

External Mechanical Devices and Vascular Surgery for Erectile Dysfunction



Landon W. Trost, MD,¹ Ricardo Munarriz, MD,² Run Wang, MD,³ Allen Morey,⁴ and Laurence Levine, MD⁵

ABSTRACT

Introduction: The field of sexual medicine is continuously advancing, with novel outcomes reported on a regular basis. Given the rapid evolution, updated guidelines are essential to inform practicing clinicians on best practices.

Aim: To summarize the current literature and provide clinical guidelines on penile traction therapy, vacuum erection devices, and penile revascularization.

Methods: A consensus panel was held with leading sexual medicine experts during the 2015 International Consultation on Sexual Medicine (ICSM). Relevant literature was reviewed and graded based on Oxford criteria to develop evidence-based guideline and consensus statements.

Main Outcome Measures: The development of clinically relevant guidelines.

Results: Penile traction therapy is a viable therapy to modestly improve penile length as a primary therapy, before penile prosthesis placement in men with decreased penile length or after surgery for Peyronie's disease. It also might have a role in the acute phase of Peyronie's disease but has inconsistent outcomes in the long-term phase. Vacuum erection devices are effective in creating an erection satisfactory for intercourse, even in difficult-to-treat populations. They also might be used in the post-prostatectomy setting to maintain penile length but have insufficient evidence as a penile rehabilitation therapy. For vasculogenic erectile dysfunction, men with suspected arterial insufficiency can be evaluated with penile Duplex Doppler ultrasonography and confirmatory angiography. Penile revascularization procedures have consistently demonstrated benefits in very select patient populations; however, inadequate data exists to suggest the superiority of one technique. Men with vascular risk factors are likely poor candidates for penile revascularization, although veno-occlusive dysfunction and age are less significant. Therapies for treating primary veno-occlusive dysfunction are not recommended and should be reserved for clinical trials.

Conclusions: Since the prior ICSM meeting, multiple developments have occurred in external mechanical devices and penile revascularization for the treatment of erectile and sexual dysfunction. Sexual medicine clinicians are encouraged to review and incorporate recommendations as applicable to their scope of practice.

J Sex Med 2016;13:1579–1617. Copyright © 2016, International Society for Sexual Medicine. Published by Elsevier Inc. All rights reserved.

Key Words: Arterial Insufficiency; Veno-Occlusive Dysfunction; Vacuum; Microsurgery; Anastomosis; Bypass

Received July 5, 2016. Accepted September 5, 2016.

¹Department of Urology, Mayo Clinic, Rochester, MN, USA;

²Center for Sexual Medicine, Department of Urology, Boston University School of Medicine, Boston, MA, USA;

³Department of Urology, University of Texas–Houston Medical School, Houston, TX, USA;

⁴Department of Urology, University of Texas Southwestern Medical Center, Dallas, TX, USA;

⁵Department of Urology, Rush University Medical Center, Chicago, IL, USA
Copyright © 2016, International Society for Sexual Medicine. Published by Elsevier Inc. All rights reserved.

<http://dx.doi.org/10.1016/j.jsxm.2016.09.008>

INTRODUCTION AND GUIDELINE METHODOLOGY

The objective of the present report is to provide evidence-based recommendations to practicing clinicians on the topics of PTT, VEDs, and penile vascular surgery. To accomplish this, a team of sexual medicine experts reviewed and summarized the relevant literature. All literature was assessed to determine its quality and overall LOE provided. Oxford criteria were used to grade the literature to determine the strength of various recommendations.¹ After completing the literature search, a summary of the outcomes was provided, and a consensus meeting was held to discuss the available evidence on various topics. Based on these discussions, guideline statements were created and graded based on the LOE supporting the statement. The final

SUMMARY OF RECOMMENDATIONS

Penile Traction Therapy

1. Penile traction therapy (PTT) is a viable treatment option to modestly improve penile length (level of evidence [LOE] = 2; strength of recommendation = B; recommended).
2. Penile traction can be used adjunctively before penile prosthesis (PP) placement in men with decreased penile length or after surgery for Peyronie's disease (PD) to optimize patient outcomes (LOE = 3; strength of recommendation = C; option).
3. PTT can correct curvature in men presenting during the acute phase of PD (LOE = 2; strength of recommendation = C; option).
4. The benefits of PTT in men with PD in the chronic phase of disease are unclear (LOE = 3; strength of recommendation = C; option).

Vacuum Erection Devices

1. The vacuum erection device (VED) is effective in creating an erection satisfactory for intercourse, even in difficult-to-treat populations such as DM, spinal cord injury, and after radical prostatectomy (RP; LOE = 2; strength of recommendation = B; recommended).
2. A VED can be used early in the postoperative setting to maintain penile length after prostatectomy (LOE = 1; strength of recommendation = B; recommended).
3. The VED has not been shown to restore erectile function more rapidly or to a greater degree when used as a rehabilitation therapy in the post-prostatectomy setting (LOE = 1; strength of recommendation = D; not recommended).
4. Limited data suggest a possible role for the VED as a primary treatment for PD and adjunctive use after incision and grafting surgery (LOE = 3; strength of recommendation = C; option).

Vascular Surgery for Erectile Dysfunction

1. Men presenting with suspected cavernosal arterial insufficiency (AI) can be evaluated with penile duplex Doppler ultrasonography (PDDU), cavernosometry, and confirmatory selective internal pudendal arteriography or computed tomographic (CT) angiography (LOE = 3; strength of recommendation = B; recommendation).
2. Men with erectile dysfunction (ED) who satisfy the criteria of the index patient as younger than 55 years with recently acquired ED from focal arterial occlusive disease in the absence of other risk factors such as smoking, diabetes mellitus (DM), or others can be considered for penile revascularization procedures (LOE = 3; strength of recommendation = C; option).
3. There are several viable microscopic penile revascularization procedures. However, current data do not support one procedure over another (LOE = 3; strength of recommendation = C; option).
4. Although younger age (<55 years) is likely a predictor for improved outcomes, data are insufficient to define a specific cut-point (LOE = 3; strength of recommendation = C; option).
5. Men with DM or other vascular risk factors are less likely to benefit from penile revascularization procedures (LOE = 3; strength of recommendation = B; recommended).
6. Venous surgery or embolization for the treatment of veno-occlusive dysfunction (VOD) is not recommended. However, these surgeries or procedures can be performed in the setting of clinical research studies with appropriate informed consent, standardized methods of diagnosis and surgical treatment, including the use of standardized questionnaires (International Index of Erectile Function [IIEF]) and long-term (24-month minimum) follow-up (LOE = 4; strength of recommendation = C; option).
7. Men undergoing vascular repair for aortoiliac occlusive disease should be considered for procedures that spare the internal iliac artery to lower the likelihood for postoperative ED (LOE = 3; strength of recommendation = B; recommended).

Download English Version:

<https://daneshyari.com/en/article/5730455>

Download Persian Version:

<https://daneshyari.com/article/5730455>

[Daneshyari.com](https://daneshyari.com)