



# PEYRONIE'S DISEASE

## Frequently-Asked Questions

### What is Peyronie's disease?

François de la Peyronie, a French surgeon in Montpellier, first described his disease in 1743 although there are simple descriptions of a similar problem as early as 1687. The first writers classified it as a form of impotence.

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.

There is an association with high blood pressure, diabetes, raised cholesterol levels, ischaemic heart disease and arteriosclerosis as well as with certain drugs (beta-blockers, anti-ulcer agents, antidepressants and antihistamines).

### 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 10 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. 3% of men with Dupuytren's contracture also have Peyronie's disease. 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 60-70% of patients. During the wait for improvement, however, patients are often willing to undergo treatments that 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.

Injection treatment with agents such as dimethyl sulfoxide, steroids, and calcium channel blockers directly into the plaques is used by some doctors; none of these techniques has, however, produced convincing results. Steroids have also been used but produce unwanted side effects such as destruction of healthy tissues. The most logical injected agent to use is collagenase, an enzyme that attacks collagen, 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.



More recently, the use of penile traction (with the Andropenis penile extender) for 4-10 hours each day over a period of 3-6 months has been used. There is some evidence that it may effectively break down the penile adhesions in 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. Success rates of 75-96% are quoted for this procedure.
- **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. Success rates of 88-94% are quoted for this procedure.
- **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.

In summary, Peyronie's disease usually 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.

We generally discourage referral for treatment except in the early, painful stages of the disease (when drugs may be helpful) or 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.



## Are there any other important points?

This publication contains guidelines and advice from professional bodies, together with information about the prescription of drugs. All NHS hospitals have local arrangements with their Primary Care Trusts (PCTs) about which medicines can be used. As a result, some drugs mentioned cannot be prescribed by local hospitals.

Treatment of patients will be planned with the Consultant responsible for care, taking into account those drugs which are or are not available at the local hospital and what is appropriate for optimum patient care.

Healthcare professionals are advised to check prescribing arrangements with their local hospital or PCT.

## Disclaimer

While every effort has been made to ensure the accuracy of the information contained in this publication, no guarantee can be given that all errors and omissions have been excluded. No responsibility for loss occasioned by any person acting or refraining from action as a result of the material in this publication can be accepted by the British Association of Urological Surgeons Limited.