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# Focus on PEYRONIE'S DISEASE

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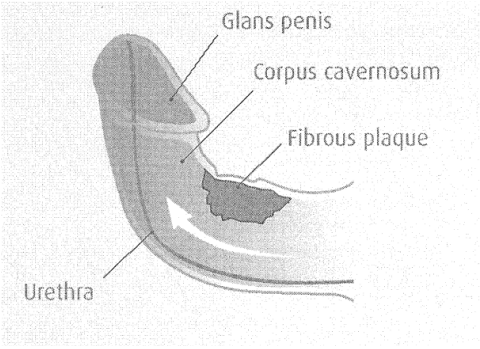
**What is Peyronie's Disease?** Peyronie's disease (named after Francois de la Peyronie, surgeon to King Louis XV of France) is the hardening of tissue (fibrosis) in the penis. A lump or scar tissue (plaque) forms on the lining of the erectile tissue which holds much of the blood in the penis during erection. The hardened area or plaque prevents normal stretching and can impact on the size and shape of the erect penis.




**What are the symptoms?** Peyronie's disease (PD) begins as a small swelling or inflammation which hardens into a lump on the upper or lower side of the penis. It usually develops over time but sometimes appears very quickly. It can be painful, reduce flexibility and in some cases shorten, create a bend or hourglass effect in the penis when erect. Some men find it difficult to get or keep erections, or the penis only becomes rigid up to the area of the scar and remains flaccid past that point.

**How common is Peyronie's Disease?** About one in ever hundred men develop this disease, although definite numbers are hard to determine as many men do not recognise the problem or seek medical attention as symptoms are mild.

**What causes Peyronie's Disease?** It is not clear exactly what causes PD, but it is thought to involve trauma, genetics or auto-immune factors or a combination of these.

When the penis is bent or bumped, the lining to the shaft is damaged. Small blood vessels can rupture or burst and proper blood flow is interrupted. Generally such an injury would only swell, or become inflamed, and would heal within a year. However recovery can take longer and fibrosis (scarring) can happen.

Men with male blood relatives with this problem are more likely to develop PD, which suggests that there are genetic factors involved. It is although thought that a pre-existing problem with the immune system could explain why some men recover from a simple injury to the penis and others develop PD.

**Does it always follow an injury or accident?** Sometimes PD follows an obvious injury to the penis, such as a sporting incident, motor vehicle accident or pelvic or urologic surgery. Injury can be caused, even without realising, during sexual activity when the penis is pushed or bent against the partner's pelvic bone. However, in many cases no injury can be identified as a trigger. Also, injection of the penis for treatment of erectile dysfunction can on occasion bring about scarring and the development of PD.

**How is Peyronie's Disease diagnosed?** A general practitioner (GP) can generally diagnose PD based on a physical examination. Lumps can usually be seen and felt when the penis is not erect (flaccid). However to determine the extent of the bend, the penis needs to be erect. To avoid the need to produce an erection in the doctor's surgery, it is sometimes suggested that patients take a photo of their erect penis at home. Erectile dysfunction medicine is sometimes given by the doctor in order to check the erect penis.

**Why is ultrasound or X-ray sometimes used?** An ultrasound helps identify the exact location, size and shape of the plaque and determines to what extent blood flow in the penis is affected. An x-ray will show any calcium deposits (calcification). About one in three men with PD develop calcification, which generally indicates the end-stage of the disease. This means the disease has run its full course and the lump or malformation is unlikely to worsen or change. This is useful in planning treatment.

**Who is most at risk of developing Peyronie's Disease?** PD usually affects men aged 45 – 60 years, but can happen at any age. Men with a family history of PD are more likely to develop this problem. It also appears to be more common in Caucasian men with Northern European ancestry. It is uncommon in African-American men and rare in Asian men.

**How serious is Peyronie's Disease?** PD lumps are benign or non-cancerous. Consequently it is not life-threatening. However, it can prevent sexual intercourse and the pain and impact on sex life can lead to distress, anxiety and low self esteem.

**How does Peyronie's Disease affect sexual intercourse?** In mild cases of Peyronie's where the lump does not cause the penis to bend very much, the effect on intercourse can be minimal. However, moderate or severe disease can prevent intercourse due to erectile dysfunction or the shape making penetration impossible.

**Why isn't treatment always suggested?** PD does not follow a set pattern or clearly defined clinical course. Lumps and scar tissue can disappear without any treatment. Doctors often suggest waiting about 12 months before surgery is recommended.

**How is it treated?** Most men do not need treatment for PD. The condition does not progress to a degree that treatment is required. However time and surgery are the only proven cures for the condition. The most common surgical form of treatment is plication of the penis. PD can also be treated through excision of the scar and grafting and also with implantation of a penile prosthesis.

**How are surgical treatments selected?** If the curvature or pain continues after 12 months surgery is generally recommended, particularly if the ability to have sexual intercourse is affected. There are a number of different procedures. Treatments are generally recommended to suit the following criteria:

- The man's ability to get and keep an erection
- The length of the penis
- The extent of the bend or curvature

**What is plication?** Penile or corporeal plication involves making a tuck, using sutures, in the lining of the penis on the side opposite the bend to straighten the penis. Known as the Nesbit procedure it is a simple operation with minimal side effects, other than shortening of the penis. It is best suited for men who have good erectile function, only a slight bend, no pain and where penile shortening is not a major concern.

**What is incision of the scar and grafting?** Incision of the scar and grafting involves cutting the scar tissue to release the tethered penis, returning the length, and the opened area is then patched. The plaque is divided with a scalpel and the defect created is then covered with skin graft, a piece of vein or other suitable grafting material. Synthetic patches are now available. The procedure can successfully treat pain, curves and other deformities. It can also improve length if shortening the penis, secondary to the scarring, is significant.

This type of surgery though has a greater chance of causing erectile dysfunction than plication because disturbing nerve on the penis is often necessary and a loss of penile sensation may happen in about 10% of

patients. The surgery is technically more difficult. For these reasons plication is often offered as a simpler initial therapy, with incision and grafting offered to men with severe scarring in whom short penile length is a major problem.

**When are penile prostheses used?** Men whose PD has led to severe erectile dysfunction, or who are unable to get and keep an erection, can also have penile implants inserted to assist them. Sometimes an implant alone will straighten the penis; however a combined procedure is often needed to completely fix the problems. The plaque is excised and grafted before the prosthesis is implanted.

**What non-surgical treatments are available?** Over a long period of time many medical therapies have been tried with some reporting initial success, but once they have been tested in a truly controlled sense with placebo, no treatment has been shown to reduce or remove penile scarring. Non-surgical treatments include:

- Vitamin E in tablet or cream form – an inexpensive and simple treatment with minimal side effects.
- Potassium aminobenzoate – a chemical that belongs to the Vitamin B group and is used to break down hard, fibrous skin in conditions like scleroderma;
- Colchicines – an anti-inflammatory drug generally used to treat gout but often has severe gastrointestinal side effects.
- Tamoxifen – an anti-oestrogen drug used to treat breast cancer and other malignant tumours which can have a range of side effects.
- Extracorporeal shock wave therapy (ESWT) – sometimes used to break down kidney stones
- Radiation therapy – high energy rays targeting the scar tissue can relieve pain, but can also cause severe side effects.
- Verapamil – a calcium channel blocker often used in the treatment of high blood pressure that is injected directly into the plaque.
- Interferon – naturally occurring protein which is also injected directly into the penis to break down the scar tissue.

**Are injectable treatments safe?** Some controversy surrounds the use of injectable treatments for PD. The benefits are still uncertain, and some treatment could make the problem worse. Steroid injection, particularly cortisone, is not recommended as they can lead to the death of healthy tissue (atrophy).

**Are all lumps in the penis Peyronie's Disease?** Not all lumps in the penis are PD. Hard swellings that suddenly appear on the shaft of the penis near the foreskin after sexual intercourse are usually lymphoceles. These are caused by temporary blockage in lymphatic channels in the penis and will go away on their own without after effects. Small bumps, cysts and pimples on the outside of the penis and scrotum are also quite common and generally harmless. Any persistent or painful cyst with a discharge should be checked by a doctor to rule out the possibility of a sexually transmitted disease.

**Could it be penile cancer?** The symptoms for penile cancer are very different from the symptoms of PD. Penile cancer generally starts with a tender spot or wart like bump on the outside of the penis. Bleeding and unusual discharge from the penis are also symptoms associated with penile cancer. This cancer is extremely rare in Western countries, although more common in Africa and Asia.

**In summary**, Peyronie's Disease it must be emphasised, is an entirely benign condition and only affects a man secondary to its functional effects on the penis. If these are minimal, no treatment should be considered. Treatment should only be reserved for those men in whom anger and frustration, secondary to the loss of function, are real issues. Treatment should always be delayed at least 12 months from the development of the scar as in many patients scarring improves to a degree that no treatment is required.