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Hair Tourniquet of Penis in a Male Goat

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I. Introduction

Hair-thread tourniquet syndrome (HTTS), coined in 1988 by Barton et al.(1), was recognized by at least the 17th century when hair was reported strangulating an appendage (toes, fingers, or external genitalia)in the pediatric population. A strand or strands of hair firmly bound around an appendage, act like a circumferential constriction band and subsequently strangulate the body appendages causing ischemic gangrene. In men, the commonly affected sites include fingers, toes, or even genitals. Failure to identify and release the acute constriction may result in amputation of the affected body part.

II. Case History and Observation

Owner of a two year old male goat noticed dribbling urine with occasional pain. Abdominal palpation revealed a distended urinary bladder which got evacuated by itself immediately after the examination. Microscopically the urine showed few red blood cells. Urine biochemistry revealed no clinical abnormalities. The animal was treated for mild cystitis, and the owner reported a slight improvement in the animal's condition for two days. Upon repeated examination on the third day, the animal elicited signs of pain while palpating the anterior portion of the penis, and thickening was felt at the area of the glans penis. The animal was sedated, and local analgesia was attained using a pudental nerve block. Detailed examination of the penis revealed a band-like structure on the body of the penis adjacent to glans penis (Fig 1).The portion of penis distal to this area looked slightly bluish in color. The material appeared tightly woven around the penis but did not adhere to.

III. Treatment

A curved artery forceps of 6" size was lubricated with liquid paraffin and passed gently between the structure and penis to check for any stricture, but nothing found. It was cut carefully at a point using curved Mayo scissors of 4" size and removed. A thorough examination of the material revealed that it was a band of hair woven together like a band (Fig 2). Due to the pressure exerted by the tight band, the superficial fascia of the penis was incised at few points. Parenteral analgesics and antibiotics were given for five days.

IV. Discussion

There is a lack of consensus as to exactly how, the ligature wraps so tightly around a structure. Hairs are hygroscopic and stretched quickly when wet and contract when dry, and the circular configuration results in hydrogen bonds giving a firmer hold. The high tensile strength of hair makes it an effective tourniquet. The constricting band reduces venous and lymphatic drainage, causing swelling and edema. Increased interstitial pressures might reduce arterial supply, causing ischemia and associated increase in pain and tenderness. The increasing swelling perpetuates this cycle in a positive-feedback fashion. There is a substantial risk of necrosis and auto amputation. This process can occur over hours to weeks. Difficulty in urination seen in male goats over five months is usually thought to be due to urinary calculi. But this can be confirmed by examination of urine sediment microscopically, which reveals crystals and sometimes red blood cells. The urinary bladder appears thick, and the animal elicits pain on palpation. In severe conditions, cystostomy is the only way of correcting the situation. In the present case, no crystals were seen on examination, and no severe obstruction for the flow of urine was also seen. Two more similar cases reported during six months. It is assumed that the body hair of female goats presented for breeding might have adhered to the glands penis when the male goat tries to mount, and a large number of such hairs together form a ring when the penis is retracted.

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Fig.1

Fig.2

V. Summary

This paper place on record, a very rare incidence of difficulty in urination in a male goat due to hair tourniquet. Similar reports in animals were not seen during literature review.

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References Références Referencias

1. Barton DJ, Sloan GM, Nichter LS, Reinisch JF. Hair-thread tourniquet syndrome. *Pediatrics*. 1988; 82(6): 925–928. [PubMed] [Google Scholar]
2. Okeke LI. Thread embedded into penile tissue over time as an unusual hair thread tourniquet injury to the penis: a case report. *Journal of Medical Case Reports*. 2008; 2: p. 230. [PMC free article] [PubMed] [Google Scholar]
3. Sivathasan, N., Vijayarajan, L., Hair-Thread Tourniquet Syndrome: A Case Report and Literature Review, Published online, Case Rep Med. 2012.
4. Summers JL, Guira AC. Hair strangulation of external genitalia: report of two cases. *Ohio State Medical Journal*. 1973; 69(9): 672–673. [PubMed] [Google Scholar]