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CASE REPORT

An inconsistent history of stone passaging in an adolescent: a facticious disease case report

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Abstract

Introduction: Urolithiasis is uncommon in children. Suspicion should be raised in the presence of exaggerated clinical manifestations. **Case Report:** An eleven-year old uncircumcised adolescent male was referred to a pediatric nephrology consultation complaining of recurrent episodes of dysuria with emission of black calculus. He had no lumbar or abdominal pain, nor gross hematuria. On physical examination, Giordano sign was negative bilaterally. His laboratory evaluation, urinalysis and ultrasound were unremarkable. A 24-hour urine collection had no noteworthy alterations. Stone analysis was unconclusive. No metabolic or infectious cause for a calculus was identified. The calculus was sent to an outside laboratory and rubber elastomer was detected. After determining the stones were self-induced, the adolescent was referred to Pedopsychiatry appointment. No further signs or symptoms of nephrolithiasis were reported. **Discussion:** Although Factitious Disorders caused by proxy have been increasingly recognized, there is a significant less awareness that children and adolescents can intentionally falsify symptoms.

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INTRODUCTION

Urolithiasis is an uncommon condition in children, even though incidence is increasing[1]. Its clinical presentation differs from the classic severe flank pain seen in adults, since younger children usually present with a nonspecific pain localized to the abdomen, flank or pelvis. Urolithiasis may also present with spontaneous passing of stones in the urine[1]. When stones are available, they should be sent for analysis to determine its composition, guiding the metabolic evaluation and therapeutic decisions[2].

Nephrolithiasis' recurrence is frequent and increases if an underlying metabolic abnormality is present. There are other risk factors frequently involved, however in up to 15-25% of affected children there is no risk factor identified, meaning the absence of a risk factor does not exclude the diagnoses[3-5]. Even so, the presence of exaggerated clinical manifestations with no reasonable explanation should always raise suspicion of Factitious Disorders (FD)[6].

This paper describes a case report of an adolescent boy with multiple episodes of stone emissions that was later diagnosed as a FD.

CASE REPORT

A previously healthy eleven-year old adolescent male football player was referred to a pediatric nephrology consultation due to multiple episodes of stone emission. Family history was positive for IgA Nephropathy. There was no personal or family history of nephrolithiasis. Neuromotor and psychiatric development were normal.

He was seen several times in the emergency department (ED) reporting multiple episodes of stone emission, up to 17 black stones of three to four millimeters. Stone emission was associated with dysuria, but no gross hematuria, lumbar or abdominal pain was present. On physical examination his abdomen was tender and Giordano's sign was negative. Blood pressure was 116/65 mmHg. His genital exam showed an uncircumcised penis, with no objectionable injuries and his rectal and prostate examination were unremarkable. A laboratory evaluation in the ED was performed with no relevant alterations, including renal function and electrolytes. Urinalysis had a ph 6,0, specific gravity of 1.016 and revealed no leukocyturia, bacteriuria or hematuria, nor did it reveal crystal fragments. Renal ultrasound showed no hydronephrosis nor malformations and did not identify the presence of any calculi. The stone was sent for chemical analysis, but the results were inconclusive.

The adolescent was sent to a nephrology and urology consultation and performed a 24-hour urine analysis with an elevated concentration of urinary urea but no other noteworthy alterations, excluding metabolic abnormalities. Secondary hyperparathyroidism was also excluded. Ochronosis was considered, although there were no other compatible symptoms and homocysteine, methionine and homogentisic acid dosing were within normal ranges.

Due to the recurrence of episodes, the study was repeated. Paradoxically, repeated urinalyses never evidenced blood or increased mineral excretion suggesting urolithiasis, and the stone chemical analysis revealed that the examined stone material was not related to lithiasis of the urinary tract. Renal function remained stable throughout the study.

Since the clinical findings remained incompatible, a multidisciplinary reunion was conducted, where the macroscopic aspect of the stone was assessed, raising the suspicion of it being synthetic material. Stone chemical analysis in an outside laboratory was arranged, identifying rubber elastomers, compatible with crumb rubber, commonly used in synthetic football turfs (Figure 1). Suspicions about the factitious nature of his symptoms were raised.

Careful examination of the patient's past history revealed a previous pedopsychiatric follow-up due to difficulty in emotion regulation. Consequently, a new psychiatric evaluation was requested. There has been no further passage of stones for 12 months, nor other signs or symptoms of nephrolithiasis were reported.

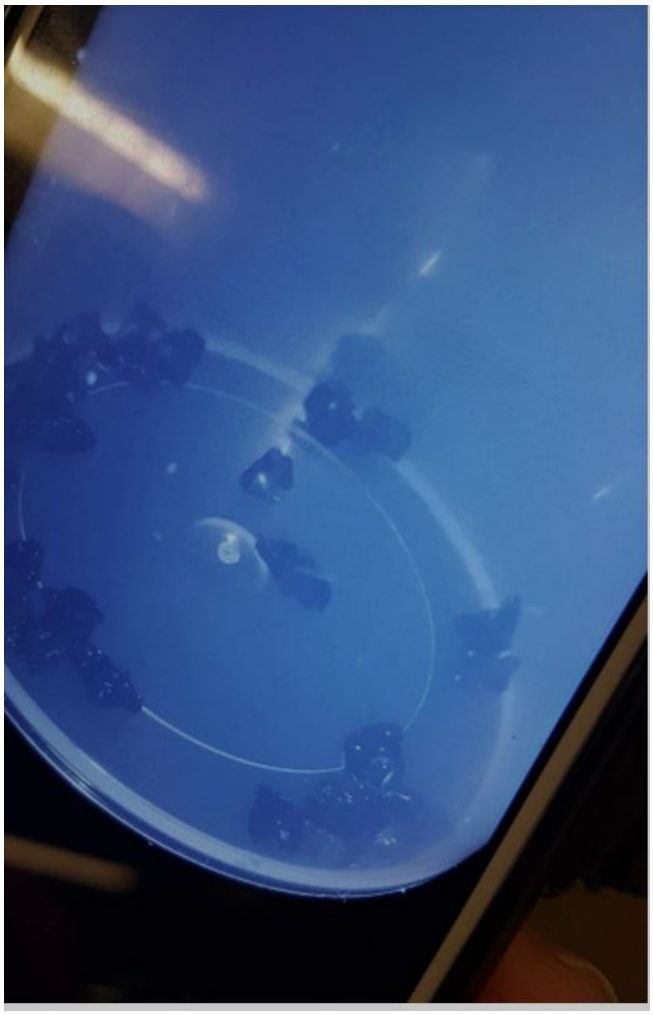


Figure 1: Macroscopic appearance of the stones brought to the emergency department.

DISCUSSION

Factitious disorders (FD) are a psychiatric disorder where illness is intentionally fabricated in order to gain hospital admission and undergo medical procedures[7]. It is considered to be one of the most challenging disorders in medical experience[8]. The prevalence of self-induced FDs in paediatric populations is unknown, but is probably underestimated, because signs and symptoms are usually reported as somatization instead of falsification[9]. People with FD feign illness or injury not to achieve a clear benefit, such as financial gain, but generally to seize attention and sympathy, and they may even willingly undergo painful or risky tests to achieve such goal[6,7].

FD have been increasingly recognized in the pediatric literature for over 20 years[10] and are more common in women aged 20 to 40 years old[6]. While illness falsification by caregivers are more easily considered as a differential diagnosis in patients with inconsistent or unexplained complaints, self-induced illness by the child herself are less common and physicians are much less aware[6,11].

Clinical manifestations of FD can vary and multiple signs and symptoms may be present, even though generally only one body system is involved. The most frequent site of lesions is the skin, while urinary tract involvement seems infrequent[9]. Even so, we found a small number of reports of factitious renal stones[9,12,13].

FDs are considered mental illnesses and are usually associated with other psychiatric manifestations, mainly personality disorder in up to two thirds of all cases and emotional difficulties[6,14].

The differential diagnosis with ochronosis was considered after multiple exams revealed no signs of nephrolithiasis. Ochronosis is a very rare autosomal recessive disorder which results in abnormal accumulation of homogentisic acid and increased urinary excretion of this product[15]. Initial symptoms can be reported since birth, with a dark collour urine noted in a child's diaper, but can also occur later. Ochronosis may affect various organs or systems. Genitourinary obstruction can occur from ochronotic calculi in the kidney and prostatic calculi can also develop. Both of these were excluded in our patient. There is a characteristic black discoloration of urine due to homogentisic acid oxidation occurring after urine has been standing, which was also a characteristic not reported by our patient[15].

In our case report, an inconsistent history of stone passage in a child with several normal urinalysis, ultrasounds and metabolic studies, with multiple stone analysis finding no evidence of lithiasis of the urinary tract and where no reasonable etiology of urolithiasis was found, led us to believe that a FD should be considered.

We would like to highlight the importance of including FD in the differential diagnosis whenever there is a long history of unexplained illness[11].

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