

## Clinical Note

### Peyronie's disease. Who is at risk?

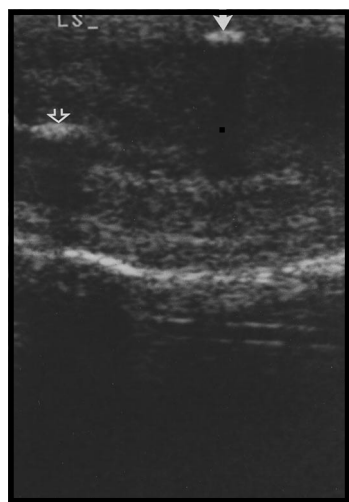
Sir,

Peyronie's disease is named after Francis de la Peyronie (1678-1747), who was the founder of the Royal Academy of Surgery, Paris, France. It is a relatively common cause of penile deformity, occurring within the age range of 20-80 years, with preponderance in the 5th decade. Here, we present a 72-year-old man who presented with penile swelling, occasional dysuria and erectile dysfunction.

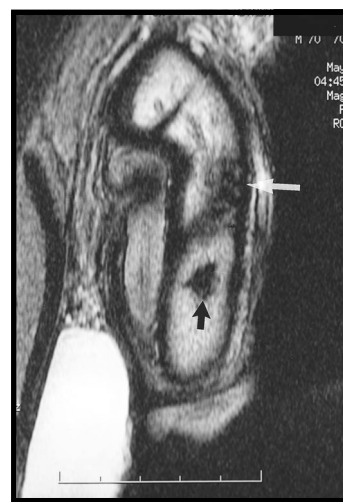
A 72-year-old man presented with a 3-year history of poor erection, a 2-year history of penile swelling and difficulty passing urine. In the last year, he had resorted to using Viagra (Sildenafil) with some improvement. In 1999, he had penile ulceration, which resulted from bruises sustained during sexual intercourse. This healed after 10 days of topical antibiotics. He is a diabetic, well controlled on low dose of oral hypoglycemic. General examination was unremarkable. Examination of the penis revealed a palpable swelling midshaft. The swelling was firm in consistency, not tender and not mobile. Full blood count, urea, electrolytes, lipid profile, midstream urine, treponema serology, ultrasound and magnetic resonance imaging (MRI) were ordered. The results of the blood tests were within normal range. Ultrasound (**Figure 1**) showed a round hyperechoic area present in the right corpus cavernosum of the midshaft of the penis. There is associated dense echo with posterior acoustic shadow indicative of

calcification in the dorsal aspect of the tunica albuginea. Dense echo with posterior acoustic shadow was also present in the wall of the right cavernosal artery. On MRI, an area of low signal intensity was present mainly in the shaft of the right corpus cavernosum but to a lesser extent, the left corpus cavernosum (**Figure 2**). Another area of low signal intensity contiguous with the tunica albuginea, was present at the shaft, proximal to the one described above. The overall appearance was consistent with fibrotic changes involving the corpora cavernosum and calcification in the tunica albuginea. The pattern was consistent with Peyronie's disease.

Peyronie's disease is said to be a relatively common cause of penile deformity. In sufferers a hard plaque of fibrosis may be palpated, which sometimes causes an erect penis to bend towards the plaque. Some studies<sup>1</sup> have found a prevalence of 7.2%, increasing with age and a significant correlation between smoking and the disease. There have been suggestions that development of Peyronie's disease may involve genetic, structural and immunological events. Other factors, which have been mentioned in the etiology of Peyronie's disease, are beta-blockers, penile trauma,<sup>2</sup> arterial disease,<sup>3</sup> diabetes mellitus, Dupuytren's disease and urolithiasis. These associated factors tend to suggest that this disease may not be as rare as we think. Although some of our patients complain of erectile dysfunction and there is high prevalence of diabetes



**Figure 1** - Longitudinal sonographic scan of the shaft of the penis. A dense linear echo with posterior acoustic shadow in the tunica albuginea (short arrow) and another short linear dense echo also with posterior acoustic shadow in the anterior wall of the right cavernosal artery (open arrow) indicating calcification of these structures.



**Figure 2** - Magnetic resonance image T2 weighted fast spin echo (TR 4000 TE 100). Sagittal image revealed a low intensity area in the shaft of the corpus cavernosum (black arrow). Another area of the low signal intensity is contiguous to the tunica albuginea (white arrow).

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mellitus, smoking and urolithiasis, our literature search did not yield any reference to Peyronie's disease from the Kingdom of Saudi Arabia. However, the only example cited in Bailey Love's Short Practice of Surgery is a case in Riyadh.<sup>4</sup>

Different types of treatment have been tried, the degree of success depends on disease duration, length of therapy and stage of disease; therefore, there is need for early diagnosis.<sup>5</sup> Some conservative treatments, for example, vitamin E, ibuprofen, colchicines, verapamil and interferon alpha-2b injection have been tried with limited success. Invasive treatments which have been tried include a) Nesbit operation; b) dissection of fibrous plaque; c) lithotripsy or extracorporeal shock-wave treatment; with widely varying degrees of success claimed in different centers. There is no doubt that these treatments individually or in combination can restore a considerable degree of function and improve quality of life for both partners. Although the pathogenesis of this condition is uncertain and etiology is in doubt, recent findings showed that there is need for thorough investigation among patients with erectile dysfunction, as many sufferers feel that their condition improved during treatment.

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### References

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