CONDITION

Fibrous plaques of the penis

Fibrous plaques are areas of penile scar tissue that can cause curvature, pain, shortening, or erection problems.

WHAT IT IS
Scar tissue within the penis's tough outer covering

BODY SYSTEM
Reproductive and urinary system

MAIN SYMPTOMS
Penile lump, new curvature, erection pain, shortening

WHAT CAUSES IT
Abnormal scar healing, often after unnoticed injury

HOW IT IS DIAGNOSED
Medical history, examination, sometimes erection ultrasound

MAIN TREATMENT
Monitoring, traction, plaque injections, or surgery

CAN IT BE CURED?
Sometimes - treatment can restore function

IS IT AN EMERGENCY?
Sometimes - sudden bruising after a snap suggests fracture

LONG-TERM OUTLOOK
Often stabilises; lasting curvature may remain

Overview

Fibrous plaques are firm areas of scar tissue inside the penis. They usually form in the tunica albuginea, the strong, flexible covering around the chambers that fill with blood during an erection.

A plaque does not stretch like healthy tissue. During an erection, this can pull the penis to one side or cause an upward or downward curve. It may also produce an indentation, narrowing, hinge-like area, or loss of length.

This pattern of scarring is commonly described medically as Peyronie's disease. The plaque is not infectious and cannot be passed to a sexual partner. It is also not the same as plaque inside an artery.

Some plaques cause little difficulty. Others make erections painful, interfere with penetration, or affect confidence and relationships. A new lump or change in penile shape should be assessed because other conditions can occasionally cause similar findings.

Symptoms

Symptoms often become noticeable during an erection, although you may be able to feel a plaque while the penis is soft.

Possible symptoms include:

The direction and degree of curvature differ between people. A plaque on the upper surface commonly produces an upward curve, while plaques elsewhere may pull the penis in another direction. More than one plaque can be present.

Penile pain often improves as the scar settles, but curvature may remain. The size of a plaque does not always show how much it will affect sexual function.

A curve that has been present since adolescence and has not changed is more likely to be congenital, meaning present from birth, rather than caused by a fibrous plaque.

- A flat, firm lump or band beneath the penile skin
- A new curve that was not present earlier in life
- Pain with erections, especially while the condition is changing
- An indentation, hourglass shape, or unstable hinge-like area
- Loss of penile length or thickness
- Difficulty getting or keeping an erection
- Difficulty with penetration or discomfort during sex

Causes and risk factors

The exact cause is often unclear. One explanation is that bending or repeated minor injury causes small tears in the tunica albuginea. Most injuries heal normally, but some people develop excessive scar tissue. There may be no remembered injury.

This can happen during sex if an erect penis bends sharply. It may also follow another form of penile trauma or, less commonly, a procedure involving the penis.

Factors associated with fibrous plaques include:

These factors do not mean that you will develop a plaque. Many people with the condition have no clear risk factor.

Fibrous plaques are not caused by poor hygiene, masturbation, sexually transmitted infections, or having too much sex. Ordinary sexual activity does not cause the condition unless the erect penis is injured.

- Increasing age
- A close relative with similar penile scarring
- Dupuytren's contracture, which causes thickened tissue in the palm
- Diabetes and some other conditions affecting erections or blood vessels
- Smoking
- Previous pelvic or prostate surgery

Diagnosis

Diagnosis usually begins with a discussion of when the change appeared, whether it is progressing, and how it affects erections and sex. A clinician will examine the penis while it is soft and feel for firm scar tissue.

The degree and type of deformity are best assessed during an erection. You may be asked to provide private photographs taken at home from different angles. In a specialist clinic, an erection can sometimes be produced with an injected medicine so that the shape can be measured.

Ultrasound is not always necessary. When used, it can show the plaque, areas of calcium within it, and blood flow through the penis. This may be helpful before an injection procedure or surgery, or when the diagnosis is uncertain.

The assessment may also consider erection quality and whether the condition is affecting your emotional well-being or relationship. Blood tests do not confirm a fibrous plaque, although they may be used to investigate related health concerns.

A clinician may describe the condition as active or stable. During the active phase, pain, curvature, or plaque size may still be changing. The stable phase means the shape and symptoms have stopped changing for several months.

Treatment and management

Treatment is based on pain, the type of deformity, erection quality, and how much the condition affects you. Not every plaque needs active treatment.

Monitoring may be appropriate when the curve is mild, erections are comfortable, and sex remains possible. Follow-up helps establish whether the condition is changing.

Simple pain relief may be used during the active phase. Anti-inflammatory medicines are not suitable for everyone, particularly people with certain stomach, kidney, heart, or bleeding problems, so personal safety should be checked before using them.

Penile traction devices apply a controlled stretching force over time. They may reduce loss of length and improve curvature for some people. Results require regular use, and the device should be designed for this purpose. Forceful stretching can cause injury.

Medicines can be injected directly into a suitable plaque. One option uses collagenase, an enzyme that breaks down collagen within scar tissue. It is used only for certain types and degrees of curvature and is given as part of a structured treatment programme. Bruising and swelling are common after treatment, and there is a small risk of serious penile injury. Other injected medicines are used in some healthcare systems, although the supporting evidence differs.

Shockwave treatment may help pain in selected cases, but evidence does not show reliable straightening of the penis. Many tablets and supplements promoted online have not been shown to remove plaques or consistently correct curvature.

Surgery may be considered when the condition is stable and the deformity makes sex difficult. The main approaches are:

Each approach has trade-offs involving penile length, sensation, erection quality, and the chance of remaining or recurrent curvature. Surgery aims to provide a functionally straight penis rather than a guaranteed return to its earlier appearance.

Counselling or sex therapy can help when pain, changes in body image, or fear of injury affect intimacy. This can be used alongside physical treatment.

- Shortening the longer side of the penis to straighten it
- Cutting or opening the plaque and placing a tissue graft
- Inserting a penile prosthesis when significant erection problems are also present

Complications

A plaque may make penetration difficult or impossible, particularly when there is a severe curve, narrowing, or unstable hinge.

Erectile dysfunction can occur because blood flow is reduced, the penis is mechanically unstable, or worry interferes with arousal. Some treatments, especially major surgery, can also affect erections.

Other possible effects include penile shortening, ongoing discomfort, reduced sexual confidence, anxiety, and strain within a relationship. These effects are real even when the physical curve appears modest.

The plaque itself is benign, meaning non-cancerous. It does not spread to other organs or turn into cancer. However, a skin ulcer, unexplained bleeding, persistent surface growth, or groin lump is not typical and needs a separate assessment.

Prevention

There is no proven way to prevent most fibrous plaques. They often develop without a recognised injury, and inherited susceptibility cannot be changed.

Avoiding forceful bending of an erect penis may reduce the chance of major trauma. During sex, stop and reposition if the penis slips out or begins to buckle. Lubrication may reduce friction, but it has not been proven to prevent plaque formation.

Managing diabetes, avoiding smoking, and looking after heart and blood vessel health may support erection quality. These steps are worthwhile for general health, but they cannot guarantee that a plaque will not develop.

Do not try to break, crush, or forcefully massage a plaque. This can injure the penis and may worsen scarring.

Living with it and what to expect

The condition often changes over months rather than days. Early on, pain or curvature may increase as scar tissue forms. This active period may last for many months and sometimes longer. Pain commonly settles, although the final shape is less predictable.

Once the condition becomes stable, the plaque and curve usually stop changing quickly. A small number of people improve without treatment, but complete spontaneous straightening is uncommon. A stable plaque may remain even when it no longer hurts.

Many people continue to have satisfying sex, particularly when the curve is mild and erections remain firm. Different positions, slower movement, and clear communication with a partner can reduce discomfort and help prevent buckling. Stop if an activity causes sharp pain.

Treatment may improve shape, preserve length, or make penetration easier, but it may not remove every trace of the plaque. Follow-up is usually routine when symptoms are stable. An earlier review is appropriate if curvature, pain, shortening, or erection quality is getting worse.

Emotional effects can last after physical pain has settled. Support from a partner, counsellor, or sexual-health professional may help with confidence and adjustment.

When to get medical help

Arrange a routine appointment if you notice a new firm area, penile curvature, narrowing, shortening, erection pain, or difficulty with penetration. Assessment is also worthwhile if an established plaque starts changing or is causing distress.

Seek prompt medical advice if you develop a penile skin sore, bleeding, discharge, an unusual surface growth, or a groin lump. These are not typical features of a simple fibrous plaque.

Get urgent medical care after an injury if you hear or feel a snap followed by immediate loss of the erection, marked swelling, bruising, or severe pain. These signs can indicate a penile fracture, which is a tear in the erection covering.

An erection lasting four hours or longer is an emergency, even if it is not very painful. This is called priapism and can damage penile tissue without timely treatment.

Common questions

Is a fibrous penile plaque cancer?

No. The usual plaque is benign scar tissue and does not become cancer. A surface growth, open sore, bleeding area, or unexplained skin change is different and should be assessed.

Will the plaque go away by itself?

Pain may improve and some mild curves become less noticeable. However, the scar and established curvature often remain. Treatment is usually aimed at preserving or restoring comfortable sexual function.

Can I still have sex?

Often, yes. Sex is generally reasonable if it is comfortable and the penis is not being forced or buckled. A clinician can discuss treatment if the curve, pain, or erection quality makes penetration difficult.

Can fibrous plaques cause erectile dysfunction?

They can. The plaque may affect blood flow or make the penis unstable, while pain and anxiety may also affect erections. Erectile dysfunction has other possible causes, so it may need a broader assessment.

Can this condition affect fertility?

The plaque does not directly change sperm production. Fertility may be affected indirectly if curvature or erection problems prevent vaginal penetration. Reproductive advice is available if this becomes a concern.

Can I massage or break down the plaque myself?

No. Forceful massage, bending, or unregulated devices may cause further injury. Plaque injections, modelling, and traction use controlled methods and should form part of an appropriate clinical plan.

Sources

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