

11-years boy with passing worm in urine a case of miyasis

Mehrdad Shakiba 1*, Shamim Shakiba 1

1. Department of Pediatrics, Children Growth Disorder Research, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

***Corresponding Author:** Mehrdad Shakiba, Department of Pediatrics, Children Growth Disorder Research, Shahid Sadoughi University of Medical Sciences, Yazd, Iran

Email: shakiba@ssu.ac.ir

Abstract

Excretion of worm in the urine is a rare observation that leads to fear the individual. This clinical finding seldom reported in pediatrics, below case is report from the excretion of gravel –like particles about two weeks before the worm comes out in a 12 years old boy which has not been reported in cases of myiasis.

Introduction

Myiasis is an infestation of vertebrate tissue by fly larvae that is clinically classified by anatomic location and ecological relationship between larvae and host, urinary myiasis is a rare clinical presentation in human and specially children. No species can complete its entire life cycle in human urinary system so ecologically called accidental myiasis. Urogenital myiasis can be external and cutaneous or internal in the bladder or urethra they mainly happen in female (1).

Case

Abolfazl was a 11-year-old male who first presented to the pediatric department of Rafsanjan (a city in center of Iran located in Kerman province) after passing small black things like gravels in his urine. He did not mention any pain or urine disruption, difficulty in urination or red urine. Ultrasonography of urinary system was reported normal findings and urinalysis was in normal limit without hematuria he discharged with possible diagnosis of renal stone. He feels only a sensation before gravel passing for several times, by two weeks he experienced different feeling during micturition and see a worm passed through his meatus (figure1) this problem was been happening for three times during one week so he came to our center for further evaluation. He was a first sibling of educated family with good hygiene he used to play with a stray dog and no significant illness was mentioned in past history or family history of stone, he has normal development.

Growth indexes were in normal Ranges and Physical exam showed no abnormal findings of the external genitalia like meatal stenosis or laceration.

Urinalysis, CBC and blood urea nitrogen were normal without hematuria or eosinophilia. Sonography of kidney and bladder was normal with 32cc residual urine.

Under direct view of cystoscopy bladder and urethra were seen normal no larva or ulceration.

He discharged with impression of myiasis with these recommendations: use of insect repellents or insecticides for control of fly population, installing fine window nets to prevent insects entrance into living areas, regularly washing clothes and drying them under the sunlight and ironing of underwear cloths and asked him to return if it happen again, after two months he return with passing one worm without gravel and we recommended to consume one dose of ivermectin but he refused to consume it. For 9 months he followed by phone and he is well without any new episode.

Discussion

Majority of myiasis reported from tropical area and adult who travel there (1). The case was a eleven years old boy with urinary myiasis from center of Iran with dry and hot climate condition.

We can't find any risk factor for illness in the case, there are several risk factors like low sanitation, mentally impaired person, limitation of activity and urinary obstruction for myiasis. Although few infected cases reported without any risk (2).

We could not identify the fly species because of no access to the passing larvae, in reported cases from the world majority belong to these species: *Cordylobia anthropophaga*, *Dermatobia hominis*, *Eristalis tenax*, *Fannia scalaris*, *Megaselia scalaris*, *Muscina stabulans*, *Piophilila casei*, it is unlikely that the identification changes our approach and the treatment.

urogenital myiasis present with flank pain, pollakiuria, dysuria, frequency, obstruction, or direct larvae or worm visualization during micturition like what happen to our case but visualization of small gravel for several days before larva passing was not mentioned before, These things like pebbles may be from pieces of larvae that were removed before the worm was expelled or its feces (3, 4).

In laboratory point of view our case had normal results although biochemical examination is not diagnostic, microhaematuria, albuminuria and leukocyturia may be observed in patients with myiasis (5).

There is no proven treatment for myiasis except removing larvae by lavage of bladder with antiseptic or anesthetic although in majority of cases larvae has been already expelled when diagnosis is done. And empirical therapy with ivermectin, mebendazole recommended but correct diagnosis prevent unnecessary work up and medication (6-9).

Conclusion

This is a boy with passing a worm like larva during micturition from arid and warm climate area in Iran without any risk factor. He had special presentation with passing small black thing like small gravel before larvae passing.

Consent informed: Consent was obtained from the patient for this Case report.

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