Other abnormalities of the penis Erectile dysfunct

Other abnormalities of the penis Erectile dysfunction

ED is failure to attain or maintain an erection. It can arise as a consequence of psychological issues, but the commonest cause is vascular disease a ff ecting the penile arterial blood flow; as such, ED is associated with diabetes, hypertension, dyslipidae - mia and smoking. Other rarer causes include endocrine disease (hypogonadism and prolactin-secreting pituitary tumours), neurological disease (multiple sclerosis, spinal cord injury and prolapsed intervertebral disc), iatrogenic damage to the caver nosal nerves owing to radical pelvic surgery (e.g. radical prostatectomy , abdominoperineal excision of the rectum and radical cystectomy), neuropathy secondary to pelvic radio - therapy and drug-induced causes (including antihypertensive agents, antidepressants and antipsychotics). ED may be a marker of cardiovascular disease . Physical examination of the genitalia, measurement of the blood pressure and assessment of the secondary sexual sugar, the serum lipid profile and the serum testosterone is nec essary in all cases. Penile Doppler ultrasound is performed with the use of intracavernosal vasoactive agents such as papaver ine. Initially the ED is treated with phosphodiesterase type 5 inhibitors (such as sildenafil). A few patients need treatment with self-intraca vernosal injection of vasoactive agents. Vacuum erection devices are a non-inv asive alternative. Penile implants are br oadly of two types: semirigid and inflatable. Their use is becoming increas ingly popular. Summary box 85.7 Erectile dysfunction /uni25CF /uni25CF /uni25CF Peyronie’s disease Peyronie’s disease (PD) is characterised by penile deformity (Figure 85.20), palpable penile plaques inside the penis, Francois de la Peyronie , 1678–1747, surgeon to King Louis XIV of France and founder of the Royal Academy of Surgery , Paris, France. Baron Guillaume Dupuytren , 1777–1835, surgeon, Hôtel Dieu, Paris, France, described this condition in 1831. Reed Miller Nesbit , 1898–1979, urologist, University of Michigan Medical School, Ann Arbor - ably involves minor injury to the erect penis with secondary microhaemorrhage beneath the tunica albuginea and fibrosis. - The latter results in the palpable plaques that can be iden - tified on examination. The plaques may rarely be calcified (Figure 85.21). The presence of these relatively inelastic plaques causes the erect penis to bend towards the side of the plaque. The def ormity is commonly dorsal (towards the abdomen) and the deformity may prevent penetrative sexual - intercourse. While the aetiology is uncertain, there is an association with Dupuytren’s contracture. The natural history of the con - dition is tha t it typically progresses for 18–24 months before stabilising. During this active phase of the disease, surgery is not indicated; a variety of medical treatments have been tried, although none with any good evidence of benefit. The diagnosis is usually made on clinical e xamination but MRI may be helpful. Newer treatments include intralesional injections of colla - genase clostridium histolyticum (Xiaflex). Surgical correction can be performed in two ways. If the penis is of adequate length, it is possible to plicate the tunica albuginea on the side opposite to the maximum curvature. The plication can be done by Nesbit’s technique or a 16-dot tech - nique . The second option involves

incision of the plaque and a bovine pericardial patch. , MI, USA. Nesbit was a pioneer of transurethral resection of

Appropriate investigation involves identi /f_i cation of vascular risk factors Phosphodiesterase inhibitors are the /f_i rst-line treatment Penile implants are becoming popular for management of ED Figure 85.20 Dorsal deformity of the erect penis that is typical of Peyronie’s disease. Bladder Corpora Testes Figure 85.21 Magnetic resonance imaging in Peyronie’s disease showing plaque. The yellow arrow shows calci /f_i ed plaque; the red arrow shows active disease on the dorsal wall of the penis.

Peyronie’s disease /uni25CF /uni25CF /uni25CF Congenital curvature of the penis This penile deformity is similar and analogous to Peyronie’s disease and is occasionally seen in young men (Figure 85.22 In congenital curvature of the penis, the urethral length is normal and it typically results in a ventral deformity of the erect penis. If the deformity interferes with sexual activity , then surgery , usually a Nesbit procedure, will straighten the erect penis. Priapism Priapism means a persistent erection lasting longer than 4 /uni00A0 hours; it is a surgical emergency . There are two main types of priapism: ischaemic and non-ischaemic. Ischaemic priapism Ischaemic or veno-occlusive priapism is the more common. It is due to venous congestion, with consequent thrombosis and ischaemia. The penis remains erect and becomes painful. This is a pathological erection and the glans penis and corpus spongiosum are not involved. The condition is most commonly seen as a side e ff ect of medication, most notably antipsychotic medication and intracavernosal injections. It can also arise as a complication of hypercoagulable blood disorders such as sickle cell disease or leukaemia. A small proportion of cases are caused by malignant disease in the corpora cavernosa or the pelvis. Blood taken from the penis shows hypoxia, hypercapnia and acidosis, while Doppler scanning shows an absence of blood flow within the penis. An underlying cause should be excluded and the patient should be referred for specialist urological care. The condition is an emergency since dela y beyond 6 hours results in progres sive, irreversible damage to the corpora cavernosa tissue with subsequent fibrosis and ED. Aspiration of the sludged blood in the corpora cavernosa is the first-line therapy; if this fails, intracav ernosal injection of phenylephrine (an α -adrenocep tor agonist) is the next line of therapy . If that proves ine ff ective, it may be necessary to decompress the penis by creating a shunt between the cor pus cavernosum and either the glans penis or the corpus spongiosum. Treatment initiated after 24–36 hours rarely restores normal erectile function. Recurrent ischaemic (stuttering) priapism is seen in sickle cell disease. Non-ischaemic priapism This rarer form of priapism arises as a consequence of trau matic damage to the central penile artery , usually as a conse quence of blunt perineal trauma. A fistula develops between the artery and the sinusoidal space, which results in a persistent). Summary box 85.9 Ischaemic priapism /uni25CF /uni25CF /uni25CF erection that is painless, in contrast to ischaemic priapism. This is a high-flow priapism. Blood gas analysis shows the charac - teristics of arterial blood and Doppler scanning and selective arteriography will demonstrate the fistula. Treatment involves - androgen ablation therapy . If medical therapy fails, selectiv e arterial embolisation is performed. -

The disease has two phases: an initial active phase and a later stable phase There is no effective treatment in the active phase Surgery may be indicated in the chronic phase to correct deformity that interferes with sexual activity Figure 85.22 Congenital curvature of the penis. The characteristic clinical features are a painful erection not involving the glans penis Blood gas analysis from the penis shows hypoxia, hypercapnia and acidosis Detumescence should be ideally

achieved within 6 hours to avoid long-term ED

Revision #1
Created 2025-12-31 15:30:56 UTC by Omar Ayman
Updated 2025-12-31 15:30:56 UTC by Omar Ayman