Case Report

Uvula Strangulation: A Rare Case of Hair Thread Tourniquet Syndrome

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Introduction

Hair thread tourniquet syndrome is a rare but previously well-documented presentation. It is described as circumferential strangulation of distal or multiple distal appendages, which can lead to tissue ischaemia and eventually necrosis without prompt treatment. Despite the characteristic presentation and potential for serious complications, many healthcare professionals remain unaware of hair tourniquet syndrome and the need for urgent management. We present the case of a 9-month-old infant who presented to the emergency department. The parent noted a long hair emanating from the mouth but on attempts to remove it was unable to do so. The child was otherwise stable. Examination on the oral cavity revealed the hair strand tightly wrapped around an oedematous and congested uvula. Attempts to remove the ligature in the emergency department were unsuccessful and a subsequent referral to otolaryngology was made. A decision was made to take the child to the operating theatre, where the ligature was successfully removed with the distal uvula remaining viable.

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Case Presentation

We present the case of a 9-month-old infant who presented to the emergency department. The parent noted a long hair emanating from the mouth but on attempts to remove it was unable to do so. The child was otherwise stable. Examination on the oral cavity revealed the hair strand tightly wrapped around an oedematous and congested uvula. Attempts to remove the ligature in the emergency department were unsuccessful and a subsequent referral to otolaryngology was made. A decision was made to take the child to the operating theatre, where the ligature was successfully removed with the distal uvula remaining viable.

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otherwise clinically stable. Examination on the oral cavity revealed the hair strand tightly wrapped around an oedematous, congested uvula with no necrosis (Figure 1). Attempts to remove the ligature in the emergency department were unsuccessful and a subsequent referral to otolaryngology was made. A decision was made to take the child to the operating theatre urgently (within 1 hour), where the ligature was successfully removed (Figure 2). The distal uvula remained healthy and viable, and the child had an uneventful postoperative recovery. Follow-up revealed a normal-appearing uvula.

Figure 1: Oral cavity (Boyle-Davis mouth gag in situ). Hair ligature wrapped tightly around an oedematous uvula, with distal congestion.

Figure 2: Oral cavity (Boyle-Davis mouth gag in situ). Hair ligature removed, with the viable distal uvula.

Discussion

Whilst ‘hair thread tourniquet syndrome’ has been frequently described in the literature in relation to tourniquet of the toes, fingers and genitals, there are only two documented cases of uvula tourniquet. Krishna et al. described a case in 2002 with a similar presentation to our case and removed the hair tourniquet under general anaesthetic with the survival of the uvula [10]. M’neal et al. in 1987 described a case of uvula hair tourniquet. They failed to remove the ligature while the child was conscious, and it was felt not in the child’s best interest to undergo a general anaesthetic. The child was discharged and reviewed 48 hours later by which time the distal tip of the uvula had self-amputated. They stated although this was sub-optimal, there were no long-lasting sequelae from the loss of the distal uvula [2].

The complications resulting from ischaemia due to occlusion of vasculature in distal appendages with end arterial supply are obvious and include partial amputation, complete amputation, and deformity [7]. These complications in regard to cases of genital or digit hair tourniquets are severe and life-changing, the long-term impact of autoamputation of the uvula is less dramatic but any preventable loss of functional tissue should be seen as sub-optimal. There is also the potential for aspiration of a self-amputated uvula and associated complications.

Therefore, patients presenting with symptoms characteristic of ‘hair thread tourniquet syndrome’ should have prompt specialty review and removal of the hair tourniquet, either by using simple measures such as unwinding or if these fail by surgical intervention [6]. The sooner the successful removal of the hair tourniquet, the lower the chance of tissue damage occurring and loss of function.

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