Penile Hair Tourniquet Syndrome - An Off-Centre Cause Of **Paraphimosis**

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ABSTRACT:

Penile hair tourniquet syndrome is a rare condition which is usually seen in paediatric population. It has a diversified presentation[1]. Here we report a case of a hair tourniquet syndrome in elderly previously unphimosed male who presented with paraphimosis and partial avulsion of glans penis for which patient underwent circumcision and is doing well at 6 months follow up.

I. **INTRODUCTION:**

Penile hair thread tourniquet syndrome is the strangulation of penis by hair or thread causing compromise of blood supply resulting in ischemia and necrosis of the distal part.it is very rare syndrome usually seen in infants and children with involvement of toes, fingers or genitals[2,3]. The presentation usually varies

inflammation, ischemia which may progress to amputation of the organ due to lack of blood supply.immediate intervention is mandated to salvage the organ.

Casepresentation:

A 60-year old male with no known comorbidities came to opd with complaints of edema and pain of the prepuce and decreased rate of urine outflow for 10 days. Patient had no history of any psychiatric disorders. His vitals were normal on examination. Local examination showed paraphimosis with partial avulsion of glans penis(fig 1 & fig 2).there was presence of foul smelling slough at the raw area. There is no loss of sensation of glans penis & tenderness was present, surrounding area showed features of inflammation. Partial penectomy was planned in view of clinical findings.





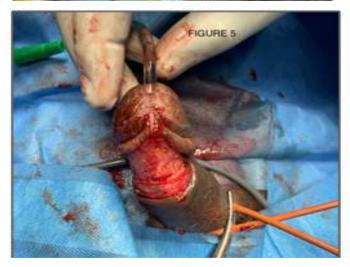
On table examination under anaesthesia showed a long tuft of hair was present amidst slough around the glans dividing skin and subcutaneous dartos fascia and compressing the

urethra with superseding infection.urethra was found to be intact. Pus sent for culture and sensitivity.









Debridement was done and proceeded with circumcision by excising edematous prepuce after ruling out necrosis of glans penis (figure 5). Glans penis appeared to be healthy inferring that hair tourniquet was not too tight in this case. There

is no evidence of urethro cutaneous fistula. Intra operative period &post operative uneventful.wound appeared healthy post surgery without any complications. Urine flow rate was normal post operatively and shaft appears healthy (figure 6 & figure 7).

II. DISCUSSION:

Very few cases were noted in literature showing incidence in infants and children. Only one case report mentioned incidence in an adult[3]. Treatment varies according to the presentation from circumcision to amputation of the organs involved.there were cases which underwent near total penectomy due to delayed presentation. This is a case to have the unique presentation in elderly.circumcision was done and glans penis was saved due to early presentation and timely intervention[4].

III. CONCLUSION:

Any unexplained presentation should be given importance suspecting a rare entity.penile hair tourniquet syndrome has wide variety of presentations like pain, glandular swelling, ischemia, necrosis, urethro cutaneous fistulas, auto amputation of involved distal portion of penis. Early diagnosis and intervention should be done to avoid serious consequences[5].

REFERENCES:

- [1]. Bean JF, Hebal F, Hunter CJ. A single center retrospective review of hair tourniquet syndrome and aproposed treatment algorithm. J Pediatr Surg. 2015;50:1583–5. doi: 10.1016/j.jpedsurg.2014.11.041.
- [2]. Bacon JL, Burals JT. Hair thread tourniquet syndrome in adolescents: a presentation and review of the literature. J Pediatr Adolesc Gynecol. 2005;18:155–6. doi: 10.1016/j.jpag.2005.03.010.
- [3]. Miller RR, Baker WE, Brandeis GH. Hair-thread tourniquetsyndrome in a cognitively impaired nursing home resident. Adv Skin Wound Care. 2004;17:351-2.
- [4]. Vazquez Rueda F, Nunez Nunez R, Gomez Meleno P, Blesa Sanchez E. [The hair-thread tourniquet syndrome of the toes and penis]. An Esp Pediatr. 1996;44:17-20.
- [5]. Thomas AJ, Jr., Timmons JW, Perlmutter AD. Progressive penile amputation. Tourniquet injury secondary to hair. Urology. 1977;9:42-4.