Peyronie’s disease is a benign condition characterized by the formation of fibrotic plaques of the tunica albuginea. The French physician Francois Gigot De La Peyronie first described the condition in 1743. Dr. Peyronie suggested the etiology of the condition might be chronic irritation from sexual activity or an inflammatory (venereal) disease (1). Two-hundred fifty years later, medical authorities are still puzzled over the etiology of this annoying condition.

Peyronie’s first theory of continued minor sexual trauma is considered today the most likely cause of the disease. The consensus thinking is that the repeated trauma of sex is thought to injure the collagen
composition of the tunica albuginea. This results in induration and the formation of fibrous plaques that decrease the elasticity of the corpora and cause curvature or constriction of the penis during erection (2). Despite this widely held opinion, the majority of patients cannot give a history of injury to the penis during sexual activity.

Discrete penile injuries can produce lesions indistinguishable from Peyronie’s disease. Trauma must not be the only factor, however, since large series have shown inherited predisposition. In addition, there is a 20% association with Dupuytren’s contractures of the hand, a disease inherited via autosomal dominant gene.

The disease affects middle-aged men primarily, although reports of patients as young as 19 yr old have been recorded. The prevalence in American men is between 0.3% and 1%, but could well be higher as a result of patient embarrassment and limited reporting by physicians. In our series of more than 2000 penile implants, Peyronie’s disease was the cause of implantation in between 8–12% of patients.

**PATHOGENESIS**

Peyronie’s disease is thought to have two phases. Initially, the inflammatory phase is characterized by penile pain on erection, progressive curvature or narrowing of erection, and palpable plaque formation. The second, or chronic phase sets in after 1–1.5 yr. The patient will demonstrate a stable, painless plaque that rarely may even calcify. The plaque causes shortening of the affected side of the penis upon tumescence as the noncompliant tunica fails to stretch with erection. Clinical expression results in various appearances. The patient may complain of curvature, hourglass deformity, or portions of the penis with restricted girth when erect. Seventy percent of the curvatures are dorsal. The less-frequent downward curvatures and lateral deflections are more likely to interfere with intercourse and tend to precipitate physician consultation. The patient may have combinations of all of the aforementioned descriptions resulting in corkscrew or a flail penis.

The reported association of Peyronie’s disease and erectile dysfunction (ED) is variable. In reviewing the literature, it is difficult to ascertain whether the erectile dysfunction is because of the lack of decent tumescence (proximal or distal flaccidity) or whether the reported dysfunction is owing to angulation or flail penis. Many authorities have attempted to link the condition with accelerated aging of the penile arterial vessels or associated venoocclusive disease precipitated by the noncompliant plaques. Suffice it to say, the older the Peyronie’s patient, the more likely he is to report significant sexual dysfunction (3).