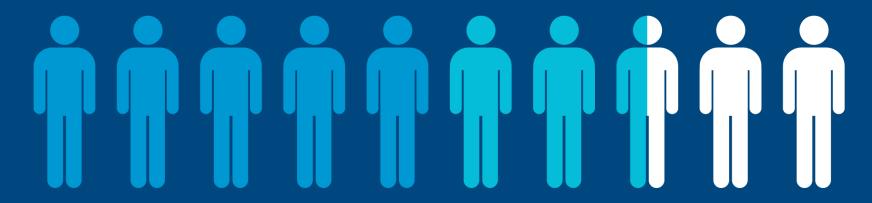


The surgeon rebuilds the urinary tract pulling the bladder down to bridge the space connecting the urethra and urethral sphincter





Sexual dysfunction after prostate cancer treatment



Overall erectile dysfunction affects 25–75% of men²³

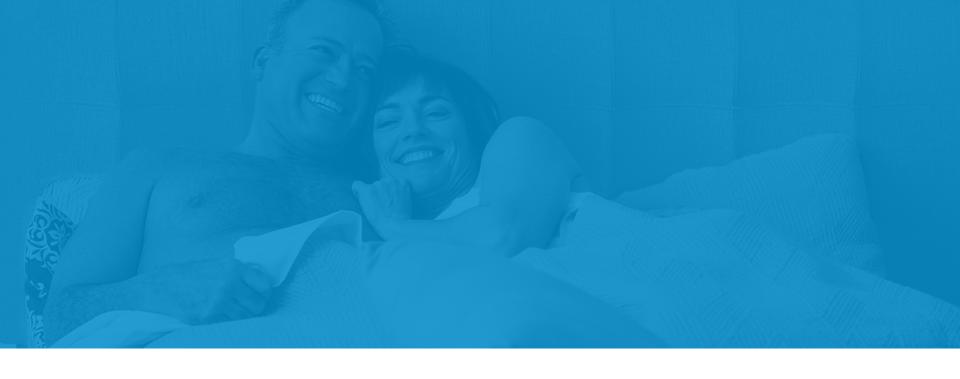


Erectile dysfunction as a result of prostate cancer surgery, robot-assisted radical prostatectomy (RARP), 10–46% of men 1 year after surgery had ED²⁴



Sexual dysfunction after radiation affects up to 50% of men²⁵





Erectile restoration treatment options

Who can treat erectile dysfunction?

Family Physician/Primary Care Physician A doctor with a general understanding of ED and is able to prescribe medical treatment options

Urologist

A specialist focused on diseases of the male and female urinary tract systems and the male reproductive organs

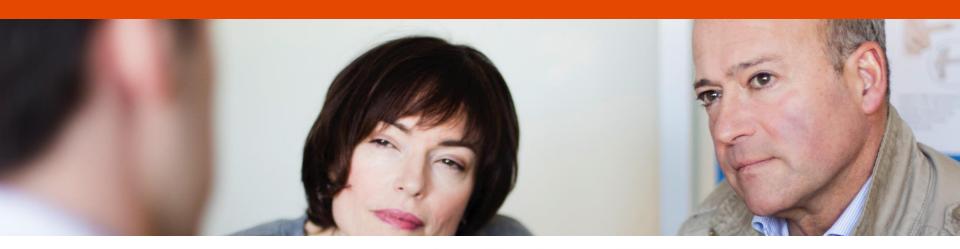
Prosthetic urologist (ED specialist)

Prosthetic urologists have additional training specific to men's health and erectile dysfunction, and specializes in the penile implant procedure





Treatment options





Oral Medications



Injections



Penile Implants



Vacuum Erection Devices



Urethral Suppositories



Oral medications (PDE-5 Inhibitors)



How do they work?²⁷⁻²⁹

- Increase blood flow to the penis, may improve ability to get erections and maintain them until sexual intercourse is successfully completed
- Requires sexual stimulation
- Usually taken within 1 hour before anticipated sexual activity
- Typically works for up to 4 hours (~36 hours with Cialis™)
- Not to be taken more than once a day
- Some oral medications' efficacy can be affected by food

How effective are they?

- Effective in approximately 60–80% of cases²⁷⁻²⁹
- Almost half of men with ED after prostate surgery give up or the pills stop working²³
- Men with diabetes are 1.5 to 2 times more likely to move on to other treatments¹⁴



Oral medications²⁷⁻²⁹



Most common side effects:

 Headache, facial flushing, stuffy nose, upset stomach

Some cautions:

- Talk to your doctor if sex is inadvisable because of cardiovascular status
- With alpha-blockers: generally, you should be stable on your alpha-blocker therapy before using an oral medication
- With nitrates: talk to your heart doctor about how to monitor your condition while on oral medications

Tell your doctor if you:

- Have ever had any heart problems, stroke or low or high blood pressure
- Have ever had liver or kidney problems



Vacuum erection device (VED)³⁰



How does it work?

- A hollow plastic tube is placed over the penis
- The pump (hand/battery-powered) is used to create a vacuum that pulls blood into the penis
- Once an erection is achieved, an elastic tension ring is placed at the base of the penis to help maintain the erection

How effective is it?

- Patient satisfaction rates rage from 68–80%³¹
- Despite initial high success rates, in one study 86% of patients decide to move on to other sexual aids²³



Encouragement for Weak Men

No man can aford to be indifferent to a Jemonstrated fact calculated for his own good. We make the unreserved claim that our Improved Vacuum Developer will perform just what we advertise it to do, and any man will approclate what it is who has long seen the sweets of life just beyond his reach.

It does the work. It cures when everything else falls. This is the reason why it is the best treatment offered to

It does the work. It cures when everything else falls. This is the reason why it is the best treatment offered to suffering men. Common sense will tell you that the Vacuum applied to the surface, draws the blood into circulation through the natural channels which before were once. Only one application of the instrument is sufficient once. Only one application of the instrument is sufficient

culation through the natural channels which before were dormant, thus setting up a wonderful vital action at once. Only one application of the instrument is sufficient to demonstrate its wonderful action and positive results. It produces the same beneficial results upon the aged armiddle aged as upon the young man. The patient can apply the treatment himself without the service of a physician is action as followed without assistant printed. It was not to be a service of a physician is action to the first day of its use.

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Write for our illustrated treatise, showing the parts of the male system involved, sent scaled free, explaining fully our improved method, or call upon us at our offices, where we shall be pleased to explain and further advise you, free of any charge.

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In use since the 1980s



Vacuum erection device (VED)



Most common side effects:30,34

- Blocked ejaculation
- Bruising of penis
- Penile discomfort
- Penile numbness or coldness

Most common reason for discontinuation: 10,35

- Erections of insufficient rigidity or duration
- Difficult mechanics
- Penile bruising
- Lack of spontaneity



Urethral suppository



Alprostadil (MUSE™)

How does it work?³⁹

- A urethral suppository, such as MUSE[™], is administered by inserting the applicator stem into the urethra after urination
- Onset of erection is within 5 to 10 minutes
- The suppository must be refrigerated

How effective is it?

- In clinical literature, success rates are reported at 40–65%^{32,33}
- 40–50% of men don't continue using this therapy after 6–8 months^{23,41}

Most common side effects: 39,40

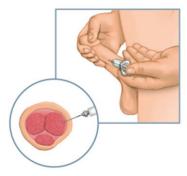
- Pain in the penis, urethra or testes
- Urethral pain or burning
- Low blood pressure
- Dizziness

Most common reasons for discontinuation:⁴¹

- Insufficient erections suitable for intercourse
- · Urethral pain and burning



Intracavernous injection therapy



Alprostadil (CAVERJECT™)

How does it work?⁴²

- Self-inject medication directly into corpora cavernosa
- Onset of erection within 5 to 20 minutes

How effective is it?

- Approximately 60% of patients were satisfied and continued use³⁶
- Despite success rates, in a study of 254 men, only 20% continued the therapy³⁷

Most common side effects:^{37,42}

- Penile pain
- Penile fibrosis or scar tissue
- Priapism or prolonged erection
- · Blood collection under the skin at injection site

Most common reasons for discontinuation: 37,43

- Unsatisfactory erections
- Pain
- Dislike of injections



Penile implant



Entirely contained in body: no one can tell you have it

How does it work?44

- Pair of cylinders implanted in the penis, a pump placed inside the scrotum and a reservoir of saline placed in the lower abdomen
- Squeezing and releasing the pump moves fluid into the cylinders, creating an erection
- Deflate the device by pressing the deflate button on the pump.

 The penis then returns to a soft, flaccid and natural-looking state

How effective is it?

- 98% of patients reported erections to be "excellent" or "satisfactory"
- At 7 years, 94% are still in use and free of revision³⁸

Most common side effects/complications or reasons for removal:44

- Post-operative genital pain
- Mechanical malfunction, including auto-inflation
- Infection
- Repeat surgery



Types of Boston Scientific penile implants



Spectra™ Concealable Penile Implant



AMS Ambicor™ Inflatable Penile Implant



AMS 700[™] Penile Implant with MS Pump[™]

- LGX
- CX
- CXR



Benefits of Boston Scientific penile implants

- Designed as a permanent solution to ED
- Spontaneous—have sex when the mood strikes
- Erection can last as long as you desire
- Entirely contained inside the body—no one knows you have one unless you tell them
- High patient and partner satisfaction^{47,51}
- Typically does not interfere with ejaculation or orgasm⁵²
- Implants have been in use for more than 40 years⁴⁹
- Nearly 500,000 patients have been treated with a Boston Scientific penile implant⁵⁰



Penile implants are a surgical procedure—possible risks⁴⁴

There are risks involved with any surgery. Not all patients are candidates for a penile implant. Discuss all the risks and benefits of this procedure in more detail with your doctor.

Some risks of a penile implant may include:

- Will make natural or spontaneous erections as well as other interventional treatment options impossible
- There may be mechanical failure of the implant, which may require revision surgery
- Pain (typically associated with the healing process)
- Men with diabetes, spinal cord injuries or open sores may have an increased risk of infection
- There is a 1–2.5% risk of infection with the Boston Scientific inflatable penile implants.^{44,45}



Summary

 Erectile dysfunction is a common problem and may be associated with other conditions

- There are a variety of treatment options
- Penile implants could offer a permanent solution
- Talk to your partner
- Talk to your erectile dysfunction specialist (Prosthetic Urologist) or find one at <u>EDCure.org</u>





Understanding male stress urinary incontinence and your treatment options





Male stress urinary incontinence

What is it?
Who has it?
What causes it?

Male stress urinary incontinence

What is it?

 Also known as bladder leakage, SUI is when the urinary sphincter muscle is damaged or weakened and it cannot squeeze and stop urine from flowing out of the body when you laugh, lift, walk, bend, push, pull and move

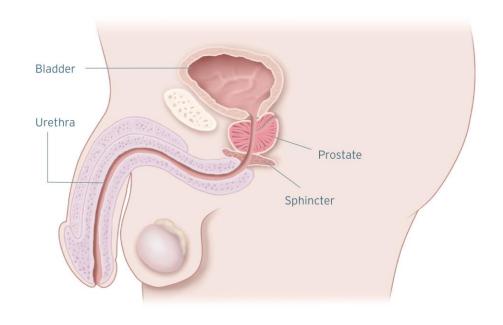
How prevalent is it?

- Studies suggest that as many as 50% of men report leakage immediately following surgery for prostate cancer but most heal within the first few weeks to few months⁵³
 - Somewhere between 9% and 16% of men will have persistent SUI one year after surgery⁵⁴
- Worldwide, approximately 500,000 men suffer from SUI⁵⁵



Urinary process

- The bladder stores urine
- Urine exits the body via the urethra
- Part of the urethra is surrounded by muscles called sphincter muscles
- The sphincter muscles remain contracted in order to keep urine in the bladder
- When the sphincter muscles relax, urine is able to exit the body via the urethra



Causes and comorbidities associated with SUI

Strongly correlates with prostate cancer surgery

 Approximately 9–16% of men have persistent post-prostatectomy incontinence 1 year after treatment⁵⁴

Can also be a result of:56,57

- Neurologic disorders
- Enlarged prostate surgery
 - Occurring in 0.5–3% of men after surgery
- External beam radiation (pelvic radiation)
 - Occurring in 1.6% of men after treatment
- Pelvic trauma



Urinary incontinence can affect quality of life⁵⁸

Urinary incontinence (UI) can have a significant negative impact on all aspects of quality of life (QOL)

Studies have shown that people suffering from UI are more depressed, psychologically distressed, emotionally disturbed and socially isolated

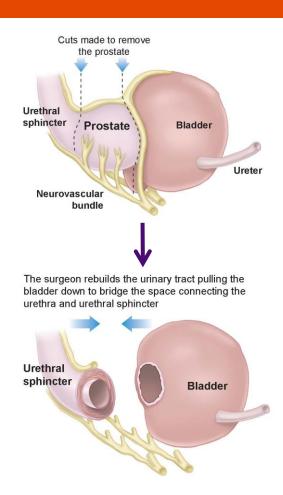




Male SUI and prostate cancer treatment

SUI and prostate cancer treatment connection

- 181,000 men are diagnosed with prostate cancer each year in the US⁵⁹
- Approximately 70,000 radical prostatectomies are performed each year⁶⁰
 - Radical prostatectomy is an operation to remove the prostate and some of the tissue around it²²
- Approximately 9–16% of men have persistent post-prostatectomy incontinence 1 year after treatment⁵⁴





A side effect of prostate cancer treatment

- Incontinence is normal immediately following radical prostatectomy
- Continence is often restored during the first year of recovery
- But not all patients are able to restore their continence^{54,61}
- There are solutions for patients who want to restore their continence and normalcy





Male continence treatment options

Who can treat male SUI?

Urologist

A specialist focused on diseases of the male and female urinary tract systems and the male reproductive organs

Prosthetic urologist

Prosthetic urologists have additional training specific to men's health and urinary incontinence, and specialize in the male sling and artificial urinary sphincter procedures





Short-term treatment options

Behavioral modifications

- Reduced fluid intake
- Planned restroom breaks

Intervention

- Pelvic floor physical therapy
- Kegel exercises
- Biofeedback

Coping

- Pads
- Diapers
- Catheters
- Penile Clamps





Short-term treatment options

5-YEAR COST OF PADS AND DIAPERS



Short-term solutions can be expensive, a nuisance and can become problematic.

- Absorbent products are easy to use but can be bulky, likely to leak and smell
- Catheters may be discreet and may be uncomfortable, and long-term use may cause urinary tract infections
- A penile clamp can control leakage but has to be moved often and can be painful and uncomfortable⁶²



Long-term treatment options

Male Sling

- Designed to <u>support</u> the urethra to better control urine⁶⁵
- Studies have shown it may be most appropriate for mild to moderate SUI⁶⁴
- Made of soft mesh material that is completely concealed inside the body⁶⁶

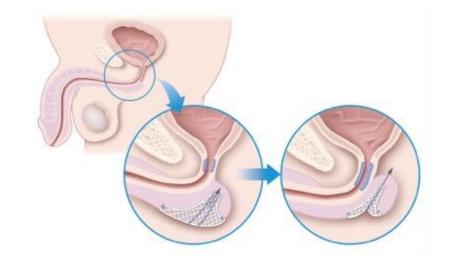
Artificial Urinary Sphincter (AUS)

- Designed to <u>replicate</u> the function of the external sphincter muscle to control urine⁶⁷
- Can treat all levels of SUI
- Made from three small connected components that are completely concealed inside the body⁶⁷:
 - Cuff
 - Control Pump
 - Pressure Regulating Balloon



Long-term treatment options: AdVance™ Male Sling System

- 10 + years of clinical use⁵⁰
- Studies have shown it may be most appropriate for mild to moderate SUI (less than 4 pads per day)⁶⁴
- Acts as a "hammock" to reposition and support the urethra, restoring normal bladder control⁶⁵
- Most patients are continent immediately following the procedure⁶⁸
- 92% patient satisfaction⁶⁴
- 94% would recommend the procedure to a friend⁶⁹



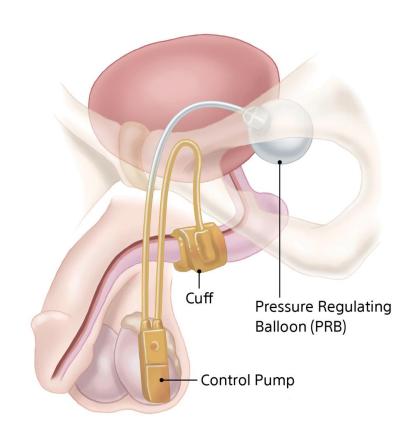
Benefits of the AdVance™ Male Sling System

- Minimally invasive procedure⁷⁰
 - Normal activities can be resumed 1 to 2 weeks after the procedure or at the discretion of your urologist⁶⁶
- There is no interaction with the device, it works on its own to restore continence⁶⁸
- Can help restore normalcy and renew confidence



Long-term treatment options: AMS 800™ Urinary Control System

- 40 + years of AUS clinic use⁵⁰
- Treats all levels of male SUI
- Recognized as the "Gold Standard" treatment for male SUI throughout medical literature⁷²
- The cuff fits around the urethra, inflates and keeps it closed, thereby keeping urine in the bladder⁶⁵
- To void, squeeze the scrotal pump several times. Doing so deflates the cuff, opens the urethra and allows urine to exit the body⁷¹
- After several minutes, the cuff re-inflates on its own, closes the urethra and keeps urine in the bladder⁷¹





AMS 800 Urinary Control System animation



Patient satisfaction with AMS 800™ Urinary Control System⁷³

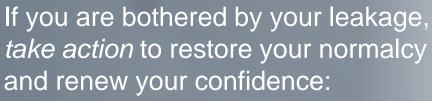


Benefits of the AMS 800 Urinary Control System

- Offers most men with a weakened sphincter muscle the ability to achieve continence⁷¹
- Mimics a healthy sphincter, allowing patients to urinate when desired⁷¹
- Placed entirely inside the body, it is undetectable to others
- High patient satisfaction⁷⁴
- Can help restore normalcy and renew confidence



Take control and assess your condition



- Speak with a urologist
- Share your daily pad usage
- Keep a weekly pad journal

For more information visit FixIncontinence.com



The male sling and artificial urinary sphincter are surgical procedures—possible risks

There are risks involved with any surgery. Not all patients are candidates for a male sling or AUS. Discuss all the risks and benefits of these procedures in more detail with your doctor.

Male Sling

Possible side effects include, but are not limited to:

- Device failure
- Urinary retention
- Post-operative pain
- Irritation at the wound site
- Foreign body response

Artificial Urinary Sphincter

Possible side effects include, but are not limited to:

- Device malfunction or failure, which may require revision surgery
- Erosion of the urethra in the cuff area
- Urinary retention
- Infection, pain and soreness



Insurance coverage

- Boston Scientific cannot guarantee insurance coverage
- Medicare and most private insurance companies cover male incontinence procedures; however, individual coverage may vary
- Work with your doctor's office and insurance provider to check coverage levels prior to receiving treatment



Summary

- Male SUI is a known side effect of prostate cancer treatment and other conditions
- There are a variety of treatment options
- Coping short-term options can be expensive over time and uncomfortable
- A sling or artificial urinary sphincter could offer a permanent solution for male SUI
- Talk with your urologist to understand your options



Important safety information for AMS 700™ Penile Prosthesis with MS Pump

Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

Your doctor is your best source for information on the risks and benefits of the AMS 700™ with MS Pump™ Inflatable Penile Prosthesis. Talk to your doctor for a complete listing of risks, warnings and important safety information.

The AMS 700™ with MS Pump™ Inflatable Penile Prosthesis is intended for use in the treatment of male erectile dysfunction (impotence). Implanting a penile prosthesis will damage or destroy any remaining ability to have a natural erection, as well as make other treatment options impossible.

Men with diabetes, spinal cord injuries or skin infections may have an increased risk of infection. Implantation may result in penile shortening, curvature or scarring. Some AMS 700 devices contain an antibiotic (InhibiZone™ Antibiotic Surface Treatment). The device may not be suited for patients who are allergic to the antibiotics contained within the device (rifampin, minocycline or other tetracyclines) or have systemic lupus.

Potential risks may include: device malfunction/failure leading to additional surgery, device migration potentially leading to exposure through the tissue, wearing away/loss of tissue (device/tissue erosion) infection, unintended-inflation of the device and pain/soreness. MH-545411-AA



Important safety information for AMS Ambicor™ Inflatable Penile Prosthesis

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Important safety information for AMS Spectra™ Concealable Penile Prosthesis

Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

Your doctor is your best source for information on the risks and benefits of the Spectra™ Concealable Penile Prosthesis. Talk to your doctor for a complete listing of risks, warnings and important safety information.

The Spectra™ Concealable Penile Prosthesis is intended for use in the treatment of male erectile dysfunction (impotence). Implanting a penile prosthesis will damage or destroy any remaining natural ability to have a natural erection, as well as make other treatment options impossible.

Men with diabetes, spinal cord injuries or skin infections may have an increased risk of infection. Implantation may result in penile shortening, curvature or scarring.

Additional information is provided in the product Patient Manuals, available through your doctor. MH-547820-AA



Important safety information for AMS AdVance™ Male Sling System

Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

Your doctor is your best source for information on the risks and benefits of the AdVance™ Male Sling System. Talk to your doctor for a complete listing of risks, warnings and important safety information.

The AdVance™ Male Sling System is intended for the treatment of male stress urinary incontinence (SUI). Potential risks may include inability to urinate (urinary retention), return to incontinence and pain. MH-547816-AA



Important safety information for AMS 800™ Urinary Control System

Caution: U.S. Federal law restricts this device to sale by or on the order of a physician.

Your doctor is your best source for information on the risks and benefits of the AMS 800™ Urinary Control System. Talk to your doctor for a complete listing of risks, warnings and important safety information.

The AMS 800™ Urinary Control System is intended for use in the treatment of male stress urinary incontinence (intrinsic sphincter deficiency) following prostate surgery.

Men with diabetes, spinal cord injuries or skin infections may have an increased risk of infection. Some AMS 800 devices contain an antibiotic (InhibiZone™ Antibiotic Surface Treatment). The device may not be suited for patients who are allergic to the antibiotics contained within the device (rifampin, minocycline or other tetracyclines) or have systemic lupus.

Potential risks may include: device malfunction/failure leading to additional surgery, wearing away/loss of tissue (device/tissue erosion), inability to urinate (urinary retention), infection, and pain/soreness. MH-545611-AA



References

- 1. Selvin E, Burnett AL, Platz EA. Prevalence and risk factors for erectile dysfunction in the US. Am J Med. 2007 Feb;120(2):151-7.
- 2. Feldman HA, Goldstein I, Hatzichristou DG, et al. Impotence and its medical and psychosocial results of the Massachusetts Male Aging Study. *J Urol.* 1994 Jan;151(1):54-61.
- 3. Boston Scientific. Data on File. [Select Market Questions]
- 4. Erectile dysfunction. NIH: National Institute of Diabetes and Digestive and Kidney Diseases. http://www.nlm.nih.gov/medlineplus/erectiledysfunction.html. Accessed May 2015.
- 5. Shabsigh R, Lue TF. A Clinician's Guide to ED Management. New York: Haymarket Media Inc.; 2006.
- 6. De Berardis G, Pellegrini F, Franciosi M, et al. Longitudinal assessment of quality of life in patients with type 2 diabetes and self-reported erectile dysfunction. *Diabetes Care*. 2005 Nov;28(11):2637-43.
- 7. Seidman SN, Roose SP The relationship between depression and erectile dysfunction. Curr Psychiatry Rep. 2000 Jun;2(3):201-5.
- 8. Meyer JP, Gillatt DA, Lockyer R, et al. The effect of erectile dysfunction on the quality of life of men after radical prostatectomy. BJU Int. 2003 Dec;92(9):929-31.
- 9. 2009-2012 National Health and Nutrition Examination Survey estimates applied to 2012 U.S. Census Data. http://www.cdc.gov/diabetes/library/factsheets.html. Accessed December 8, 2014.
- 10. Phé V, Rouprêt M. Erectile dysfunction and diabetes: A review of the current evidence-based medicine and a synthesis of the main available therapies. *Diabetes Metab.* 2012 Feb;38(1):1-13.
- 11. Malavige LS, Levy JC. Erectile dysfunction in diabetes mellitus. *J Sex Med.* 2009 May;6(5):1232-47.
- 12. American Diabetes Association. 2015 Fact Sheet. http://main.diabetes.org/dorg/adm/adm-2015-fact-sheet. Accessed October 22, 2015.
- 13. Hatzimouratidis K, Hatzichristou D. How to treat erectile dysfunction in men with diabetes: from pathophysiology to treatment. *Curr Diab Rep.* 2014;14(11):545.
- 14. Walsh TJ, Hotaling JM, Smith A, et al. Men with diabetes may require more aggressive treatment for erectile dysfunction. *Int J Impot Res.* 2014 May-Jun;26(3):112-5.
- 15. Kalter-Leibovici O, Wanstein J, Ziv A, et al. Clinical, socioeconomic and lifestyle parameters associated with erectile dysfunction among diabetic men. *Diabetes Care*. 2005 Jul;28(7):1739-44.
- 16. Jackson G, Boon N, Eardley I, et al. Erectile dysfunction and coronary artery disease prediction: Evidence-based guidance and consensus. *Int J Clin Pract.* 2010 Jun;64(7):848-57.
- 17. Vlachopoulous C, Jackson G, Stefanadis C, et al. Erectile dysfunction in the cardiovascular patient. Eur Heart J. 2013 Jul;34(27):2034-46.
- 18. Gandaglia G, Briganti A, Jackson G, et al. A systematic review of the association between erectile dysfunction and cardiovascular disease. *Eur Urol.* 2014 May;65(5):968-78.
- 19. Montorsi P, Roumeguère T, Montori F, et al. Is there a link between erectile dysfunction and coronary artery disease? EAU Update Series, 2004 Jun:2;43-8.
- 20. Mulligan T, Frick MF, Zuraw QC, et al. Prevalence of hypogonadism in males aged at least 45 years: the HIM study. Int J Clin Pract. 2006 Jul;60(7): 762-9.
- 21. Bashin S, Cunningham G, Hayes F, et al. Testosterone therapy in men with androgen deficiency syndromes: An Endocrine Society clinical practice guideline. *J Clin Endocrin Metab.* 2010 Jun:95(6):2536-59.
- 22. American Cancer Society. Prostate Cancer. 2014. http://www.cancer.org/cancer/prostatecancer/index. Accessed November 3, 2015.



References, continued

- 23. Matthew AG, Goldman A, Trachtenberg J, et al. Sexual dysfunction after radical prostatectomy: prevalence, treatments, restricted use of treatments and distress. *J Urol.* 2005 Dec;174(6):2105-10.
- 24. Ficarra V, Novara G, Ahlering TE, et al. Systematic review and meta-analysis of studies reporting potency rates after robot-assisted radical prostatectomy. *Eur Urol.* 2012 Sep;62(3):418-30.
- 25. Potosky AL, Davis WW, Hoffman RM, et al. Five-year outcomes after prostatectomy or radiotherapy for prostate cancer: the prostate cancer outcomes study. *J Natl Cancer Inst.* 2004 Sep 15;96(18):1358-67.
- 26. Mayo Clinic. Peyronie's Disease. 2014. http://www.mayoclinic.org/diseases-conditions/peyronies-disease/basics/complications/con-20028765. Accessed January 9, 2016.
- 27. Viagra Prescribing Information, Revised January 2010.
- 28. Cialis Prescribing Information, Revised October 2011.
- 29. Levitra Prescribing Information, Revised November 2011.
- 30. Osbon ErecAid® Esteem® Vacuum Therapy System User Guide. Timm Medical Technologies, 2011.
- 31. Defade BP, Carson CC 3rd, Kennelly MJ. Postprostatectomy erectile dysfunction: the role of penile rehabilitation. Rev Urol. 2011;13(1):6-13.
- 32. Padma-Nathan H, Hellstrom WJ, Kaiser FE, et al. Treatment of men with erectile dysfunction with transurethral alprostadil. Medicated Urethral System for Erection (MUSE) Study Group. *N Engl J Med.* 1997 Jan 2;336(1):1-7.
- 33. Costabile RA, Spevak M, Fishman IJ, et al. Efficacy and safety of transurethral alprostadil in patients with erectile dysfunction following radical prostatectomy. *J Urol.* 1998 Oct;160(4):1325-8.
- 34. Hellstrom WJ, Montague DK, Moncada I, et al. Implants, mechanical devices, and vascular surgery for erectile dysfunction. J Sex Med. 2010 Jan;7(1 Pt 2):501-23.
- 35. Derouet H, Caspari D, Rohde V, et al. Treatment of erectile dysfunction with external vacuum devices. *Andrologia*. 1999;31(Suppl 1):89-94.
- 36. Kerfoot WW, Carson CC. Pharmacologically induced erection among geriatric men. *J Urol.* 1991 Oct;146(4):1022-4.
- 37. Sung HH, Ahn JS, Kim JJ, et al. The role of intracavernosal injection therapy and the reasons of withdrawal from therapy in patients with erectile dysfunction in the era of PDE5 inhibitors. *Andrology*. 2014 Jan;2(1):45-50.
- 38. Enemchukwu EA, Kaufman MR, Whittam BM, et al. Comparative revision rates of inflatable penile prosthesis using woven Dacron™ Fabric Cylinders. *J Urol.* 2013 Dec;190(6):2189-93.
- 39. MUSE® Prescribing Information. Revised February 2011.
- 40. Mydlo JH, Volpe MA, MacChia RJ. Results from different patient populations using combined therapy with alprostadil and sildenafil: predictors of satisfaction. *BJU Int.* 2000 Sep:86(4):469-73.
- 41. Nandipati KC, Raina R, Agarwal A, et al. Erectile dysfunction following radical retropubic prostatectomy: epidemiology, pathophysiology and pharmacological management. *Drugs Aging*. 2006;23(2):101-117.
- 42. Caverject® Prescribing Information, Revised August 2009.
- 43. Prabhu V, Alukal JP, Laze J, et al. Long-term satisfaction and predictors of use of intracorporeal injections for post-prostatectomy erectile dysfunction. *J Urol.* 2013 Jan;189(1):238-42.



References, continued

- 44. AMS 700™ with MS Pump™ Penile Prosthesis Product Line Instructions for Use. American Medical Systems. 2013.
- 45. Carson CC III, Mulcahy JJ, Harsh MR. Long-term infection outcomes after original antibiotic impregnated inflatable penile prosthesis implants: up to 7.7 years of follow-up. *J Urol.* 2011 Feb;185(2):614-8.
- 46. FDA/PDP N970012-S065.
- 47. Montorsi F, Rigatti P, Carmignani G, et al. AMS three-piece inflatable implants for erectile dysfunction: a long-term multi-institution study in 200 consecutive patients. *Eur Urol.* 2000 Jan;37(1):50-5.
- 48. Bernal RM, Henry GD. Contemporary patient satisfaction rates for three-piece inflatable penile prostheses. Adv Urol. 2012;2012;707321.
- 49. Scott FB, Bradley WE, Timm G. Management of erectile impotence: use of implantable inflatable prosthesis. Urology. 1973 Jul:2(1):80-2.
- 50. Boston Scientific. Data on File.
- 51. Levine LA, Estrada CR, Morgentaler A. Mechanical reliability and safety of, and patient satisfaction with the Ambicor inflatable penile prosthesis: results of a 2 center study. *J Urol.* 2001 Sep;166(3):932-7.
- 52. Penile Implants Erectile Dysfunction. Sex Health Matters Website: http:///www.sexhealthmatters.org/erectile-dysfunction/penile-implants-erectile-dysfunction/P7. Accessed December 3, 2014.
- 53. Catalona WJ, Ramos CG, Carvalhal GF. Contemporary results of anatomic radical prostatectomy. CA Cancer J Clin. 1999 Sep-Oct;49(5):282-96.
- 54. Ficarra V, Novara G, Rosen RC, et al. Systematic review and meta-analysis of studies reporting urinary continence recovery after robot-assisted radical prostatectomy. *Eur Urol.* 2012 Sep;62(3):405-17.
- 55. Boston Scientific. Data on File.
- 56. Boston Scientific. Data on File. Based on market research by Dymedex.
- 57. Sandhu JS. Treatment options for male stress urinary incontinence. Nat Rev Urol. 2010 Apr;7(4):222-8.
- 58. Ko Y, Lin SJ, Salmon JW, et al. The impact of urinary incontinence on quality of life of the elderly. Am J Manag Care. 2005 Jul;11(4 Suppl):S103-11.
- 59. American Cancer Society. American Cancer Society. Cancer Facts and Figures 2016. 2016. <a href="http://www.cancer.org/acs/groups/content/@research/documents/docum
- 60. Boston Scientific. Data on File. Based on estimated procedural volume.
- 61. Stanford JL, Feng Z, Hamilton AS, et al. Urinary and sexual function after radical prostatectomy for clinically localized prostate cancer: the Prostate Cancer Outcomes Study. *JAMA*. 2000 Jan 19;283(3):354-60.
- 62. Moore K, Lucas M. Management of male urinary incontinence. *Indian J Urol.* 2010;26(2):8-9.
- 63. Boston Scientific. Data on File.
- 64. Sturm RM, Guralnick ML, Stone AR, et al. Comparison of clinical outcomes between "ideal" and "nonideal" transobturator male sling patients for treatment of postprostatectomy incontinence. *Urology.* 2014 May;83(5):1186-8.
- 65. Rehder P, Haab F, Cornu JN, et al. Treatment of post-prostatectomy male urinary incontinence with the transobturator retroluminal repositioning sling suspension: 3-year follow up. *Eur Urol.* 2012 Jul;62(1):140-5.
- 66. AdVance™ Male Sling System Instructions for Use. American Medical Systems, Inc. 2013.



References, continued

- 67. AMS 800™ Urinary Control System Instructions for Use. American Medical Systems, Inc. 2014.
- 68. Welk BK, Herschorn, S. The male sling for post-prostatectomy urinary incontinence: a review of contemporary sling designs and outcomes. *BJU Int.* 2012 Feb;109(3):328-44.
- 69. Suskind AM, Bernstein B, Murphy-Setzko M. Patient-perceived outcomes of the AdVance sling up to 40 months post procedures. *Neurourol Urodyn.* 2011 Sep;30(7):1267-70.
- 70. Bauer RM, Mayer ME, May F, et al. Complications of the AdVance Transobturator Male Sling in the treatment of male stress urinary incontinence. *Urology*. 2010 Jun;75(6):1494-8.
- 71. AMS 800™ Urinary Control System Operating Room Manual. American Medical Systems, Inc. 2014.
- 72. Trost L, Elliott DS. Male stress urinary incontinence: a review of surgical treatment options and outcomes. Adv Urol. 2012;2012;287489.
- 73. Litwiller SE, Kim KB, Fone PD, et al. Post-prostatectomy incontinence and the artificial urinary sphincter: a long-term study of patient satisfaction and criteria for success, *J Urol*.1996 Dec;156(6):1975-80.
- 74. Montague DK. Artificial urinary sphincter: long-term results and patient satisfaction. Adv Urol. 2012;2012:835290.



