

PRIAPISM – THE OCCASIONAL SURGICAL EMERGENCY: A CASE REPORT

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SUMMARY

An uncommon problem that can present as a surgical emergency is described and the aetiology of priapism and its management is alluded to in the light of simpler surgical measures that are presently available.

INTRODUCTION

Priapism is abnormally prolonged and painful erection of the penis, and in this state the patient will have considerable difficulty to pass urine. The erect penis exhibits engorgement of the corpus cavernosum. The corpus spongiosum is not turgid. The word 'priapism' gets its derivation from Greek mythology. The goddess of sexual love, Aphrodite, produced a son whom she named Priapus. The occurrence of priapism commonly in healthy males has some intangible relation to excessive sexual stimulation of the male organ of some sort or other.

Being an unusual presentation, a physician may be confronted with it perhaps once in a life time. In

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referral centres however the incidence may be higher. The physiologic erect state of the male organ is principally due to closure of the arteriovenous anastamotic channels of the corpora. The corpora further engorge due to the lessened egress of blood via the efferent veins which tend to narrow a bit as well. In priapism the erect penis exhibits turgidity of the corpora cavernosa but not the corpus spongiosum. There is obstruction to the outflow from the corpora cavernosa. Some mechanism tends to prolong the obstruction and the stagnant blood becomes deoxygenated and the subsequent haemodynamic changes leads to an increased viscosity and sludging of blood. Oedema and thrombosis of the vascular channels ensue. The final result is a fibrosis of the corpora cavernosa which is the main cause of subsequent impotence.

Priapism can arise unassociated with any disease state. Secondary priapism is closely associated to many haematological problems such as sickle cell disease, sickle cell leukaemia and polycythemia. The drugs that have some cause effect relationship to priapism is growing.¹ Psychotropics, anti-hypertensives, and anticoagulants are known for their association in the causation of priapism. Recently Segasothy² noted priapism in a patient on Trandate, Prazosin, and Betaloc.

CASE HISTORY

A 43-year-old Malay man was referred to the Institute of Urology for complaints of priapism of

over three weeks duration. He had a past history of hypertension and he was on Betaloc and Minipress. He had presented to the medical ward about a week after onset as he was hoping for a spontaneous detumescence. On presentation to the urology ward he was found to be well and normotensive. Apart from the priapism he had no other detectable abnormality (Fig. 1). Under sedation and local anaesthesia a 2 cm transverse incision was made on the dorsum of the glans approximately 1 cm from the corona (Fig. 2). The tissue of the corpus spongiosum was incised till the hard corpus cavernosum was reached. The circular incisions were made in the tunica albuginea about 0.5 cm diameter on either corpora cavernosa.

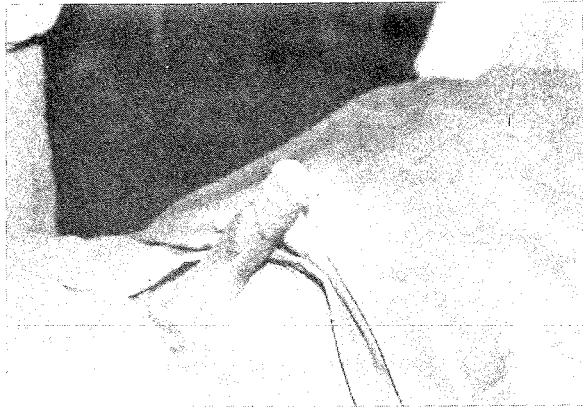


Fig. 1 No detectable abnormality was seen apart from the priapism.

With gentle pressure on the erect penis the corpora cavernosa were evacuated of its dark thick altered blood (Fig. 3). The evacuation was completed by introducing a large gauge butterfly needle at the base of both corpora and flushing out the remnants with saline (Fig. 4). This was repeated till the wounds in each corpus cavernosum was bright red colour. This was followed by closing the incision on the glans with 4 zero polyglycolic acid. Detumescence was noted (Fig. 5). A slight pressure dressing was applied and the penis was strapped down in a dependent position. A catheter may or may not be left behind. Post-operative result was satisfactory. At eight months after the operation the patient was not able to experience an erection.



Fig. 3 Evacuation of blood from the corpora cavernosa.



Fig. 2 Transverse incision was made on the dorsum of the glans.



Fig. 4 Evacuation completed with introduction of a large gauge butterfly needle at base of corpora.



Fig. 5 Detumescence noted after incision was closed.

DISCUSSION

Methods for treating priapism are legion. Medical methods have been tried as often as they have failed. Anticoagulants have been used widely in the past. This drug is known to cause priapism as well. Generally we would hesitate not to operate. The principle involved in the management of this surgical emergency would be to create channels both for the evacuation of the slugged blood as well as create new shunts for the corpus cavernosum. Many of these new shunts eventually close down but by then the normal channels would be hopefully functioning normally.

Methods of surgical management include those ranging from single aspiration to creation of anas-

tomoses between the obstructed corpus cavernosum and saphenous vein. Creation of a window anastomosis of the corpora cavernosa and corpus spongiosum at the base of the penis has its advocates. Simple and less time-consuming methods have been evolved recently,¹ whereby fistulae are created between the glans and the corpora cavernosa with the aid of a Travenol biopsy needle or Kerrison rongeur. As an extension to the same principle is the Al-Ghorab³ shunt used in our patient. The large windows in the Al-Ghorab shunt carries the obvious advantage of a large shunt over the procedures that require the use of the Travenol needle or Kerrison rongeur. Secondary priapism would need therapy for the primary disorder and surgery should be contemplated if there is no detumescence in a couple of days.

The Al-Ghorab shunt is less time consuming than the older methods and a satisfactory result can be expected. Furthermore this procedure can be performed under local anaesthesia. In conclusion we would like to emphasize that priapism is a surgical emergency that needs early detumescence so as to prevent the late complications of it.

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