

Foreskin Zipper Entrapment: A Simple and Innovative Approach



Medical Science

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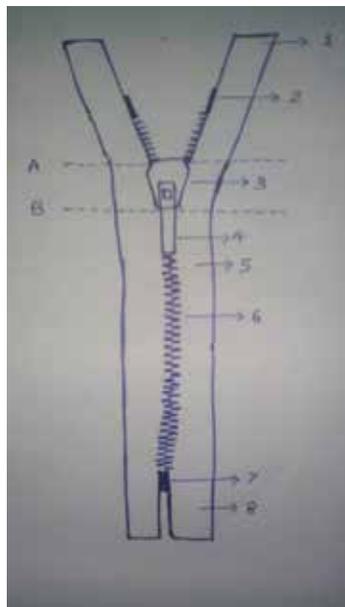
ABSTRACT

The foreskin injury caused by entrapment of foreskin between teeth and zip slider of a zipper mechanism is a great distressing situation for the child and parents. Any aggressive management would simply worsen the problem. Here a technique is presented which is quick, painless, requiring minimal anesthesia and only simple instruments like scissors are required and simple to perform.

INTRODUCTION:

Foreskin injuries are very rare in adult men although it is frequent in children. The crush injury mediated by the entrapment of the skin between teeth and slider of a zipper mechanism is a quite distressing situation for the child and the parents. The injuries occur most commonly whilst the zip are been done up. Any enthusiastic intervention would simply worsen the problem leading to frustrating management. Also attempts to cut open the zip slider are time consuming and may alleviate the patient's anxiety and may not be either helpful or feasible in all situations. The approach to foreskin zipper entrapment should be simple, quick and non traumatic requiring simple instruments and reproducible irrespective the age of child, mechanism and site of entrapment, presence of local edema, zipper size or design. We describe a technique for managing foreskin zipper entrapment which is quick, simple and easily reproducible.

PARTS OF ZIPPER:-



1. Top Tape Extension – The fabric part of zipper that extends beyond the teeth at the top of chain.
2. Top Stop – Two devices affixed to the top end of a zipper to prevent the slider from coming out of chain
3. Slider – The device that moves up and down the chain to open or close the zipper.
4. Pull Tab - Part of slider that is held to move the slider up or down.
5. Tab Width – Width of fabric on both side of zipper chain
6. Zipper Chain with teeth.
7. Bottom Stop – Two devices affixed to bottom end of zipper to prevent slider from coming out of chain.
8. Bottom Tape Extension – The fabric part of zipper that extends beyond the teeth, at the bottom of chain.

TECHNIQUE:-

Step – 1

After cleaning the area 1 ml of local anesthetic agent is infiltrated surrounding the entrapped foreskin. Surrounding clothing is cut leaving only the zipper.

Step – 2

Then using a Mayo's scissor, the two unzipped halves are transversely cut along with the teeth just above the slider. Then the zipped chain is cut transversely along with teeth and tab width just below the slider.

Step – 3

Now only slider remains with a pull tab along with a small segment of chain and the entrapped foreskin. Now just apply xylocaine jelly as a lubricant and using pull tab slider is pushed forwards or backwards which immediately releases the foreskin. Then entrapped foreskin is cleaned and anti septic cream is applied locally.

In figure, 'A' and 'B' shows the upper and lower level at which zipper mechanism is cut respectively.

DISCUSSION:-

Foreskin injuries by zipper are relatively frequent in uncircumcised children, however to the best of our knowledge no cases in elderly have been published in literature, probably because

patients achieve to release the foreskin of the zipper^[1]. These children are often distressed and frightened due to several unsuccessful and painful attempts at extrication by the parents^[2]. In these cases various management strategies are reported including an aggressive approach of a partial excision of foreskin or a circumcision^[3,4]. The most obvious disadvantage of this procedure is that it is only suitable to uncircumcised patient with an injury to the prepuce. However, this may not be a palatable option as it necessitates general anesthesia in addition to conferring its own operative risk^[5,6]. The non aggressive management strategies involve some form of mechanical disengagement of zipper from skin. These include techniques of releasing foreskin using screw drivers^[7], another one using a pliers and wire cutters^[8]. Other report use of mineral oil followed by traction^[2]. However, the most common method described so far, involves division of median bar connecting the anterior and posterior fore plates of slider using a bone cutter or mini hacksaw^[9,10,11,12]. The disadvantages of this method are probably need for general anesthesia and availability of instruments^[2] which may not be at hand. Another technique using two needle holders applying pressure on anterior and posterior plates of slider, thus separating the teeth from entangled skin has also been described^[13].

CONCLUSION:-

All the techniques described above are suitable for solving the problem. Review of literature yielded no previous report of similar technique. The technique reported here is safe, quick, painless requiring only minimal anesthesia and simple instruments like scissors and simple to perform. So, it can be used in all cases of foreskin entrapment regardless of the size of zip, the mechanism of entrapment and associated edema. Therefore, this technique provides a straight forward suitable alternative in the management of this problematic injury.

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