Penile Zipper Injury

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Key Words

Penis · Zipper · Injury

Abstract

Objective: To report 2 cases with pediatric penile trauma due to penile zipper injury. **Clinical Presentation and Intervention:** Two boys presented to the emergency service because of penile zipper injury. The zipper was cut away and removed from the foreskin by cutting the median bar of the sliding piece of the zipper and the zipper teeth with a bone cutter. After opening the zipper teeth, the zipper fell apart, which allowed its removal from their foreskin. There was minimal trauma to the foreskin and the boys were sent home on the same day. **Conclusion:** Penile entrapment in a zipper is a presentation that may be seen in any emergency department. The 2 boys were treated successfully by cutting the median bar of the sliding piece of the zipper.

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Introduction

Penile zipper injuries generally occur when uncircumcised young boys zip up their pants too quickly and entrap their foreskin in the zipper. We describe some techniques for the management of the penile zipper injury.

Case Reports

Case 1

A 6-year-old boy was referred by a family physician because his foreskin was trapped in his zipper. He was anxious, therefore benzodiazepine was administered orally followed by examination. The foreskin was infiltrated with 2% lidocaine without epinephrine. The zipper was cut away from his pants and then was removed from his foreskin by cutting the median bar of the sliding piece of the zipper and the zipper teeth with a bone cutter (fig. 1). After opening the zipper teeth, the zipper fell apart, which allowed its removal from the foreskin. The patient had no major injury; there was just a lot of swelling, primarily from the lidocaine. He was discharged with instructions for local care.

Case 2

An 11-year-old boy presented to the emergency department because the right side of his foreskin was caught in his zipper. By using the technique described above, the zipper was cut off his foreskin. Slight edema and ecchymosis remained, but he had no complaint of pain. He was discharged from the emergency department with local wound care instructions and follow-up appointment.

Discussion

Knowledge of the parts of the zipper is necessary for extracting the trapped foreskin without additional trauma [1]. The zipper is a slide fastener consisting of a sliding piece and two strips of material with metal or plastic teeth along the edges. The sliding piece consists of an an-

Fig. 1. a Cutting the median bar of the sliding piece of the zipper with a bone cutter. **b** Cutting the zipper teeth with a bone cutter.

terior and posterior faceplate, connected by a small bridge called the median bar (or 'diamond') (fig. 2). Simply cutting the median bar with a bone cutter or wire cutter results in the entire zipper falling apart, freeing the entrapped foreskin. There are some reports that the median bar cannot be reached with a bone cutter because of the unusual design of the zipper [2]. This may be resolved by cutting across the zipper with a bone/wire cutter below the entrapment, allowing the teeth to separate. If these fail, a mini hacksaw is useful to cut the median bar of the zipper [2].

Fig. 2. Anatomy of a zipper. Anterior and posterior faceplates are connected by a small bridge called median bar (or 'diamond', arrow).

Kanegaye and Schonfeld [3] described 2 patients whose zippers were released with the application of mineral oil followed by traction. They soaked the zipper and foreskin in mineral oil for approximately 10 min before the arrival of a bone cutter. This simple maneuver is recommended before trying to cut the zipper.

Conclusion

Penile entrapment in a zipper is a presentation that may be seen in any emergency department. The 2 boys were treated successfully by cutting the median bar of the sliding piece of the zipper.

References

- 1 Saraf P, Rabinowitz R: Zipper injury of the foreskin. *Am J Dis Child* 1982;136:557-558.
- 2 Strait RT: A novel method for removal of penis zipper entrapment. *Pediatr Emerg Care* 1999; 15:412-413.
- 3 Kanegaye JT, Schonfeld N: Penile zipper entrapment: a simple and less threatening approach using mineral oil. *Pediatr Emerg Care* 1993;9:90-91.