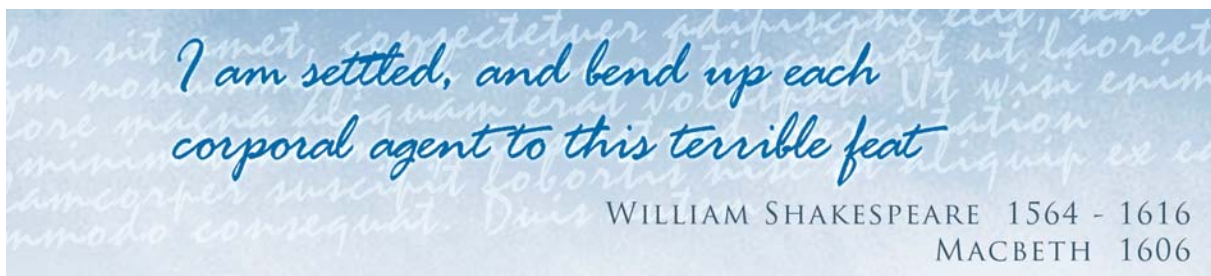




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Peyronie's disease is a connective tissue disorder which produces a bend in the penis when it is erect.

It was described by Francois de la Peyronie in 1743



Incidence

As many as one in a hundred men will suffer from this deformity.

Age

Peyronie's disease is most common in the 25 to 60 age group. There is a congenital curvature of the penis but this is much rarer.

Sex

It is only found in males

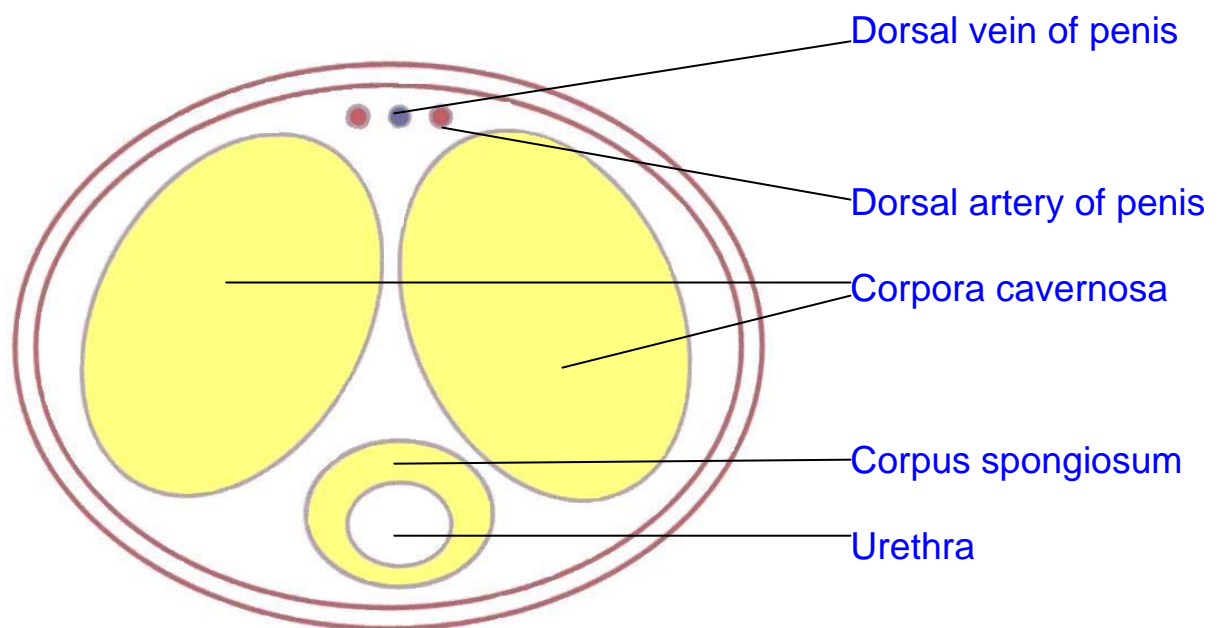
Anatomy

The penis contains erectile tissue. The urethra is surrounded by erectile tissue called the corpus spongiosum. The erectile tissue of the glans is an extension of the corpus spongiosum. There are also two columns of erectile tissue extending the length of the penis and under the pubic bone posteriorly. Each column of erectile tissue is called the corpus cavernosum (plural – corpora cavernosa).



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Cross section of penis (erectile tissue in yellow)



Presentation

A pain or an ache may be the first symptom to appear. Shortly after the pain commences the patient may notice a lump or area of induration in the shaft of the penis. This lump is non-cancerous. Some weeks or months later the penis may start to bend when erect. In turn this bend can make sexual intercourse difficult or impossible. Intercourse can still be possible with a lateral bend of up to 90°. Upward or downward deviations of 30° can make intercourse difficult. Erectile dysfunction may be associated with Peyronies disease but not always. 11% of Peyronies disease is associated with Dupuytren's contracture (fibrosis of the tendons of the hand). There is also a link with Lederhosen contracture (fibrosis of the tendons of the foot).



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Causes

The exact cause of Peyronies is not known. The covering layer of the erectile tissue is laminated. It also contains elastic tissue to allow for expansion. As men age the amount of elastic tissue gets less. The tissues become more rigid with less elastic tissue and more collagen. With repeated minor trauma small blood blisters appear between the laminations. With time this blood may become fibrosed and scarred. This produces the characteristic lump. All scar tissue heals and as it heals it contracts. The site of the lump is therefore shortened producing the classic bend.

Intra corporeal injections for the treatment of impotence have been linked to peyronies disease. Alprostadil (Caverject®) is a Prostaglandin E1. Repeated injections into the corpora cavernosa carry a small incidence of Peyronies.

Diagnosis

The diagnosis is usually made on the history and examination

Investigations

Investigations are not routinely performed. Assessment of the bend and the severity of the disease may only be assessed by examining the penis during an erection. Alternatively the patient may prefer to take a photo of the deformity. Ultrasound scans can help to assess the degree of severity. The extent of the scarring can be made.

Treatment

Oral treatment

Vitamin E has been used to treat Peyronies but it has never been proved to be beneficial in any clinical trial

Para amino benzoic acid (Potaba®) by mouth was once a common treatment for Peyronies. It has been shown to have no beneficial effect.



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Intra-lesional injections

Verapamil

Treatment with Verapamil injected directly into the plaque has been tried

Collagenase

Collagenase is an enzyme which produces fibrinolysis. It has been injected into the plaque.

Steroids

This treatment decreases inflammation in the plaque when injected. It is most useful in the early disease.

Radiotherapy

Radiation therapy may ease symptoms such as pain. Its use in benign conditions is no longer performed

ESWT

Extra corporeal shockwave therapy has been tried in recent years. It may afford some benefit in the early disease.

Surgery

There are two common operations for this condition.

Devine and Horton excised the plaque and filled in the consequent defect with a skin graft. There was no shortening with this operation.

Nesbitts Plication is an operation where the penis is straightened by excising small ellipses of the tunica of the corpora cavernosa on the opposite side to the plaque. Alternatively small tucks are fashioned instead of the small excisions. Where the penis has been shortened by the Peyronies on one side this procedure shortens the other side by a similar degree in order to straighten it.



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Before any surgery is contemplated sufficient time must elapse before the operation. It is important to ensure that the process has finally stopped advancing (ie the bend has stopped bending).

Historical note

Francois de la Peyronie was a French Surgeon. He was born January 15 1678 in Montpellier. He died April 25 1747. He was the son of a surgeon. He was a fully qualified Master of Surgery at the age of nineteen.

In 1704 he served in the army of Louis XIV. He pioneered techniques to exteriorise bowel that had been damaged in battle with subsequent closure of the fistula at a later date.

Eventually he became the Surgeon to Louis XV in 1736. He treated the Kings of Poland and Prussia as well as Peter the Great of Russia. On his death he bequeathed the vast fortune he had amassed to establish four professorial departments of Surgery and Anatomy.

He first described Peyronies disease in 1743.