

## HAIR TOURNIQUET SYNDROME

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### ABSTRACT

Hair Tourniquet syndrome is a rare disorder. Although most cases are considered to be accidental. In this syndrome hair or thread tightly wrapped around toe (most commonly) and occasionally finger, genital or other parts of body. [1] This will compromise the blood flow of the involved appendage leading to its ischemic injury. Mechanism involved in this syndrome is believed to involve wet hair become wrapped around a body part and then tightening as it dries. [1] Circumferential digital strangulation leads to impairment in lymphatic and venous drainage causing distal edema. Left untreated, leads to arterial occlusion and ischemic injury. [5] Prolonged ischemia leads to tissue necrosis and ultimately auto-amputation. So immediate diagnosis of Hair Tourniquet Syndrome and treatment of the condition is very important. Immediate hair or thread removal can save the finger of child.

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### INTRODUCTION

Hair Tourniquet syndrome is a rare disorder. Although most cases are considered to be accidental. In this syndrome hair or thread tightly wrapped around toe (most commonly) and occasionally finger, genital or other parts of body. [1] This will compromise the blood flow of the involved appendage leading to its ischemic injury. This will lead to pain and swelling of the affected part. [1] Hence early recognition and urgent intervention are needed for salvaging the involved digit. Timely removal of hair strand can prevent further establishment of gangrene that could have led to auto-amputation. In this article, we report a rare case of hair tourniquet syndrome in a 1.5 month old baby boy.

### Case Report

**A 1.5 month old male child presented to M.M.I.M.S.R.**

Hospital, Mullana, Haryana with complain of swelling and redness in left thumb since last 1 day. There are no other symptoms on presentation. There was no history of similar problems. No history of injury or insect bite over thumb. On local examination, redness, swelling and tenderness present over left thumb. There is a constriction band present at interphalangeal joint of left thumb [Figure.1]. On further examination we found some hair material tightly wrapped around left thumb in constriction ring. Other fingers are normal. Peripheral pulses were normal. Systemic examination shows normal findings.

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**Figure 1**

Immediately hair was removed [Figure 2] with fine forcep. After removal of hair, gradually within 48 hrs. swelling and redness reduce. [Figure 3]



**[Figure 2]**

**[Figure 3]**

### DISCUSSION

Hair tourniquet syndrome is a rare disorder. Hair tourniquet syndrome described as involving the fingers, toes and even genitals. [2,3] Majority cases of HT syndrome have been reported

in infants less than 2 months of age.<sup>[4]</sup>Most cases occur accidentally.<sup>[1]</sup>Mechanism involved in this syndrome is believed to involve wet hair become wrapped around a body part and then tightening as it dries.<sup>[1]</sup>Circumferential digital strangulation leads to impairment in lymphatic and venous drainage causing distal edema. Left untreated, leads to arterial occlusion and ischemic injury.<sup>[5]</sup>Prolonged ischemia leads to tissue necrosis and ultimately autoamputation. So immediate diagnosis and treatment of condition is very important. **Immediate hair or thread removal** can save the finger of child. It can usually be removed by direct inspection. Surgical exploration is mandatory if doubt persists as to the completeness of removal, especially as the hair cuts through the skin and becomes invisible.<sup>[2,5]</sup>

## References

1. Gottlieb, M; Holladay, D; Spearman, D (May 2019). "Current Approach to the Evaluation and Management of Hair-Thread Tourniquets". *Pediatric emergency care.* 35 (5): 377–379. doi:10.1097/PEC.0000000000001827. PMID 31045982.
2. Alverson B. A genital hair tourniquet in a 9-year-old-girl. *Pediatric Emerg Care.*2007;23:169-170.
3. Barton DJ, Sloan GM, Nichter LS, Reinisch JF. HairThreadMtourniquetsyndrome. *Pediatric.*1988;82:9 25-928.
4. Sudhan ST, Gupta S, Plutarco C. Toe-Tourniquet syndrome\_assidental or intentional? *Eur J Pediaric.*2000;159:866.
5. Mackey S, Hettiaratchy S, Dickinson j. Hair-tourniquet syndrome-multiple toes and bilaaterality. *Eur J Emerg Med* 2005;12:191-192.

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