

Do Other Definite Treatments Still Have a Future?

Although the less-invasive, more-convenient modalities of oral medications will be the main trend in the treatment of erectile dysfunction, there will still be patients for whom these treatments fail, who complain of side-effects or who have contraindications to oral medications such as sildenafil; these patients may proceed to use other invasive and definite therapeutic options.

1. Vacuum Erection Device

Vacuum constriction devices (VCDs) can induce a mechanical erection in most patients even after penis prosthesis removal.²³ The use of VCDs for augmenting erections may also be a popular indication.²⁴ In patients for whom erection quality with other treatments is suboptimal or partial, a VCD can be used to augment the erection with no adverse effects. However, drop-out rates in clinical studies with VCDs have been as high as 31%.²⁵ More-comfortable, convenient, and easily manipulatable devices are expected for patients who use this mechanical method on a continuous basis.

2. Intracavernosal Injection Therapy

Intracavernosal injection of vasoactive drugs has been shown to be a safe and effective treatment of erectile dysfunction of various etiologies.²⁶ It enjoyed a period of popularity during the 1980s and early 1990s, as the only other effective alternative treatment was then an invasive penile prosthesis.²⁷ Even after the introduction of an effective oral medication, the treatment modality is still used by many patients, because injection therapy can achieve an immediate erection within 5 to 10 min and lasts sufficiently long for the patient and his partner to engage in satisfactory sexual activity. At present, it is also the first choice of a second-line therapy for erectile dysfunction when oral medications are not effective. The commonly used drug for intracavernosal injection therapy is alprostadil (prostaglandin E1) in variable dosages. If it is not good enough to induce a rigid erection, then a combination of papaverine and phen-tolamine titrated to a suitable dose is satisfactory

for most patients.

3. Intraurethral Suppository of Prostaglandin E1

The relatively high dropout rate with intracavernosal self-injection therapy encountered in long-term follow-up studies is mostly due to needle phobia in many patients. Local adverse effects such as a prolonged erection and the development of fibrotic plaques occur in a small percentage of patients, and may also cause patients to withdraw from long-term treatment. An intraurethral suppository of prostaglandin E1 MUSE (Medicated Urethral System for Erection) has been proven to be effective and safe²⁸ and is used as alvage therapy in patients not responding to or who have dropped out of intracavernosal injection therapy. However, the erectile response of MUSE sometimes is not complete and additional sexual stimulation or a mechanical device (penile constriction band) is needed.²⁹ The risk of urethral irritation and urethral stricture with long-term usage of MUSE also needs to be more thoroughly evaluated.

4. Penile Prosthesis Implantation

In our traditional, conservative society, penile prosthesis implantation gradually became acceptable only in the 1980s. I reviewed the long-term results of 331 cases with special considerations concerning sociocultural factors influencing postoperative patient-partner satisfaction.³⁰ Results showed that the great benefit for those with a penile prosthesis was in restoration of self-confidence and self-esteem as a man. Although some men did not increase sexual activity, they felt free of the anxiety of impotence and able to complete the responsibility to their woman. Instead of pursuing the goal of improving the quality of sexual life, which is commonly seen in other less-invasive alternatives of impotence treatment, penile prosthesis implantation may better redefine the image of the impotent patient in our cultural setting, i.e., potency means power and is the symbol of a man. Based on the fact of an increasing number of cases of penile prosthesis surgery in recent months, it is believed that penile prosthesis implantation still has its place as a definite and permanent therapy for some men with uncorrectable erectile dysfunction.³¹