Peyronie’s Disease: A Patient-Oriented Guide

Peyronie’s disease is a condition that affects the penis, causing it to bend or curve during erections. While this can sound alarming, it is relatively common and, in many cases, manageable. Understanding the condition, its progression, and available treatments can help reduce anxiety and guide informed decisions about care.

What is Peyronie’s Disease?

Peyronie’s disease occurs when fibrous scar tissue (called plaque) develops within the penis. This plaque can cause the penis to bend, shorten, or become painful during erections. The condition is not cancerous and is not contagious.

Signs and Symptoms

Symptoms can vary in severity and may include:

- **Penile curvature** (upward, downward, or sideways)
- **Palpable lumps or plaques** under the skin
- **Pain during erections** (more common in early stages)
- **Erectile dysfunction (ED)**
- **Shortening or narrowing of the penis**
- **Difficulty with sexual intercourse**

Some men notice a sudden change, while others experience gradual progression.

Incidence and Who is Affected

Peyronie’s disease is estimated to affect **3–9% of men**, although the true number may be higher due to underreporting. It is more common in men aged **40–70**, but it can occur at any age.

Risk factors include:

- Penile injury or repeated microtrauma
- Genetic predisposition
- Connective tissue disorders
- Diabetes and cardiovascular disease

Acute vs Chronic Phases

Peyronie's disease typically progresses through two phases:

Acute Phase (Active Phase)

- Lasts **6–18 months**
- Painful erections are common
- Curvature may worsen
- Plaque is forming and evolving

Chronic Phase (Stable Phase)

- Pain usually resolves
- Curvature stabilises (no further worsening)
- Plaque becomes firm and mature

Understanding which phase you are in is important because it influences treatment options.

Natural History (What Happens Without Treatment?)

The course of Peyronie's disease varies:

- **~20% improve spontaneously**
- **~40% remain stable**
- **~40% worsen over time**

Mild cases may not require intervention, especially if sexual function is preserved.

Treatment Options

Treatment depends on severity, symptoms, and patient preference. Not all men require treatment.

1. Observation (Watchful Waiting)

- Appropriate for mild curvature and minimal symptoms
- Regular monitoring for changes

2. Vacuum Erection Devices (VED)

- Mechanical pump creates negative pressure
- May improve penile length and reduce curvature

- Often used as part of rehabilitation

3. Penile Traction Therapy

- Devices gently stretch the penis over time
- Can reduce curvature and improve length
- Requires consistent daily use (hours per day)

4. Intralesional Injections

Collagenase (Not Available in UK)

- Breaks down plaque
- Good evidence for curvature reduction
- Widely used in some countries but currently unavailable in the UK

Hyaluronic Acid

- May reduce inflammation and plaque size
- Emerging evidence suggests modest benefits

Verapamil (Off-label)

- Calcium channel blocker
- Thought to disrupt scar formation
- Evidence is mixed but still used in some centres

5. Oral Medications

PDE5 Inhibitors (e.g., sildenafil, tadalafil)

- Improve erectile function
- May have beneficial effects on penile tissue health

Vitamin E

- Historically used
- Limited evidence of effectiveness

6. Surgery

Surgery is usually reserved for men in the **chronic phase** with significant curvature affecting sexual function.

Plication Surgery

- Shortens the longer side of the penis to straighten it

- Simpler procedure

Grafting Surgery

- Plaque is cut or removed and replaced with graft material
- Used for more severe deformities

Treatment Comparison Table

Treatment	Indications	Success Rate (Approx.)	Side Effects / Risks
Observation	Mild symptoms	N/A	Disease progression possible
Vacuum Pump	Early disease, penile shortening	30–50% improvement	Bruising, discomfort
Sildenafil + Vacuum Pump	ED with curvature, rehabilitation approach	40–60% functional gain	Headache, flushing + pump discomfort
Traction Therapy	Motivated patients, early disease	40–70% improvement	Time commitment, mild discomfort
Collagenase*	Moderate curvature (30–90°)	30–50% reduction	Bruising, swelling, rare rupture
Hyaluronic Acid	Early disease	20–40% improvement	Mild injection site pain
Verapamil (unlicensed)**	Early or stable disease	Variable (20–40%)	Minimal, injection discomfort, Blood pressure issues
Vitamin E	Low-risk patients	Minimal benefit	Very few
Plication Surgery	Stable disease, <60° curvature	>80% success	Penile shortening, recurrence, Lower ED risk
Grafting Surgery	Severe curvature, complex deformity	60–80% success	High ED risk, longer recovery, less shortening

*Not available in the UK/EU

** This means the drug is not supposed to be used for this purpose

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Choosing the Right Treatment

Treatment decisions depend on:

- Severity of curvature
- Presence of pain
- Erectile function
- Impact on sexual activity
- Personal preferences and expectations

In early disease, non-surgical treatments are typically recommended. Surgery is considered when the condition stabilises and significantly affects quality of life. Non-surgical treatments are generally preferred as they have less side effects

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Living with Peyronie's Disease

Peyronie's disease can have emotional and psychological effects, including anxiety, low self-esteem, and relationship stress. Open communication with partners and healthcare providers is important.

Support options include:

- Urology specialist consultation
- Sexual counselling
- Patient support groups

Key Takeaways

- Peyronie's disease is a **common and treatable condition**
- It progresses through **acute and chronic phases**
- Many cases **stabilise or improve without surgery**
- A range of treatments exist, from observation to surgery
- Early consultation with a specialist can improve outcomes

If you are experiencing symptoms, seeking advice from a healthcare professional—preferably a urologist—is the best first step toward effective management.