Peyronie’s Disease

What is Peyronie’s disease?

Peyronie’s disease (named after François de la Peyronie, surgeon to King Louis XV of France) is the hardening of tissue (fibrosis) in the penis. A lump or plaque (scar tissue) forms on the lining of the erectile tissue which holds much of the blood in the penis during erection. In most cases, a hard lump can be felt at the point where the penis curves.

The hardened area or plaque prevents normal stretching and can affect the size and shape of the erect penis. In severe cases, the plaque can include the muscle and arteries of the penis leading to erectile problems.

What are the symptoms of Peyronie’s disease?

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.

Some men notice PD after an injury to the penis. These men often describe hearing a loud ‘crack’, with pain and bruising of the penis. However, in many cases men cannot remember any injury happening.

PD can be painful, reduce flexibility, and in most cases shorten or create a bend in the penis when erect. In some cases, there is an hour-glass deformity or constriction to one side of the penis. Some men find it difficult to get or keep an erection. In some cases, the penis only becomes hard up to the area of the scar and stays flaccid (not erect) past that point.

How common is Peyronie’s disease?

It is not known exactly how many men have PD as often men do not recognise the problem, are too embarrassed to see a doctor, or do not seek help as the symptoms are mild. A recent Australia population study showed the prevalence of PD is around one in ten men.

What causes Peyronie’s disease?

The causes of PD are not clear, but it is thought to happen after repeated bending or bumping of an erect penis. The tearing in the lining of the erectile tissue leads to an inflammatory plaque (scar tissue) that does not heal normally. Small blood vessels can burst and interfere with blood flow.

Usually this type of injury leads to swelling, and/or becomes inflamed (red and/or hot), and will heal by itself within a year. However in some men recovery takes longer and scarring can happen.
A pre-existing problem with the immune system or diabetes could explain why some men develop PD after a simple injury to the penis while others recover from the injury.

PD usually affects men after puberty but the most common age group is between 45 and 60 years.

What are the main effects of Peyronie’s disease?

PD lumps are benign (non-cancerous), but erections and normal sexual activity can be more difficult. PD can therefore have a major effect on emotional, physical and overall health.

How does Peyronie’s disease affect sexual intercourse?

In the early stage, some men may complain of penile pain when getting an erection. In mild cases of PD where the lump does not cause the penis to bend very much, or at all, the effect on intercourse is usually small. However, moderate or severe PD can make intercourse impossible due to the shape of the penis or problems with getting an erection.

How is Peyronie’s disease diagnosed?

A general practitioner (GP) can usually diagnose PD based on medical history and physical examination. Lumps can often be seen and felt when the penis is flaccid (not erect).

However, the penis needs to be erect for the doctor to see how much it is bending. To avoid having an erection while in the doctor’s surgery, and to help in diagnosing PD, the man may take a photo of his erect penis at home.

What is ultrasound or X-ray sometimes used?

An ultrasound is used to show the exact location, size and depth of the Peyronie’s plaque (hardened area of scar tissue) and to check the blood flow in the penis. It will also show any calcification (calcium deposits), that happens in about one in three men with PD. Calcification usually means the PD has run its full course and the lump is not likely to get better (end-stage disease). This is useful to know when planning treatment.

How is Peyronie’s disease treated?

Some men do not need treatment for PD because it does not become serious enough or it gets better over time. Conservative (medical) treatment of PD can be successful for men who have had PD for less than 12 months. It is important for men to seek appropriate medical review if PD bothers them.

If the curve or pain in the penis continues for more than 12 months, surgery is generally the best treatment, particularly if there are problems with having sexual intercourse.

The most common form of surgery is:
- plication of the penis.

Other types of surgery include:
- incision/excision of the scar and grafting
- implanting a penile prosthesis.

How are surgical treatments selected?

The choice of the type of surgery is based on the following:
- the man’s ability to get and keep an erection (co-existing erectile dysfunction)
- the existing length of the penis
- how much the penis is bent or curved, or the presence of an hour-glass deformity or constriction.

What is plication of the penis?

Plication of the penis involves making a tuck using stitches in the lining of the penis. This is done on the side opposite to the bend, to straighten the penis.

It is a simple operation with few side-effects. However, to make the penis straight, the unaffected side of the penis is made shorter. It is best suited to men with good erectile function, only a slight bend, no pain, and where a shorter penis will not be a major problem. Recurrence of curvature can occur in up to five per cent of men following surgery.

What is incision/excision of the scar and grafting?

Incision/excision of the scar and grafting is sometimes done in more severe cases of PD. It involves cutting the scar tissue to release the penis so that it returns to its original length. The opened area is then grafted (patched).

While this type of surgery can be successful it is technically more difficult than plication and has a higher risk of side-effects. The risk depends on the size and location of the plaque.

To do the surgery, the nerves in the penis are often affected, leading to sensory numbness in the head of penis (about one in ten). Other potential side-effects are erectile dysfunction (about one in four), recurrence of curvature (up to one in ten in the long term), and/or post-operative infection which can lead to scarring of the penis and in some cases loss of tissue.
When are penile implants used for Peyronie’s disease?

Men with PD and erectile dysfunction can be helped by a penile implant. Sometimes an implant alone will straighten the penis. However, often the plaque will need to be removed and grafted before the implant is put in, to completely fix the problem.

What are the non-surgical treatments for Peyronie’s disease?

Non-surgical treatments for PD include oral medicines, injections, shock wave treatments and penile traction (extender) devices. Non-surgical treatments work better in men with PD for less than six months, and men with pain and a smaller curve in the penis.

At present, the only licenced treatment for PD is a drug called Xiaflex® (which is an enzyme that dissolves plaque). It has been shown to be effective in improving curvature and decreasing plaque size in 60 per cent of cases. However it should only be administered by accredited doctors (such as a urologist) to avoid damage to underlying healthy tissue in the penis.

Are all lumps in the penis Peyronie’s disease?

Not all lumps in the penis are PD. Small bumps, cysts and pimples on the outside of the penis and scrotum are also common and usually harmless.

Any persistent or painful cyst with a discharge should be checked by a GP to rule out sexually transmitted infection.

Could a lump in the penis be penile cancer?

The symptoms of penile cancer are very different from the symptoms of PD and penile cancer is extremely rare in Western countries.

Symptoms of penile cancer generally start with bleeding and unusual discharge under the foreskin or on the shaft of the penis. Any penile lumps, cysts, bleeding or unusual discharge should be checked by a GP.

Related resources:
• Penis Lumps fact sheet

Visit healthymale.org.au or speak to your doctor for more info.