

# Soap induced urethral pain in boys

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## Summary

**Objective:** To describe the cause, possible pathogenesis and management of "idiopathic" urethral pain in boys.

**Patients and method:** Eighteen boys presenting with distal urethral pains over a period of 12 years were reviewed and their responses to the application of bland petroleum jelly to the external urethral meatus before each soap bath was noted.

**Results:** The symptoms started suddenly while bathing with soap. Penile erections at onset occurred in 14(78%). Two (11%) had purulent urethral discharge and 1(5.5%) had meatal stenosis. Application of bland petroleum jelly to the external urethral meatus before each soap bath satisfactorily controlled the urethral pains.

**Conclusion:** "Idiopathic urethral pain in boys" may be due to soap induced chemical urethritis and responds well to application of bland petroleum jelly to the external urethral meatus before each soap bath with appropriate antibiotics when there is associated purulent urethral discharge.

**Keywords:** Urethral pain, Boys, Soap-induced

## Résumé

**Objectif:** Décrire la cause, des pathogénese et la prise en charge possible de la douleur urètre "idiopathique" chez des garçons. Dix huit garçons atteints des douleurs distal uretre au cours d'une période de 12 ans ont été passés en revue et on avait noté leur reponse par rapport a l'application de la vasiline fade sur le meat uretral extern avant chaque bain au savon.

**Resultats:** Tout d'un coup, les symptôms commençaient tandis qu'on se baignait avec du savon. L'érection du pénis au commencement était arrivée en 14, soit 78%. Deux soit 11% avaient des suppurations purulentes d'uretre et 1 soit 5,5% avait la sténose 'meatale.'

L'application de la vasiline fade sur l'uretre meatus extern avant chaque bain avec du savon avait de façon satisfaisante controlé les douleur uretrales.

**Conclusion:** "Urètre la douleur idiopathique uretre chez des garçons" pourrait être attributable a l'urêtrite chimique provoquée par le savon et agit très bien avec l'application de la Vaseline fade sur l'urètre meatus extern avant chaque bain avec du savon avec des antibiotiques appropriées quand il y a un écoulement d'un urètre purulent associé.

## Introduction

Distal urethral pain, purulent urethral discharge and dysuria are often the symptom complex of infective urethritis suggestive of sexually transmitted disease often seen in sexually active adult males. When this symptom complex occurs in young children, one is in a dilemma of having to

consider sexual abuse as a possibility. Following its first description by Williams and Mikhael (1971)<sup>1</sup>, a few further reports have appeared in the literature notably by Kaplan and Brock (1982)<sup>2</sup>, Renouard et al (1984)<sup>3</sup> and Harrison and Whitaker (1987).<sup>4</sup> The etiology remained unknown with very little in the way of treatment. However, in the past 12 years, 18 patients were seen, each with a clear history pointing to soap used during bathing as the most probable cause of this symptom complex and their analysis forms the basis of this presentation.

## Patients and methods

Eighteen boys seen over the 12 year period January 1990 to December 2001 were studied. Their ages, symptoms of distal urethral pains associated with the use of bathing soap and worsened by the act of micturition were obtained. The patients were then examined with particular attention to the external urethral meatus for the presence of urethral discharge or urethral meatal stenosis. The patients' mothers were advised to apply bland petroleum jelly to the external urethral meatus before each soap bath and the response of the distal urethral pain to this application was noted on subsequent follow up visits. One patient who presented with urethral meatal stenosis was offered urethral meatotomy after his pains had subsided.

## Results

Eighteen boys were studied. Their ages ranged from 5.5 years to 9 years with a mean of 7.3 +/-1.25 years. They all presented with distal urethral pains of 2 weeks to 1.5 years duration (mean 13.71 +/- 23.74 weeks), which were said to have started suddenly while bathing with soap in the morning. No particular type of soap was implicated. In 14(78%) patients, their mothers recollected very clearly that the children had penile erections while being bathed on the day the pain started. In all the patients, the pain was aggravated by micturition. Two (11%) patients gave a history of purulent urethral discharge in the course of the illness while 1(5.5%) had meatal stenosis at the time of initial presentation. The pains reduced and eventually disappeared on application of bland petroleum jelly to the external urethral meatus before each soap bath and deliberate avoidance of excessive soaping of the external genitalia especially if the child had a penile erection at the time of bathing. Except for the patient with meatal stenosis who underwent meatotomy after his pains had subsided, all the others are being followed up to pick up urethral meatal stenosis should this occur.

## Discussion

Distal urethral pains, purulent urethral discharge and dysuria ordinarily would indicate purulent urethritis as often seen in adult males with sexually transmitted disease. When

this occurs in a child, sexual abuse becomes a strong differential diagnosis. Since the cause had hitherto been unknown, Williams and Mikhael (1971) in their study of 17 cases referred to it as idiopathic urethritis in male children.<sup>1</sup> The patients in this study are slightly younger than in Williams and Mikhael's population and did not have hematuria. Three other series by Kaplan and Brock (1982),<sup>2</sup> Renouard et al (1984)<sup>3</sup> and Harrison and Whitaker (1987)<sup>4</sup> presented 21, 14 and 19 patients respectively. However, since the etiology had remained unknown, there was very little proffered in the way of effective treatment. In 14 of the patients in this series, their mothers clearly recollected that the children had penile erections at the time they were having their baths when the pains first started. No particular type of soap was implicated. It would appear that the erect penis causes the external urethral meatus to open up, allowing water used during bathing along with soap lather to gain access into the distal urethra. The soap then causes chemical irritation of the delicate urethral epithelium leading to distal urethral pain. The chemical irritation leads to urethral mucosal inflammation, which may become secondarily infected by bacteria giving rise to purulent urethral discharge as seen in two of these patients. The inflamed, infected mucosa of the external urethral meatus may adhere together between acts of voiding and heal by fibrosis,

leading to meatal stenosis as seen in one of these patients. Application of bland, non-irritant petroleum jelly to the external urethral meatus before a soap bath effectively seals the external urethral meatus, preventing the easy entry of soap lather into the distal penile urethra and the chemical urethritis and pain associated with this. This will explain the efficacy of this application in managing the distal urethral pains in these patients together with deliberate avoidance of excessive soaping of the external genitalia especially if the child had a penile erection at the time of bathing. If the patient presents with purulent urethral discharge, appropriate antibiotic therapy would be required. From the findings of this study, it would appear therefore that "urethritis in male children" which was hitherto thought to be "Idiopathic" may actually be due to soap induced chemical urethritis.

#### References

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