Multiple Surgeries Due To Pneumaturia, Cystolithiasis and Neurogenic Bladder in a Case with Munchausen Syndrome

Necmettin Penbegul,[1] Yasar Bozkurt,[1] Kadir Yildirim,[1] Ahmet Ali Sancaktutar,[1] Haluk Soylemez,[1] Murat Atar,[1] Yasin Bez[2]

[1] Department of Urology, Dicle University, Faculty of Medicine, Diyarbakır, Turkey.
[2] Department of Psychiatry, Dicle University, Faculty of Medicine, Diyarbakır, Turkey.

Corresponding Author:

Necmettin Penbegul, MD
Department of Urology, Dicle University School of Medicine 21280, Diyarbakir, Turkey.

Tel: +90 412 248 8001
Fax: +90 412 248 8440
E-mail: penbegul@yahoo.com

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INTRODUCTION

Pneumaturia is the passage of gas in the urine, and it usually suggests a fistula between the urinary tract and the bowel. This occurs most commonly in the bladder or urethra, but it may also be seen in the urethra or renal pelvis.[(1)] The most common causes are carcinoma of the sigmoid colon, diverticulitis, regional enteritis (Crohn's disease), and trauma.[(2)] Congenital anomalies account for most urethroenteric fistulas. Certain bacteria, by the process of fermentation, may liberate gas on rare occasions. Rarely, however, do patients with diabetes mellitus have gas-forming infections.[(1)]

Munchausen syndrome (MHS) is a chronic psychiatric disorder in which patients consciously simulate or self-inflict symptoms of an illness in repeated attempts to gain hospital admission. Patients suffering from MHS successfully obtain repeated invasive diagnostic management by the permanent presentation of various symptoms, especially in the surgical branches of medicine. In urology, the "hemorrhagic type," the "abdominal type," and the "neurological type" are predominant.[(3)]

In this study, we report a 16-year-old female who presented with pneumaturia and who had undergone multiple surgeries for these symptoms, which were consciously generated by the patient. Hint points until the diagnosis of MHS in this patient are discussed.

CASE REPORT

A 16-year-old female was admitted to our urology clinic and had suffered pneumaturia for two days prior to her admission. Her recent medical history revealed the swallowing of a hooked needle 10 days before her admission that was defecated out with her stool. She had also suffered gross hematuria for the previous two days that resolved spontaneously. The patient had

Figure 1. Distended urine bag after applying a transurethral catheter.

Figure 2. Distended urine bag after the nephrostomy catheter was pulled out and fixed under the dermis.

Figure 3. Bladder calculus in the plain radiograph.

an operation of right percutaneous nephrolithotomy (PNL) two years ago because of a right renal stone. Afterwards, for unknown reasons, she developed a glob vesicle. Then urodynamic evaluation was performed with the preliminary diagnosis of neurogenic bladder. But obviously there was not any evidence consistent with neurogenic bladder. Patient's complaint (glob vesicle) continued and consequently she was advised to use clean intermittent catheterization. She had used this catheterization for the previous year, during which the catheter broke three times in her bladder. A cystoscopy and the removal of the catheter were performed under local anesthesia. During her physical examination, only mild abdominal distension was observed. Then, a transurethral catheter was applied. Five minutes after its application, the urine bag became distended (Figure 1).

None of the laboratory tests, intravenous pyelography, abdominopelvic computed tomography scan, pelvic magnetic resonance imaging, retrograde urethrocystography, or urethrocystoscopy revealed any morphological or functional abnormalities. After extensive laboratory analyses, the only abnormality found was on ultrasonography scan, which suggested grade 1 hydronephrosis of the right renal collecting system due to a previous surgery. However, the cause of pneumaturia was not clearly identified.

Then, she was consulted about general surgery. A colonoscopy could not be administered because of the patient's incongruity. Then, she underwent a diagnostic laparotomy that showed no evidence of fistula tract. A per operative urologic evaluation showed a clear urinary tract. After the operation,

the patient was followed up in our clinic about 10 days. However, her pneumaturia had continued with the additional symptom of post-operative right flank pain. A right nephrostomy catheter was applied to the patient because of her right hydronephrosis. Two days after the nephrostomy catheter application, free air started to fill the nephrostomy catheter. Diagnostic ureterorenoscopy was applied and no pathology was observed.

At this stage, suspicions were raised regarding the possible factitious nature of her problem. The nephrostomy catheter was pulled out and fixed under the dermis. With this procedure, the treating physicians wanted the patient to think that the catheter was in her kidney. In this way, they could observe any air in her catheter, which, in fact, was located under her dermis. When free air was still observed in the catheter (Figure 2), the clinicians concluded that the patient might have a psychiatric disorder. After a detailed psychiatric examination and observations, the patient was diagnosed with MHS. Then, we learned that she spent a long time unsupervised in the toilet where was puffing up her urine bag.

After her psychiatric treatment, she recovered from her pneumaturia and neurogenic bladder symptoms. However, six months later, this same patient applied to our clinic complaining of difficulty in micturition. The ultrasonography showed one 8 mm piece of bladder calculus (Figure 3). This piece was removed during a cystoscopy. It was observed that the shapes of the bladder calculus were well-rounded so it could not be a real calculus. For this reason and her previous MHS diagnosis, the patient was again referred to the psychiatry clinic.

DISCUSSION

To our knowledge, this is the first case in the literature of a patient admitted with pneumaturia due to MHS, a rare disorder in which patient presents with factitious disorders and a self-destructive urge to undergo invasive procedures. This syndrome should be kept in mind, especially for the patients who repeatedly undergo surgeries. These patients can also put a large strain on the urologists' time and may cause increased costs for the healthcare system due to their self-generated symptoms.[4]

Reich and colleagues describe patients who present with renal colic and an intravenous contrast allergy and have an increased probability of a factitious disorder. In their article, 10 of 12 patients (83%) were men and most of the patients were likely to leave against medical advice.[4] So these patients usually left one hospital and went to another hospital. However, recent case reports showed that most of these factitious patients are female and most of them averaged above 25 years of age. All of these patients underwent extensive investigations, and some of them underwent invasive procedures, such as a kidney biopsy, a ureteroscopy, a nephroscopy, multiple blood transfusions, and a nephrectomy.[5-11]

MHS patients are usually admitted to a urology clinic by complaining of recurrent renal colic, recurrent urinary tract infections, hematuria, or bladder lithiasis. These patients are usually likable and extremely convincing. Possible diagnoses should be ruled out with extensive tests and invasive interventions and then the real diagnosis, namely MHS, can be reached at the end of the procedures. Our patient was clearly suffering from pneumaturia and initially we did not suspect factitious pneumaturia. However, we eventually concluded that she had a factitious disorder (MHS), which clinicians should keep in their mind when the symptoms are recurrent and unexplainable with well-known medical examinations and investigations.

CONCLUSION

MHS is a rare chronic psychiatric disorder that can be seen in urology practice, but patients consciously simulate or self-inflicted symptoms of illnesses in repeated attempts to gain hospital admission. Psychiatric help is usually rejected, and treatment is frequently unsuccessful. Urologists should be aware of these patients and avoid the administration of unnecessary tests that may impose a great burden on the healthcare system.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. McAninch JW. Symptoms Of Disorders Of The Genitourinary Tract. In: Tanagho EA, McAninch JW, editors. Smith's General Urology. San Francisco: The McGraw Hill Company; 2008. p. 30-8.
2. Weiss RM. Urine Transport, Storage, And Emptying. In: Wein AJ, Kavoussi LR, Novick AC, Partin AW, Peters CA, editors. Campbell-Walsh Urology. Philadelphia: Saunders Elsevier; 2007. p. 81-110.
3. Heimbach D, Bruhl P. Munchhausen's syndrome in urology. Int Urol Nephrol. 1995;27:539-45.
4. Reich JD, Hanno PM. Factitious renal colic. Urology. 1997;50:858-62.
5. Fukuhara S, Kawamura N, Kakuta Y, Imazu T, Hara T, Yamaguchi S. Case of self mutilation of urethra in a Munchausen's syndrome patient. Hinyokika Kiyo. 2007;53:829-31.
6. Chettouh-Harrache D, Amar A, Taleb S, Bouhacina N, Auberthie R. Factitious lithiasis: Case report from Western Algeria. Sante. 2004;14:257-60.
7. el Khader K, el Mamoun M, Koutani A, Ibn Attya A, Hachimi M, Lakrissa A. Unusual case of Munchausen's syndrome: factitious vesical lithiasis. Acta Urol Belg. 1998; 66:33-5.
8. Cai T, Pazzagli A, Gavazzi A, Bartoletti R. Recurrent renal colic in young people: abdominal Munchausen syndrome-a diagnosis not to forget. Arch Ital Urol Androl. 2008;80:39-41.
9. Chew BH, Pace KT, Honey RJ. Munchausen syndrome presenting as gross hematuria in two women. Urology. 2002;59:601.
10. Schmidt F, Strutz F, Quellhorst E, Muller GA. Nephrectomy and solitary kidney biopsy in a patient with Munchausen's syndrome. Nephrol Dial Transplant. 1996;11:890-2.
11. Ifudu O, Kolasinski SL, Friedman EA. Brief report: kidney-related Munchausen's syndrome. N Engl J Med. 1992;327:388-9.