

Peyronies Disease

Peyronie's disease is a non-cancerous or benign condition that can result in sexual dysfunction by causing a bent penis during erection. The disease is characterized by a hard, fibrous layer of scar tissue (plaque) that develops in the wall of the erectile 'chambers' of the penis. When the penis is erect, the scar tissue prevents normal stretching of the 'chamber' on one side causing a curved penis as the unaffected side expands normally.

Signs and symptoms

The signs and symptoms of Peyronie's disease may appear overnight or develop more slowly. These may include:

- Painful erection
- A bend or curve in your penis during erection
- Inflammation under the skin of your penis that develops into hardened scar tissue
- A thick band of hard tissue on one or more sides of your penis
- Narrowing of the diameter of your penis during erection
- Impaired ability to obtain an erection (erectile dysfunction)

The condition is thought to start with an inflammatory event that usually resolves leaving the deformity. The inflammatory phase is therefore transient, however, it is at this time that some of the medical therapies may be most effective. If the subsequent scar tissue develops on the top of the penis, the penis will bend upward. Plaque on the underside of your penis will cause it to bend downward. More rarely, hardening may occur on both sides of the penis, causing indentation, shortening and potentially a failure of full 'hardening' of the penis beyond the lesion.

It is not fully understood what causes Peyronie's disease. A number of theories exist, including:

- **Injury to the penis.** Trauma to the penis from being hit or bent abnormally while erect or during intercourse may cause small tears in the tissue. It may also cause small blood vessels in the penis to rupture and bleed internally. Abnormal healing can result in the development of hard, thickened scar tissue (plaque) under the skin of the penis. With repetitive trauma, the plaque may develop tough fibrous tissue (fibrosis) or calcium deposits (calcification) and result in the deformity.

- **Autoimmune disorder.** Some studies suggest that Peyronie's disease may be an autoimmune disorder. A man's immune system may respond abnormally and cause plaque to form in the penis. However, Peyronie's disease isn't related to other autoimmune diseases, such as rheumatoid arthritis or lupus.
- **Collagen abnormality.** Peyronie's disease may be caused by an abnormality in the substance that builds and remodels connective tissue (collagen).
- **Medications.** Some drugs list Peyronie's disease as a possible side effect. Most of these drugs belong to a class of blood pressure and heart medications called beta blockers. These drugs are also used to treat glaucoma, multiple sclerosis and seizures. Developing Peyronie's disease as a side effect of these drugs is rare. Check with your doctor before discontinuing any prescribed drug.

Although injury to the penis may explain sudden (acute) cases of Peyronie's disease, cases that develop slowly or disappear quickly with no apparent trauma to the penis remain unexplained.

Risk factors

Peyronie's disease is a relatively uncommon disorder. The following factors may increase your risk:

- **Age.** Aging may diminish penile elasticity, increasing the chance of injury and the development of Peyronie's disease.
- **Heredity.** Heredity may be an important factor in determining who acquires Peyronie's disease, although it's not the only factor.
- **Other conditions involving hardened tissues.** Some men with Peyronie's disease experience hardened tissues in other areas of the body, such as the hands or the feet. A condition known as Dupuytren's contracture, which is a cord-like thickening across the palm that causes the fingers to pull inward, also may be associated with Peyronie's disease.

Treatment

Because the course of Peyronie's disease differs from man to man and some men experience improvement without treatment, many patients initially opt for a wait-and-see approach. It is often sensible to wait for at least 6 months stability of the disease before assessing plaque formation, penile curvature and erectile function with a view to treatment.

Nonsurgical methods

1. **Vitamin E.** Researchers have reported improvements in Peyronie's disease when vitamin E is taken orally, yet the effectiveness of vitamin E therapy has yet to be proved in controlled studies. Similar research exists on potassium aminobenzoate (Potaba), a vitamin B-complex. The benefit of potassium aminobenzoate also remains unproved.
2. **Intralesional injections.** Drugs such as calcium channel blockers, e.g. verapamil, can be injected directly into the plaque. These drugs are intended to break down scar tissue deposits and return the tissue-building process to normal. You'll receive multiple injections over a period of up to three months. The success of intralesional injections varies.

Surgery

Surgical treatment is a reasonable option when the appearance is unacceptable, there is pain or significant difficulty during intercourse or if there is a deterioration in the quality of erection. Surgery is generally effective although each surgical method can cause unwelcome side effects such as shortening of the erect penis.

Common surgical methods include:

- **Nesbit plication.** Tissue on the opposite side of the penis is removed or pinched, canceling the bending effect.
- **Plaque incision with saphenous vein graft.** Several linear cuts are made in the plaque, which allows straightening. The cut plaque is then covered with a grafted vein.
- **Penile prosthesis.** An implanted device is used to straighten and increase the rigidity of the penis.