Chronic Pelvic Organ Prolapse and Bladder Calculi in an Adolescent

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Vesical calculi complicating pelvic organ prolapse (POP) is very rare and usually be seen in older women. There are limited reports of POP associated with vesical calculi; the first was in 1950[1,2]. The pathophysiology of concomitant occurrence of POP and vesical calculi is still unknown. It has been mentioned that urinary stasis, along with the superimposed infection due to elevated residual urine volume, are among contributory factors and possible etiologies of bladder calculi in long-lasting POP cases[2,3].

A 17-year-old virgin female presented to our center with massive POP since birth, which had gradually increased in size. She had a history of recurrent non-febrile urinary tract infection episodes with urinary stone passing and difficulty in voiding. No symptoms of urinary or bowel incontinence were present. Prior to admission, she had to push back the bulge protruding out of the vagina and perform the Credé maneuver along with crossing her legs in order to empty the bladder satisfactorily. The patient did not meet the criteria for Ehlers-Danlos syndrome. Prolapsed ureters and bladder and the stones within the bladder are shown in Figures 1A and 1B, respectively. Figure 1C shows the prolapsed bowel. Biopsies from the interlabial mass revealed no dysplasia or malignancy. Following transurethral cystolitholapaxy for removal of bladder stones, the patient underwent abdominal sacrocolopopexy to repair POP. The operation and postoperative period were uneventful, and the patient was discharged with a stable general condition. In short-term and long-term follow-up, she did not have a recurrence of symptoms, and she had 2 full-term pregnancies with successful vaginal delivery, 7 and 8 years after her surgery.

All previous cases with POP and vesical calculi were reported in multiparous women aged over 40 years [1–5]. To the best of our knowledge, this is the first case of simultaneous POP and vesical calculi occurring in a virgin adolescent. Transurethral cystolitholapaxy followed by abdominal sacrocolpopexy is a safe therapeutic approach with little associated morbidity. Despite greater prevalence of POP in older women, it should also be considered in younger females to prevent the progression into more severe POP with serious complications.

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Key Words

Pelvic organ prolapse (POP), bladder calculi, cystolitholapaxy, sacrocolpopexy

Competing Interests

None declared.

Patient consent: Obtained.

Article Information

Received on July 12, 2022 Accepted on, July 27, 2022

Soc Int Urol J. 2023;4(1):69–70 DOI: 10.48083/QJEP9763

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SIUJ.ORG SIUJ • Volume 4, Number 1 • January 2023

FIGURE 1

A. Intravenous pyelogram demonstrated prolapse of ureters (asterisks) and bladder (arrow) that are pushed down near the knee; B. The prolapsed bladder with six stones (arrow); C. Barium enema showed a significant portion of the prolapsed bowel (arrow)

