Peyronie's Disease

Frequently Asked Questions

What is Peyronie's disease?

The disease is characterised by a plaque, or hard lump, that forms in the erectile tissue of the penis. It begins as a localised inflammation and can then mature into a hardened scar.

There are two erectile cylinders which run the length of the penis. The inner membrane of each chamber is a sheath of elastic fibres. A connecting tissue, called a septum, runs between the two chambers and attaches at the top and bottom of the penis. If the penis is abnormally squeezed or flexed, the area where the septum attaches to the elastic fibres may over-stretch, injuring the lining of the erectile chamber and rupturing small blood vessels. In older men, diminished elasticity, disease of the arteries and diabetes may further increase the chances of injury.

The damaged area may heal slowly but abnormally. In most patients, however, the injury heals within a year and the plaque does not advance beyond an initial inflammatory phase. In more persistent cases, the plaque undergoes scarring due to formation of tough, fibrous tissue and may even form calcium deposits. While trauma might explain acute cases of Peyronie's disease, it does not explain why most cases develop slowly and with no apparent traumatic event. Neither does it explain why some cases disappear quickly.

What problems does it cause?

Peyronie's disease usually occurs in a mild form that heals without treatment in 6 to 15 months. In severe cases, the hardened plaque reduces flexibility, causes pain and forces the penis to bend during erection. The plaque itself is benign (non-cancerous). A plaque on the top of the shaft (most common) causes the penis to bend upward; a plaque on the underside causes it to bend downward. In some cases, the plaque develops on both top and bottom, leading to indentation and shortening of the penis. At times, pain, bending, and emotional distress prohibit sexual intercourse.

How common is it?

Peyronie's disease occurs in approximately 3% of men. Although the disease occurs mostly in middle-aged men, younger and older men can acquire it. About 30 percent of people with Peyronie's disease develop fibrosis (hardened cells) in other elastic tissues of the body such as the hand or foot. A common example is a condition known as Dupuytren's contracture of the hand. In some cases, men who are related develop Peyronie's disease, which suggests that familial factors might make a man vulnerable to the disease.

When is medical treatment needed?

Men with Peyronie's disease usually seek medical attention because of painful erections or difficulty with intercourse. The goal of any treatment is to keep the Peyronie's patient sexually active. Providing education about the disease and its course is often all that is required. There is no strong evidence that any treatment other than surgery is effective. Experts usually recommend surgery only in long-term cases where the disease has stabilised and where the deformity prevents intercourse.

Because the plaque of Peyronie's disease often shrinks or disappears without treatment over a 6–15 month period, medical experts suggest waiting 1 to 2 years before attempting to correct it surgically. Spontaneous improvement in the disease is seen in 6–70% of patients. During the wait for improvement, however, patients are often willing to undergo treatments that may produce benefit but have no scientifically-proven effectiveness.

Some clinicians have given men with Peyronie's disease vitamin E tablets; as yet, no studies have ever established the effectiveness of vitamin E therapy. Similar inconclusive success has been attributed to para-aminobenzoate (Potaba®) tablets. The only medical treatment proven to be effective is Tamoxifen, taken for 6 weeks, but this is only indicated in the early, painful stage of the disease; given at the right time, Tamoxifen can relieve the pain and limit any subsequent bending of the penis.

Peyronie's Disease continued...

Injection treatment with agents such as steroids, and calcium channel blockers directly into the plaques are also used. The results from these treatments are variable. Collagenase, an enzyme that attacks collagen, has also been injected in the past. Collagen is the major component of Peyronie's plaques; the effects of this, however, are disappointing.

Radiation therapy, in which high-energy rays are aimed at the plaque, has also been used. Like some of the chemical treatments, radiation appears to reduce pain, but it has no effect on the plaque itself and can cause unwelcome side effects. Currently, no medical treatment has equalled the body's natural ability to eliminate Peyronie's disease.

When is surgery indicated?

Peyronie's disease has been treated with some success by surgery. The most common surgical methods are:

Shockwave treatment-

This uses a low-energy version of the lithotripsy technique for kidney stones and has been used to disperse the plaque and reduce the deformity. 4–6 treatment sessions are usually required, at monthly intervals, before any effect is noticed

Removal or expansion of the plaque-

This is followed by placement of a patch of skin, artificial material or vein graft; this may result in partial loss of erectile function

Removal or bunching (plication) of tissue-

This is performed on the side of the penis opposite the plaque, which cancels out the bending effect; this is known as Nesbit's procedure but does cause slight shortening of the penis in addition to the shortening which the disease itself may produce

Implantation of penile prostheses—

This is only performed when the plaque prevents the normal flow of blood to the tip of the penis, thereby, inhibiting a full erection. It is major surgery and is rarely indicated

Are there any problems with surgery?

Most types of surgery produce positive results. But complications can occur, and because many of the phenomena associated with Peyronie's disease (for example, shortening of the penis) are not corrected by surgery, most doctors prefer to perform surgery only on the small number of men with curvature so severe that it prevents sexual intercourse.

Summary

In general, Peyronie's disease requires no treatment because it is likely that the condition will improve spontaneously. However, this may take 12–18 months and the problem may not disappear completely. Treatment in the early, painful stages of the disease (when drugs may be helpful) is suggested as it is in the late stages where the penis is too bent or too floppy to allow penetration for normal intercourse and where spontaneous improvement has not occurred.

Peyronie's Disease continued...

Who can I contact for more help or information?

Dr Peter Campbell

Suite 9, level 9, Evan Thomson Building, The Wesley Hospital, Chasely St, Auchenflower, QLD 4066 (07) $3367\,1608$, www.campbellurology.com.au

The Wesley Hospital, Urology Ward

451 Coronation Drive, Auchenflower, QLD 4066 (07) 3232 7168 www.uhc.com.au/wesley

The Wesley Emergency Centre

451 coronation Drive, Auchenflower, QLD 4066 (07) 3232 7333

Greenslopes Private Hospital, Continence Advisor

Newdgate St, Greenslopes, QLD 4120 (07) 3394 7978 www.greenslopesprivate.com.au

Greenslopes Private Hospital Urology Ward

Newdgate St, Greenslopes, QLD 4120 (07) 3394 7261 www.greenslopesprivate.com.au

Greenslopes Private Hospital Emergency Centre

Newdgate St, Greenslopes, QLD 4120 (07) 3394 6777 www.greenslopesprivate.com.au

The Queen Elizabeth II Jubilee Hospital,

Urodynamics Department

Kessels Rd, Coopers plains, QLD $_{4108}$ (07) $_{3275}$ $_{6346}$

American Urological Association Foundation

1000 Corporate Blvd, Suite 410, Linthicum, MD 21090 1800 828 7866 www.urologyhealth.org

Thank you for taking the trouble to read this information sheet. If you are satisfied with the explanation of the test, please sign below and this leaflet will be filed in your chart.

If you wish to retain a copy for you own records, one will be provided.

 $I\,have\,read\,this\,information\,sheet\,and\,I\,accept\,the\,information\,it\,provides.$

Signature Date