



## Case Report

## Zip injuries: A simple solution

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### **Abstract**

Entrapment of penile foreskin between zipper teeth and zip slider is a common injury in children. It is seen in boys of age group 5-12 years who usually do not wear underpants. About 80% of these injuries occur accidentally while zipping up. Here, we have described a technique which is simple, quick, pain less and require no special instruments.

### **Key words**

Zip injuries, Penile foreskin, Solution.

### **Introduction**

Preputial injuries are common genital injuries due to entrapment of penile foreskin into the zipper. It is a distressing situation to the child and the parents. Improper intervention would worsen the situation. The approach to release the foreskin should be some form of mechanical disengagement of the zipper from the skin [1]. It should be simple, quick, non traumatic and easily reproducible, irrespective of the site of entrapment, tissues involved and design of the zip.

### **Case report**

A 4 years old boy with accidental entrapment of prepuce while fastening the zip, presented to the Surgical Department after failed attempts to unzip for almost one hour. The simple technique

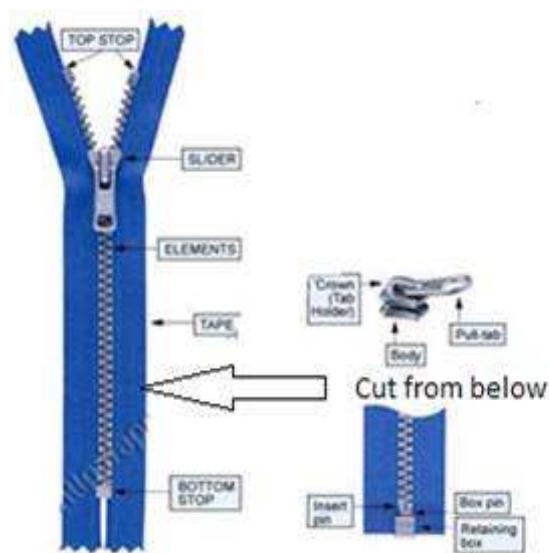
we advocated was to cut open the lower end of the zip from the cloth, using a surgical blade (No. 11 or 15) which released the lower most zipper teeth and then by pulled it apart from below upwards automatically released the skin. The child was asked to pass urine and he did it without difficulty. Anti-inflammatory drugs and antibiotics were prescribed for skin bruises. (Figure – 1, Figure – 2)

### **Discussion**

Entrapment of unprotected penile skin into zipper is most common cause of preputial injury in children [2]. Various techniques reported range from simple mechanical disengagement of zipper under local anesthesia to circumcision under general anesthesia. We treated all cases of zip entrapment by above technique without

anesthesia which requires only a surgical blade to cut the zip at the lower end and dismantle its teeth which are fused, then pulled apart from below upwards to release the skin. This procedure is simple, safe, reproducible and requires no special instruments.

**Figure – 1:** Parts of zipper.



**Figure – 2:** Zip dismantled from below.



Other suggested techniques include: Lateral compression of the zip using pliers, Cutting the teeth of closed zipper [3], Release of foreskin using screw drivers [4], Use of mineral oil followed by traction [5], Division of median bar connecting the anterior and posterior faceplates of slider using bone cutter or mini-hacksaw [6, 7, 8, 9], Using two needle holders applying pressure on anterior and posterior plates of slider, thus separating the teeth from entangled skin is also described [10]. These procedures require general anesthesia and availability of instruments.

### Conclusion

Though zipper injury to penile skin appears simple, mismanagement by parents and aggressive treatment by surgeons can lead to partial excision of the foreskin or circumcision under general anesthesia. All the above given techniques are suitable solutions but our technique seems to be simple, safe, quick, needing just a surgical blade or scissors. Thus we suggest children with long prepuce to undergo circumcision to avoid such injuries and in habituate wearing underpants or use alternative to zip for clothing in children.

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