Priapism: A Report of 4 Cases

Pages with reference to book, From 208 To 210

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Abstract

Four cases of priapism related to spinal cord trauma, myeloid leukaemia and ingestion of an indigenous drug are reported. Other causes of priapism and the management are reviewed (JPMA 33:208. 1983).

Introduction

Priapism is a persistent, painful erection of the penis usually unrelated to sexual stimulation or desire although the onset may be in. itiated by sexual stimuli (Mitchel and Popkin, 1982). Majority of patients are under 40 years of age but no age is exempted. Graw et al. (1969) reported a case of priapism in a small boy. The pathogenesis of this disease is still poorly understood. Thrombosis of arteriovenous shunts and venules draining cavernous lacuna, thrombosis of cavernous tissue itself and irritation of presacral nerves have been postulated as underlying causes (Stieve, 1930; Haq, 1979).

Table 1

Causes of Priapism.

Aetiology	Frequency
Idiopathic	50.6%
Sickle cell anaemia	27.7%
Leukaemia	6.7%
Haemodialysis	3.6%
Genitourinary Tumour	3.6%
Drugs	3%
Perineal trauma	3%
Syphilis	1.2%
Pelvic thrombosis	0.6%

Table I shows that this disorder is due to various haematological disorders, trauma and venereal disease (Nelson and Winter, 1977; lhekwaba, 1980). In majority of cases it may be idiopathic (Dawson Butterworth, 1969). Only the Corpora cavernosa but not the cavernosa spongiosum are involved.

Material and Results

Four cases of priapism were admitted in the department of surgery of the Punjab Medical College, Teaching Hospital (D.H.Q. Hospital) Faisalabad from 1979 to 1981. Each was thoroughly investigated by history, physical examination, haematological investigation, bone marrow biopsy and skiagram of the skeleton (Table II).

Table II

Clinical Data And Results Of The Cases.

No. & Date	Name & Age	History	Duration of priapism	Blood & Marrow examination	X-ray s	Treatment	Results
1 15.11.79	M.I 40	Accidental injury of back of sacrum	4 days	Normal	Normal	Caverno spongiosum shunt.	Cured but impotency.
2. 27.8.80	M.A. 25	III health spleen 8 fingers chronic myeloid Leukaemia	8 days	W.B.C. 3,12000 typical ch. Myloid Leukae-mia Dry tap marrow aspration.	Not done	Conservative failed left Hospital.	Died at home of leukaemia.
3. 18.1.81	J 45	Gunshot injury spine and paraplegia	3 days	Normal	Bullet in neural canal at T. II.	Open drainage of cavernosa	Better but impotent
4. 22.11.81	J 50	Ingestion of indigenous medicine for sex	8 days	Normal	Normal	Conservative left Hospital.	Took some indigenous medicines and got better.

All the cases were treated conservatively with cold compresses, sedatives and heparin, while waiting for the results of investigation and final decision regarding surgery. None of the cases responded to conservative treatment. One with the myeloid leukaemia went home against medical advice in despair and died.

One patient a 50 years old labourer had painless haematuria and was treated conservatively., During the treatment he developed difficulty in micturation and left the hospital on the second day after admission. He went to three quacks (two in Faisalabad, one in Lahore). Next day after the treatment from last quack he got priapism for which he was admitted in the ward and again left after 3 days. The priapism remained for 8 days, then he was given Khatkal (Oxalis Cornigulata Linn) which relieved his symptoms and he did not develop impotence. Khatkal mainly contains potassium oxalate which is also used for Dhaturea (Belladona) poisoning, which is also a diuretic and weak sedative. Its effect on this patient could not be due to its sedative effect because he already had strong tranquilizers while in hospital. The relief of symptoms might have been due to its diuretic action.

One with minor sacral injury got operated for caverno spongiosum and got cured immediately, but became impotent.

The man with the bullet injury of the spine and paraplagia and an open drainage of both cavernosa and got better. He refused removal of the bullet and left the hospital with paraplagia and its usual complications along with impotence.

Discussion

Priapism is a medical emergency requiring prompt investigations and treatment if permanent physiological impotence is to be avoided. Many forms of conservative treatments have been advocated (Bell and Pitney, 1969) like cold compresses, sedatives, general anaesthesia, spinal, epidural and caudal analgesia, curanisation, anti coagulants, estrogenic drugs and aspiration of corpora by a wide bore needle. None have been reported as being successful. Haq (1979) reported two cases of priapism due to myeloid leukaemia treated successfully without operation by radiation to the Penis (Graw et al., 1969). Various surgical procedures have been adopted for this condition, e.g. open drainage for corpora cavernosa and removal of thrombi or pseudo thrombi, bilateral caverno shunt, caverno spongiosum sephenous shunt and of the ligation internal pudendal artery.

Barry (1976) had been shunting dorsal venis of the penis with corpora cavernosum with some success. Winter (1976) made a successful shunt between glans penis and tips of corpora cavernosum by boring with a wide bore biopsy needle without operation. We have resorted to drainage in some of our cases and a caverno spongios shunt in another. In both, the early result were good but impotence followed. Qureshi (unpublished data) who has a long series of cases of priapism performed drainage alone and has never failed to relieve priapism, although all his cases ultimately became impotent. Ihekwaba (1980) advocates shunts within 36 hrs of the erection to minimize the chances of impotence.

All our cases reported atleast 3 days after erection. Our fourth case who was given various type of gums and ammonium salts, cinamon and other herbs developed priapism but got better with another indigenous medicine and maintained his potency.

Spinal cord and brain injury, drugs like cantherides, yohimbin, carbonmonoxide, heparin and recently phenothiazines specially chlorpromazine have been reported to cause priapism (Larocque and Cosgrove, 1974; Dorman and Sclunidt, 1976; Appell et aL, 1977; Gottlieb and Lustberg, 1977; Bastechy and Gregova, 1977; Merkin, 1977). Almost all the patients needed operation and majority of them ended up with impotence.

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