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Prostheses

Both **erectile dysfunction** and **urinary incontinence** can occur after radical prostatectomy, as well as in other situations.

Careful nerve sparing prostatectomy has reduced the incidence of erectile dysfunction. In many cases, penile rehabilitation can be achieved with oral medical therapy or injection therapy. For some men however, erectile dysfunction can be severe and unresponsive to simple measures. A penile prosthesis is an excellent option but requires careful consideration and discussion. Men with erectile dysfunction unrelated to surgery, may also consider a prosthesis. This group of men often includes diabetics and men with vascular disease.

Surgical placement of a **penile prosthesis** is a straightforward procedure. A small transverse incision is made in the scrotum below the base of the penis where the corporal bodies can be easily identified. Specialised tools allow accurate sizing of the required prosthesis. The pump mechanism is placed in a scrotal pouch and the reservoir is usually placed immediately behind the pubic bone. The operation usually requires an overnight stay.

The operation is usually very well-tolerated with minimal post-operative discomfort. There can be some swelling and bruising in the scrotum and penis in the short term. It is also important to note that the glans penis will remain relatively soft and can sometimes have a slight ventral or downward angle when the device is inflated. This doesn’t impede sexual activity in any way. The main risk of the surgery is infection which may require removal of the device as it is very difficult to completely eradicate infection in the presence of a foreign body. Many steps are taken prior to and during the procedure to reduce the risk of infection which fortunately occurs in fewer than 5% of cases. Like any mechanical device, they have a very small rate of failure, but I have seen prostheses lasting 10 to 15 years or more. In the event of mechanical failure, the device can usually be replaced.

If the patient is comfortable, he can begin cycling the device a few weeks post operatively, but intercourse should not be undertaken for about six weeks or so. Both patients and their partners report a very high degree of satisfaction.

Severe urinary incontinence can also be treated with a prosthetic device if non-surgical methods fail. An **artificial urinary sphincter** or cuff, can also be placed through a scrotal incision. A small amount of fluid fills the cuff which compresses the urethra and prevents leakage. When there is a desire to void, a pump mechanism in the scrotum is simply compressed which pushes fluid out of the cuff, relaxing the compression, allowing the bladder to empty. The cuff slowly automatically refills, compressing the urethra. These devices restore perfect or near perfect continence. Again, the procedure is very simple, but infection can be a major problem.

For patients with severe erectile dysfunction or urinary incontinence, it is very sensible to consider these options although it is often a last resort. They do however provide a high level of confidence and allow men to return to an excellent quality of life.