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### Case Report

## Anaesthetic Management of a Rare Case of Priapism

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#### ABSTRACT

Priapism is a relatively rare condition defined as painful sustained erection of penis as a result of sludging of blood in corporeal vessels due to sickling of red blood cells. It is an uncommon emergency condition that may have devastating physical, functional and psychological consequences. Prompt and early treatment is vital to ensure good functional outcome. We report a case of priapism which was treated surgically under anaesthesia with better functional recovery.

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### 1. Introduction

Priapism derived from Greek word Praipus (son of Aphrodite) is a continuous, painful abnormal erection of Penis with out sexual desire. Priapism can be associated with haematological disorders (sickle-cell disease, leukemia, thalassemia, and Fabry's disease) and neurologic disorders (spinal cord lesions, spinal cord trauma), with glucose-6-phosphate dehydrogenase deficiency. It is rare and uncommon emergency condition that may have devastating physical, functional and psychological consequences. Prompt and early treatment is vital to ensure good functional outcome. We report a case of priapism which was treated surgically under anaesthesia with better functional recovery, which was first case done in our institution.

### 2. Case Report

A male patient aged 30 years came with h/o persistent erection of penis since 7 days associated with h/o sudden onset of severe pain with burning micturition. Diagnosis of priapism was made clinically with h/o sickle cell anaemia, peripheral blood smear and confirmed with arterial Doppler of penis. Haemoglobin was 16gm%. Patient was taken up for surgery under General anaesthesia with bag and mask ventilation. Preoxygenated, premedicated with Inj.glycopyrrolate and Inj.fentanyl, induced

with Inj.propofol, maintained with N2O:O2 and propofol. Multiple scalp vein cannulas were inserted at corporeal body and all the blood was drained out. Corporal body was irrigated with 100 microgram of phenylephrine and saline 4, 10 to 15 minutes apart and erection was reduced.

### 3. Discussion

The erection is caused by trapping of blood in corpora cavernosa, venous stasis and oedema. This may lead to fibrosis of the septa and permanent occlusion of the arterio venous mechanism. Treatment should be prompt otherwise may result in Impotence, infection and gangrene. Recurrence is also common. Sedation, regional and general anaesthesia techniques are practised for helping the surgical decompression [1]. Oral or intravenous hydration, alkalinization to ameliorate acidosis, analgesics, and frequent urination are also used to treat priapism [2]. Hormones and red cell transfusions have been used to prevent Priapism. Hormonal interventions decrease the production of testosterone (eg, gonadotropin-releasing hormone analogues) or its action (eg, estrogens) [3].

Shunt procedures, usually between the corpora cavernosa and glans penis or saphenous veins has been successful in relieving severe and refractory priapism, with the objective of maintaining potency [4]. Our case was managed under General anaesthesia and Multiple Scalp veins irrigation Technique [5, 6].

### 4. Conclusion

In this case priapism was due to sickle cell disease, prompt and early diagnosis and surgical intervention under anaesthesia are essential to endure a successful outcome with minimal

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complications. Delay in medical aid may result in devastating physical and psychological disabilities that are potentially avoidable. Even though the patient reported late due to social stigma/ embarrassment, prompt assurance with immediate surgical intervention under anaesthesia with a meticulous approach was done for successful outcome.

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