Title: Trouser Zipper Genital Injures in Children Our Experience


* Liaquat University of Medical & Health Sciences, Jamshoro, Sindh – Pakistan
** BEMS, Hamdard University, Karachi, Sindh – Pakistan

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Abstract

Trouser zipper genital injuries in children are common¹, however in Pakistan it is relatively uncommon as it is reported in school age children from urban population only. 70% of our population lives in rural areas where children wear shalwar kamiz as their common dress. It is commonly observed in uncircumcised children, but in Pakistan circumcision is religiously mandatory it is seen in circumcised children also. The penis or foreskin is commonly entrapped between the teeth and the fastener of the trouser zip². Scrotum is less commonly injured organ by the trouser zip¹, ². We report our experience of 75 such cases who presented to our A&E Department from 2005 to 2014.

Keywords: Trouser zip, Genital injuries, Children, Management

Objective:

To report our experience of trouser zipper genital injuries in children’s and it’s various methods of management.
Patient & Methods:

Children with age from 5 to 11 years who presented with trouser zipper genital injuries were included in the study from 2005 to 2014. They were managed without anesthesia or under sedation. However few of them were managed by circumcision under general anesthesia. We used Mac Can technique by using two needle holders and dismantling the skin from the zipper. There are no any complications reported. This method satisfied the surgeons and parents of the patient with or without anesthesia or under sedation.

Results:

115 male children between 2005 to 2014 were presented with trouser zipper injuries to the genitals. Most of the children were in 5 to 7 years of age. Penis and foreskin were entrapped in majority of children. Scrotal skin involvement is not observed in our study. In 60 children the ventral surface of penis was involved in the injury, while in 30 children the dorsal skin of the penis was involved. In 10 uncircumcised children the foreskin was entrapped, however in 5 children penile shaft was entrapped. 105 children were circumcised and only 10 children were uncircumcised.

We managed 105 children by using two small needle holder technique advocated by Mc Cam PA without anesthesia and under sedation. Only 10 children in our study underwent circumcision under general anesthesia.
Discussion:

Genital injury in a trouser zipper is a common injury in children; however it is relatively uncommon in our country. It is quite a distressing situation for the child and the parents and can be a frustrating for the attending surgeon. Any overzealous intervention would simply worsen the situation as the Childs are very frightened at presentation due to failed attempt of manipulation by their parents at home. The zipper manipulation should be quick, simple and it can be used in all the cases of genital entrapment regardless of size of the zip, the mechanism of entrapment and the presence of local odema in all groups of children. Various different techniques and methods has been reported in the literature for dismantling the zipper to circumcision. Before attempting any recommended method the parents anxiety should be lesson by reassurance, the child should also be taken with confidence as they are often distressed and frightened due to several unsuccessful and painful attempts by their parents at home.

Misra\(^3\) reported a simple, quick and safe painless technique of zipper manipulation in which foreskin is instantly released by lateral compression of the zip fastener using pliers.

Flower drew ET al\(^4\) reported a method that involved bone cutter to separate the median bar of the fastener to undo the zipper.

Raveen thiran\(^5\) reported a technique with a screw driver to remove the zipper in 12 children successfully.

Nakagawa ET al\(^1\) perform traction of the zipper successfully.

Kanegaye JT\(^6\) advocated a less threatening approach by using mineral oil to slide the zipper.

Mydlo JH\(^7\) advocated an elliptical incision to resolve the problem of entrapment in delayed presentations.
Mc Cann PA\(^8\) advocated a method of management of penile zipper injuries by two small needle holders. However Watson CC\(^2\) advocated this problem in children by circumcision but it is only suitable for uncircumcised children and is unacceptable for various cultural reasons.

**Conclusion:**

We conclude that incidence of zip related genital injuries in children in our country is low, but surgeons should be familiar with safe and painless manipulation of genital zipper entrapments without anesthesia or under sedation.

**References:**