Vacuum erection assistance devices: Frequently asked questions

What are vacuum erection assistance devices?
Vacuum therapy is a non invasive method of obtaining and sustaining an erection in men with impotence (erectile dysfunction). An erection is obtained by inducing a negative pressure with a hand or battery operated pump. To use this device, the penis is inserted into a cylinder with plenty of lubrication being used to provide a seal at the base of the penis.

How do they work?
Activation of the vacuum device removes air from the cylinder. This is accomplished using either a small electric motor or a hand operated pump. The negative pressure produced encourages blood to flow into the penis, thus causing an erection. A constriction ring is then slipped around the base of the penis to hold blood in and to maintain the erection.

How long are they effective?
It may take up to seven minutes to obtain a full erection using the vacuum device but, once an erection has been obtained, the cylinder is removed and the constriction ring maintains the erection. The constriction ring should not be left in place for more than 30 minutes to prevent bruising or discoloration of the penis. Some patients find this process rather mechanical and it can make the penis feel “cold”. The constriction ring can, sometimes, be slightly uncomfortable and about 60% of men experience some difficulty with ejaculation since the constriction ring stops the flow of semen; this causes no harm although it may be slightly uncomfortable at the time of climax.
Approximately 70% of men are able to obtain an erection using this method but are sometimes put off by the expense; the pumps cost between £120 and £300, and are available on the NHS (under schedule).

**What happens when sexual activity has finished?**
Once intercourse has been completed, the constriction ring should be grasped firmly by its tabs and stretched, to allow the trapped blood to pass out of the penis. Once the erection has subsided, the constriction ring can be removed from the penis without difficulty.

**How can I try a device?**
Patients who wish to try a vacuum device will have its use demonstrated by a nurse practitioner and will be allowed to take a pump home for a one month trial period. If it proves successful, they will then have to purchase the device themselves. Vacuum pumps can be re-used many times after washing with soap and water.

**Other information**
This patient information leaflet provides input from specialists, the British Association of Urological Surgeons, the Department of Health and evidence based sources as a supplement to any advice you may already have been given by your GP. Alternative treatments can be discussed in more detail with your urologist or specialist nurse.

**Who can I contact for more help or information?**

**Oncology nurses**
Uro- oncology nurse specialist  
01223 586748

Bladder cancer nurse practitioner (haematuria, chemotherapy and BCG)  
01223 274608

Prostate cancer nurse practitioner  
01223 274608 or 216897 or bleep 154-548

Surgical care practitioner  
01223 348590 or 256157 or bleep 154-351

**Non-oncology nurses**
Urology nurse practitioner (incontinence, urodynamics, catheter patients)  
01223 274608 or 586748 or bleep 157-237

Urology nurse practitioner (stoma care)  
01223 349800

Urology nurse practitioner (stone disease)  
01223 349800 or bleep 152-879
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Document history

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01223 256650/ Fax 01223 216069

Publish/Review date
October 2018/October 2021

File name
Vacuum_erection_assistance_devices_FAQ.doc

Version number/Ref
V9/PIN1956/Doc ref 7944

Local Ref number
13/Info_10_18