

# Successful Management of Vesicouterine Fistula : A Case Report

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## ABSTRACT

Vesicouterine Fistula (VUF) represents a rare urogenital complication. It is considered to be the least common type of urogenital fistulas. Iatrogenic reasons have been shown to be the most prominent cause, with lower segment caesarean section accounting for approximately two-thirds of the cases. VUF can present with clinical symptoms varying from cyclic hematuria, amenorrhea and vaginal leakage of urine to secondary infertility and first-trimester abortion. Quality of life (QoL) for patients having this pathology is strongly affected due to the psychological burden. Surgical excision of the fistula remains the mainstay of treatment, as less than 5% of patients respond to conservative therapy. Herein, we presented the successful delayed surgical repair of VUF in a 40-year-old female patient.

## KEY WORDS

Caesarean section; Quality of life; Vesicouterine fistula.

## INTRODUCTION

Vesicouterine Fistula (VUF) is an abnormal communication between the bladder and the uterus. It represents a rare urogenital complication, accounting for approximately 1-4% of genitourinary fistula.<sup>1,2</sup> VUF is considered to be the least common type contrary to other types, such as Vesicovaginal Fistula (VVF) which is the most frequent. It was first described as a clinical entity by A. F. Youssef in 1957.<sup>3</sup>

## CASE REPORT

A 40 years old female Para 3(1VD, 2C/S+0) house wife who presented at Padma General Hospital, Dhaka, Bangladesh, with history of cyclic haematuria, secondary amenorrhoea for 7 years and secondary infertility for 5 years. She had an emergency caesarean

delivery in a private hospital 7.5 years back due to obstructed labour. A healthy female baby was delivered. The surgery was complicated initially with urinary incontinence that resolved after 21 days of conservative treatment. Seven months after the delivery, she noticed cyclic hematuria. The abdominal ultrasound (Figure: 1) confirmed a vesicouterine fistula between the posterior wall of urinary bladder and anterior uterine wall in previous scar region which communicate with uterine cavity. She was admitted on 11.06.2021 for surgical repair of the fistula. Entrance in the abdominal cavity was done through a pfannenstiel incision. Once the uterus and the vesicouterine space were dissected, bladder and uterus were completely separated and VUF was clearly exposed (Figure : 2). The margin of the fistula was elevated with forceps and excised with scissors circumferentially. The entire fistula tract was dissected. The ureteral orifices were catheterized and the open ended straight ureteral stents were left aside prior to externalization. The bladder repaired with vicryl 2-0 in two layer and uterus repaired with 1-0 vicryl in single layer. We used omental flap in between the bladder and uterus. The postoperative recovery was uneventful.

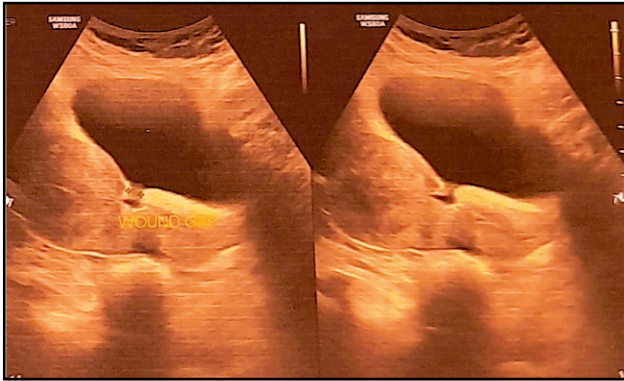
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**Figure 1** Sonographic findings of Vesicouterine Fistula



**Figure 2** Peroperative findings of Vesicouterine Fistula

## DISCUSSION

Vesicouterine Fistula (VUF) represents a rare urogenital complication. In developed countries, iatrogenic reasons have been shown to be the most common cause, with lower segment cesarean section accounting for approximately two-thirds of the cases.<sup>4,5</sup> The clinical manifestations vary from cyclic hematuria (Menouria) amenorrhea, vaginal leakage of urine, with or without urinary incontinence and recurrent urinary tract infections associated with low-grade pyrexia to secondary infertility and first-trimester abortion.<sup>1,2,4-6</sup> In summary, the adoption of a careful and structured, diagnostic, and operative strategy plays a pivotal role in the definitive treatment of VUF. Surgical management, even with delayed repair, was shown to be feasible, safe and efficient. Recently, minimally invasive techniques started gaining ground as an alternative approach to traditional open surgical repair, with encouraging and comparable results in the hands of an experienced surgeon. However, there is a need for well-designed studies with a large number of patients and long-term follow-up to support their superiority.

## CONCLUSION

In conclusion, our experience indicates that vesicouterine fistula becoming more common because of the increase in the performance of cesarean section.

## DISCLOSURE

All the authors declared no competing interest.

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