

## Peyronie's disease

Peyronie's disease causes abnormal, fibrous lumps (plaques) to form inside the erectile tissue of the penis. Over time, these plaques can grow and deform the erect penis and cause it to curve.

Peyronie's disease usually affects the upper side of the penis, but the disease may sometimes target the lower side or both sides. Infection or injury to the penis can lead to Peyronie's disease, but the cause remains unknown in the majority of cases.

The condition is more common in middle aged and older men. Peyronie's disease affects around three per cent of men aged 30–80 years. There is no cure and the condition is difficult to treat. The most successful form of treatment is surgery to remove the plaques and replace the erectile tissue with an inflatable prosthesis (to create an artificial erection).

### Symptoms

Peyronie's disease can be mild, moderate or severe. It may appear suddenly or progress slowly over a matter of weeks or months. The progression of symptoms may include:

- A small, localised ache or discomfort is felt in the penis.
- A lump forms at the site of the ache.
- The lump may be painless.
- The plaque contracts as it spreads, bending or kinking the erect penis towards the affected side.
- Erections become uncomfortable or painful.
- The erections are softer than usual.
- There may be one or several plaques.

### The structure of the penis

The erectile tissue of the penis – called *corpora cavernosa*, or corporal bodies – looks like two rods running the length of penis. There are blood vessels inside these 'rods'. During sexual arousal, the nerves that supply the penis allow these relatively empty blood vessels to open and fill with blood, causing the erection.

Peyronie's disease tends to start in the membrane that covers the corporal bodies. It can also progress to invade the erectile tissue. The contraction of the plaques causes the penis to bend and the invasion of the corporal bodies interferes with blood flow, making it difficult for the penis to become erect.

### Deformed erections

The plaque most often develops on the top side of the penis, causing it to curve upwards. Sometimes, the plaque develops on the underside, which means the penis curves downwards. In a small percentage of cases, plaques grow on both the upper and lower sides, which shortens and distorts the penis.

### The link to Dupuytren's contracture

Around 16–20 per cent of men with Peyronie's disease develop other forms of fibrosis, or plaques. A common example is Dupuytren's contracture – the shortening of the connective tissue of the palm, which causes the fingers to close.

### A range of causes

In most cases, the cause of Peyronie's disease is unknown. Some of the known causes and risk factors include:

- Injury to the penis, such as bending the erect penis severely enough to rupture the membrane that covers the blood vessels
- Family history (which suggests there may be a genetic susceptibility)

- Inherited collagen abnormality in the genes that regulate the growth of fibrous connective tissue proteins (collagen)
- Infection of the penis
- An autoimmune response, which causes the plaques to form
- Certain drugs including blood pressure medications (beta blockers), interferon and anti-seizure drugs.

### Diagnosis

Peyronie's disease is diagnosed using a number of tests, including:

- Medical and sexual history
- Physical examination
- Ultrasound scan of the penis.

### Treatment

Treatment options include:

- **'Wait-and-see' approach** – in some cases, Peyronie's disease can resolve by itself with no medical intervention at all. The reasons for this are unknown.
- **Medications** – including anti-inflammatory drugs, colchicine, vitamin E and potassium para-aminobenzoate. If symptoms haven't eased within one year of treatment, it is assumed that medications won't fix the condition.
- **Injections directly into the plaque** – an enzyme called collagenase may be used to soften the plaque, or a medication called verapamil may be used to relax the blood vessels.
- **Surgery** – in severe cases, where sexual function is affected, surgery may be the only option.

#### Different types of surgery

If other forms of treatment are not effective, surgery may be offered as an option. Common surgical options include:

- **Nesbit plication** – the membrane that covers the corporal body on the side opposite to where the plaque is located is plicated (folded). This straightens the penis. This procedure does not alter the length of the penis – any shortening of the penis is caused by the disease itself.
- **Plaque incision with vein graft** – cuts are made along the plaque to allow the penis to straighten. Vein grafts are used to assist blood flow. This is used in more severe forms of curvature.
- **Penile prosthesis** – a device (with a pump) is used to straighten and harden the penis. This may be needed when erection is not possible due to the disease.

### Where to get help

- Your doctor
- Urologist
- Family Planning Victoria Tel. 1800 013 952 or (03) 9257 0100

### Things to remember

Peyronie's disease causes abnormal, fibrous lumps (plaques) to form inside the erectile tissue of the penis.

Over time, these plaques can grow and deform the erect penis by causing it to curve.

Sometimes the condition improves without any treatment.

Various treatments are available but surgery is usually only offered as a last option.

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