

URETHROCUTANEOUS FISTULA DUE TO A COIL OF HAIR*

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SUMMARY: Gülmez I, Tatlışen A, Karacagil M, İpekcan C. (Department of Urology, Erciyes University Faculty of Medicine, Kayseri, Turkey). Urethrocutaneous fistula due to a coil of hair. Turk J Pediatr 33: 191-193, 1991.

Strangulation of the penis by a coil of hair is often an unrecognized clinical entity with severe potential complications. In this report, a five - year - old boy with urethrocuteaneous fistula caused by the wrapping of a single strand of hair around the penis is presented. *Key words:* penile tourniquet syndrome, urethrocutaneous fistula.

Strangulation of the penis by an encircling object is an uncommon clinical presentation¹, and has been reported following the application of numerous foreign objects including rings, bottles, rubber bands, pipes, threads, ribbons, metal and plastic washers and metal nuts^{2, 3}. These objects are placed on the shaft of the penis sometimes to enhance sexual performance⁴. A frequently unrecognized and potentially devastating form of penile strangulation is that caused by human hair³. In this report, a case of urethrocutaneous fistula due to a coil of human hair is presented.

Case Report

A five - year - old boy (M.Ö.) had been urinating through a fistula beneath the corona glandis and external meatus for two months. He had been circumcised two years ago. Physical examination of the penis revealed a moderately swollen glans with marked annular constriction at the level of the coronal sulcus. This constricting ring was covered with necrotic debris (Fig. 1) which was removed meticulously. A long strand of hair was found wrapped around the penis several times. The coil of hair was removed by cutting (Fig. 2). The urethra had been transected completely by the hair and the coronal groove was markedly manifest (Fig. 3). The father informed us that he had removed a coil of hair, which had been wrapped around the child's penis, two months after the patient had been circumcised and that there was no evidence of fistula formation at that time.

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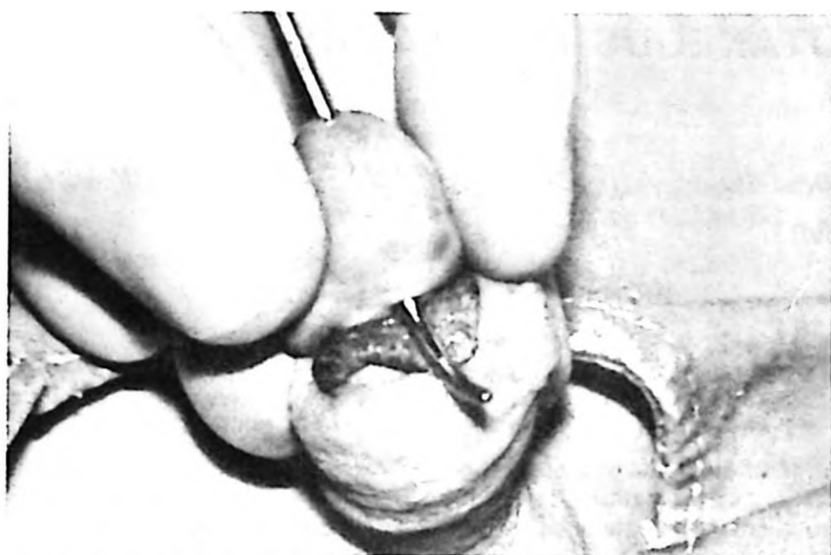


Fig. 1: Constricting ring and urethrocutaneous fistula.



Fig. 2: Removed hair and debris.



Fig. 3: Following removal of necrotic debris and the hair, a markedly deep coronal groove is seen.

The patient was hospitalized. The penis was cleansed with a solution of povidone iodine twice daily and ampicillin (250 mg qid) therapy was instituted. Seven days later, the patient was discharged. The parents were advised to have the fistula repaired, but the patient was not brought back to the hospital.

Discussion

Penile strangulation due to human hair was first reported in 1888, and since then, a number of cases have been reported. This type of strangulation can cause ulceration, fistula, necrosis and partial or complete amputation of the glans. The patients are always children, with a range in age from 21 days to eight years, and circumcision is an important predisposing factor³. In Turkey, only one case of urethrocutaneous fistula secondary to a human hair has been reported⁵.

Since human hair is quite stretchable when wet and contracts when dry, it is not difficult to understand how hairs can tighten as they dry and become embedded in the skin. Because human hair is extremely fine, its presence as a foreign body may not be noticed, and the diagnosis may be missed unless the clinician is alert to the possibility of this unusual cause of penile strangulation⁶.

How the hair gets wrapped around the penis is a matter of speculation. Application may be accidental or intentional by either the patient, siblings, parents or other adults. Some parents wrap hair around the penis to control enuresis³. In our case, the coil was not wrapped around the penis for any specific purpose. We postponed reconstructive surgery until complete healing of the tissues.

REFERENCES

1. Sinha BB. Penile incarceration by a metallic object. *Br J Surg* 75:33, 1988.
2. Fiumara NJ. Annular constriction of the penis-the tourniquet syndrome [letter]. *JAMA* 240:2153, 1978.
3. Sheinfeld J, Cos LR, Ertürk E, Cockett AT. Penile tourniquet injury due to a coil of hair. *J Urol* 133:1042, 1985.
4. McLaughlin T, Coyner W. Removal of a strangulating metal bearing from the penis. *J Urol* 141:617, 1989.
5. Yalçın V. Enteresan bir üretral fistül olgusu. *Türk Üroloji Dergisi* 14:357, 1988.
6. Alpert JJ, Filler R, Glaser HH. Strangulation of an appendage by hair wrapping. *N Engl J Med* 273:866, 1965.