

Emasculation Following Penile Injury

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Abstract

A 7 month old child was brought to us with injury to his genitalia. Emasculation due to penile gangrene in case of a dog bite can not be imagined. Phalloplasty worked wonder with small stumps of corpora cavernosa, by restoring cosmetic and functional aspects of the organ.

Introduction

Few cases of loss of external genitalia are reported in children. Two main causes are electrocautery accidents during circumcision¹ or injury by domestic animals.² Reconstructive procedure which restores penile length necessary to void standing, penetrate vagina, provide functional seminal conduit, preserve skin sensation and erectile potential for intercourse is done. If this fails, option of sex reassignment to the female gender can be considered.

Case Report

A 7 month old male was brought from Nepal with complaints of dog bite to his external genitalia. The incident had occurred a week back. The child was attacked by a stray dog during afternoon hours while asleep. Injection TT was given. ARV prophylaxis was initiated. The wound was dressed by local doctor and the patient was referred to us.

There was no history of haematuria and retention of urine.

General examination showed vitals to be stable.

Local examination showed gangrenous penile stump. Meatus was not seen (Fig. 1). Scrotal oedema was present. The wound had uneven edges. Testicles were not palpable. Dribbling of urine could be seen from the undersurface of gangrenous penis on straining. Irrigation, debridement and dressing of the wound was done. The wound healed with sloughing out of gangrenous mass in 15 days; leading to meatal

stenosis (Fig. 2). Meatoplasty was done. Post-operatively the child could pass urine in good stream without straining. The parents were counselled regarding the outcome surgery if the length of



Fig. 1 : Photograph showing stump of penis with gangrenous glans. Meatus is not seen.



Fig. 2 : Photograph showing empty scrotum and stenosed meatus.

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Fig. 3 : Photograph showing genitoplasty in process with flaps retracted and corpora seen.

corpora were not adequate to construct a good sized penis.

Genitoplasty was planned after 6 months. V-shaped incision was taken ventrally and dorsally. Stump length of 2 cms could be mobilized. Skin around the meatus was transfixed ventrally and dorsally. Split skin graft was wrapped around the corpora. Z-plasty was done at the base of penis to achieve closure (Figs. 3,4). Catheter was retained for a week. Post-operatively the urine stream was good and a stump length of 1.5 cms could be appreciated visually. The patient is on regular follow up. Patient will be initiated on hormonal supplementation at adolescence.

Discussion

Genital trauma (emasculatio and gangrene) due to dog bite are rare in children.² Appropriate steps regarding tetanus and rabies should be taken.

Genital trauma can occur due to bite from dog, donkey, pig, horse and human.² Typical pathogens include Staphylococcus, Streptococcus, E. Coli, Pasteurella Multisoda and Moraxella.³

Genital trauma to penis can lead to partial or total penile amputation along with small or large scrotal wounds. Irrigation and debridement is the mainstay of initial management. Further management depends on the length of remaining phallus, presence or absence of testis.

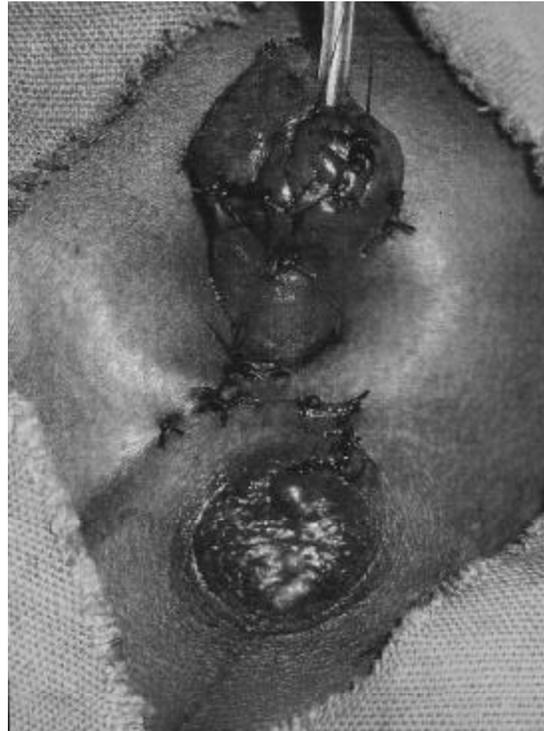


Fig. 4 : Photograph showing post-operative penile length of 2 cms with split skin graft wrapped around the corpora. Z-plasty was done at the base of penis to achieve closure.

Two important factors to be considered in management of genital trauma are age and the fact that to restore lost erectile tissue is almost impossible. Sexual identity develops in the initial 18 months of life.⁴ Phalloplasty using the remaining stumps of the corpora cavernosa must be the first line of treatment in children, who have amputation. If a reconstructive procedure that restores the penile length necessary to void, functional seminal conduit, preserves skin sensation and erectile potential for intercourse fails; reassignment to the female gender can be considered. Female genitoplasty is a simple procedure and provides excellent cosmetic and functional results in contrast to skin flap phalloplasty.

With all these principles in mind sex

reassignment may be considered the best option for a boy less than a year with total loss of penis.

Strategies for preventing animal bites include animal control laws; effective breeding programmes, education of pet owners and identification of overly aggressive dogs and stray animals.

References

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THROMBUS-ASPIRATION : A VICTORY IN THE WAR AGAINST NO REFLOW

Failure to restore myocardial perfusion after successful reopening of the infarct-related artery by primary percutaneous coronary intervention (PCI), the so-called no-reflow phenomenon, is caused by a combination of three main pathogenetic components: distal atherothrombotic embolisation, ischaemia-reperfusion injury, and susceptibility of coronary microcirculation to injury. In at least a third of patients undergoing successful primary PCI, restoration of myocardial perfusion fails, which is associated with much higher rates of early postinfarction complications, late admissions for heart failure, and mortality.

Other studies showed that simple manual thrombus aspiration by an intracoronary catheter was feasible and safe, allowed the extraction of atherothrombotic material from the infarct-related artery in most patients, and reduced thrombus burden seen on angiography.

The TAPAS trial is the first convincing victory in the fight against incomplete myocardial perfusion, a frequent event that negates the potential benefit of primary PCI. This development will be favoured by the low cost and easy use of thrombus-aspirating catheters, which make them ready for use in all catheterization laboratories that treat patients with acute myocardial infarction.

The Lancet, 2008; 371 : 1890.