

Penile Hair Tourniquet Syndrome Due to a Coil of Hair: First Report in Iran

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Abstract

Penile hair tourniquet syndrome (PHTS) is a rare clinical condition characterized by progressive penile strangulation caused by a piece of hair curled around sulcus corona. This clinical condition may result in some clinical and urgent complications including ischemia and gangrene of glans penis, urethra-cutaneous fistulae, and urethral transection. The case report is about a four year and six month old circumcised boy with a hair coil penile strangulation caused by strands of hair being wrapped around the sulcus corona.

Keywords: Penile Hair Tourniquet Syndrome, Strangulation, Iran

1. Introduction

Tissue strangulation by a thread was first introduced by Guillimeau in 1612 (1) and it was first reported and published in the Lancet in 1832 (2). Penile hair tourniquet syndrome (PHTS) is a rare condition characterized by a progressive hair coil penile strangulation mainly occurring in toddlers (3). This clinical situation is also known as “progressive penile strangulation, hair coil penile strangulation and penile tourniquet syndrome” (4). The penile strangulation represents 25% of individuals with PHTS and is usually seen in external parts of genitalia (5). This condition results in partial or total obstruction of circulation, ischemia and then, necrosis of the strangulated organ.

Harouchi et al. in 1980 (6) reported the largest series of PHTS and recently some studies reported the number of male cases with different degrees of this syndrome (4). Herein, we aimed to report on the diagnosis and the treatment of a 4 year and 6 month old boy with a swollen penis entrapped with a hair strand which is the first report in Iran.

2. Case Presentation

The patient's mother recognized an increased swelling and pain in glans penis and sulcus coronalis for the past 24 hours in his 4 year and 6 month old boy who was admitted

to the emergency department of Dr. Sheikh hospital. He had irritability during urination, mild penile swelling, and coronal sulcus erythema for the last two weeks.

His parents did not declare a history of remarkable trauma, foreign body, allergy, and other important disorders or surgery for their son, except nocturnal enuresis and circumcision under local anaesthesia when he was 27 days old. On the examination, the patient was irritable and there was a penile swelling at the glans, and there was an erythematic and tender circumferential line at the coronal sulcus. Fortunately, his penis was not transected at the coronal sulcus, urethra, corpus cavernosum and, also, other bundles were normal. Bladder, ureters, and kidneys were normal in ultra-sonographic imaging. In addition, lab findings such as blood electrolytes and serum creatinine and urinalysis were normal and negative.

At first, oral antibiotics were prescribed. Foreign body and child abuse were the initial diagnosis due to a coiled circumferential hair-thread strangulating the glans. The child was taken to the outpatient operation room; examination showed a hair tourniquet lodged in the coronal level without any fistula and penis was uncoiled with a needle (Figure 1).