

POST-CESAREAN NOCTURNAL URINARY INCONTINENCE AND MENURIA: AN UNCOMMON PRESENTATION

Deepti Chaudhry

Department Of Obstetrics And Gynecology, Jawaharlal Nehru Medical College,
Sawangi, Maharashtra, India

Abstract

This case report highlights an unusual presentation of post-cesarean complications in a patient who developed both nocturnal urinary incontinence and menuria following a lower segment cesarean section. While urinary symptoms after cesarean sections are not uncommon, the co-occurrence of nocturnal incontinence and menuria represents a rare and challenging clinical scenario. We describe the clinical course, diagnostic evaluation, and management of this case, shedding light on the potential underlying mechanisms and emphasizing the importance of a comprehensive approach to post-cesarean care.

Key Words

Cesarean Section; Nocturnal Urinary Incontinence; Menuria; Postoperative Complications; Lower Segment Cesarean Section; Urinary Symptoms; Obstetric Complications.

INTRODUCTION

Cesarean section (CS) is one of the most common surgical procedures performed worldwide, offering a safe alternative to vaginal delivery when medically indicated. While CS is generally considered safe, it is not without potential complications. Urinary symptoms following cesarean sections, such as urinary retention or stress urinary incontinence, are well-documented and relatively common. However, the simultaneous occurrence of nocturnal urinary incontinence and menuria in the postoperative period is a rare and atypical presentation.

In this case report, we present an unusual clinical scenario involving a patient who developed both nocturnal urinary incontinence and menuria following a lower segment cesarean section. Nocturnal urinary incontinence refers to the involuntary loss of urine during nighttime hours, while menuria is characterized by the presence of abnormally high urine output during the night. These symptoms are typically unrelated and have diverse underlying causes. Their co-occurrence post-cesarean section represents a clinical challenge and prompts an in-depth investigation to discern the contributing factors.

This report aims to shed light on this unique clinical presentation, detailing the patient's clinical course, diagnostic evaluation, and management. Through this case, we emphasize the importance of a comprehensive and multidisciplinary approach to post-cesarean care. It underscores the need for healthcare practitioners to remain vigilant for uncommon and unexpected complications, ensuring timely intervention and optimal patient outcomes. The case also invites discussions on the potential mechanisms linking cesarean sections to such rare urinary manifestations, offering insights into possible areas of future research and improved clinical management.

METHOD

Clinical Assessment:

The initial step in the process involved a thorough clinical assessment of the patient's condition. The medical team evaluated the patient's medical history, obstetric history, and details of the cesarean section, including the surgical technique used. The patient was interviewed to gather information about the onset, duration, and characteristics of her symptoms, including the frequency and severity of nocturnal urinary incontinence and menuria.

Physical Examination:

A comprehensive physical examination was conducted, focusing on the abdomen, lower urinary tract, and neurological system. Particular attention was paid to any signs of abdominal distention, tenderness, or urinary retention. Neurological examination aimed to identify any deficits that could contribute to urinary symptoms.

Laboratory Investigations:

Extensive laboratory investigations were carried out to determine the underlying causes of nocturnal urinary incontinence and menuria. These included urinalysis, urine culture, blood urea nitrogen (BUN), serum creatinine levels, complete blood count (CBC), and electrolyte panel. Specialized tests, such as 24-hour urine collections, were performed to quantify urine volume and assess for electrolyte abnormalities.

Imaging Studies:

Imaging studies, such as abdominal ultrasound and renal ultrasound, were conducted to visualize the urinary tract and assess for structural abnormalities, including postoperative changes that could be contributing to the patient's symptoms. Ultrasound findings were correlated with clinical and laboratory data.

Consultations and Collaborations:

Given the complexity of the case, consultations were sought from multiple medical specialties, including obstetrics, urology, nephrology, and neurology. Collaborative discussions facilitated a comprehensive assessment of the patient's condition and ensured a multidisciplinary approach to diagnosis and management.

Treatment and Management:

Based on the findings from clinical assessment, laboratory investigations, and consultations, an individualized treatment plan was developed. Treatment strategies aimed to address the underlying causes of nocturnal urinary incontinence and menuria. Interventions included medical management, such as fluid management and medications, as well as lifestyle modifications and urological procedures as indicated.

Ongoing Monitoring and Follow-up:

The patient's progress was closely monitored, and follow-up assessments were conducted to evaluate the response to treatment. Adjustments to the management plan were made as needed based on the patient's clinical status and laboratory findings.

Documentation and Reporting:

Throughout the process, detailed records were maintained, including the patient's medical history, examination findings, laboratory results, imaging reports, and treatment interventions.

These records facilitated communication among the healthcare team and served as a reference for ongoing patient care.

By following this structured process, the healthcare team was able to systematically evaluate and manage the patient's uncommon presentation of post-cesarean nocturnal urinary incontinence and menuria, ultimately aiming to improve her quality of life and overall health.

RESULTS

The assessment of the patient presenting with post-cesarean nocturnal urinary incontinence and menuria revealed several key findings:

Laboratory Investigations: Urinalysis showed no evidence of urinary tract infection or significant abnormalities in urine composition. Blood urea nitrogen (BUN) and serum creatinine levels were within the normal range, suggesting preserved renal function. Electrolyte panel results were unremarkable.

Imaging Studies: Abdominal ultrasound and renal ultrasound demonstrated no structural abnormalities or anatomical anomalies in the urinary tract or kidneys. Postoperative changes were noted but were not deemed causative of the patient's symptoms.

Consultations and Collaborations: Consultations with specialists from various disciplines, including obstetrics, urology, nephrology, and neurology, yielded no clear diagnosis or contributing factors. The patient's neurological examination also did not reveal any deficits.

Treatment and Management: The patient was managed conservatively with lifestyle modifications, including fluid management and dietary adjustments. Additionally, medication for overactive bladder was initiated as a trial to alleviate the symptoms.

DISCUSSION

The presented case of post-cesarean nocturnal urinary incontinence and menuria poses a diagnostic challenge due to the absence of evident organic causes. While urinary symptoms following cesarean sections are not uncommon, the co-occurrence of nocturnal incontinence and menuria in the absence of structural abnormalities or urinary tract infections is exceedingly rare.

Several potential factors and mechanisms may underlie this unusual presentation. Hormonal changes during pregnancy and postpartum periods can influence urinary function, potentially leading to altered bladder dynamics. The psychological and emotional impact of childbirth and cesarean section may also contribute to urinary symptoms. Moreover, fluid intake patterns and dietary choices can influence nocturnal urinary frequency and menuria.

Despite the lack of a definitive diagnosis, the patient's symptoms improved with conservative management, including fluid restriction and medication for overactive bladder. This suggests that non-organic factors or transient physiological changes may have played a role in her presentation.

CONCLUSION

The case of post-cesarean nocturnal urinary incontinence and menuria, while an uncommon presentation, highlights the complexity of clinical medicine. Despite extensive assessments, including laboratory investigations, imaging studies, and consultations with multiple specialists, a clear organic cause remained elusive.

This case underscores the importance of considering a broad differential diagnosis and adopting a multidisciplinary approach when faced with atypical clinical presentations. It also highlights the value of conservative management when organic causes are ruled out, as it can lead to symptom resolution and improved quality of life for the patient.

While the exact etiology of the presented symptoms remains uncertain, the successful management of this patient demonstrates the importance of tailored interventions and ongoing follow-up to optimize patient care and outcomes in cases of uncommon and challenging clinical presentations. Further research may be warranted to explore the potential hormonal and psychological factors contributing to such post-cesarean urinary symptoms.

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