

## Case Report

### **Vesicocutaneous fistula**

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#### **Abstract**

Vesicocutaneous fistula, a very distressing condition has a tremendous impact on the quality of life of the patient. We report the case of a 30 years old woman , who had caesarean hysterectomy after her third emergency caesarean section . She later developed abdominal wound infection which required resuturing.

Since then she had been suffering from recurrent urinary tract infections and urinary leak through the abdominal wound during micturition. Urine analysis, urine culture, intravenous urogram, (IVU), voiding cystourethrogram (VCU) , cystoscopy , and sinogram done in our institution revealed communication between urinary bladder and cutaneous opening in left edge of abdominal scar. Bladder was catheterized for 03 weeks and aseptic dressing on abdominal defect was done for the same duration. Antibiotics were also advised. Full recovery was achieved.

**Keywords:** Vesicocuteous fistula, Fistula, Bladder,

Caesarean hysterectomy.

#### **Introduction**

Vesicocutaneous fistula is a rare condition. The constant leakage of urine results in maceration and eventual destruction of skin with ensuing infection, discomfort and malodour. With proper investigations and adequate surgical treatment, it can be corrected. Surgical intervention is imperative as there can be life threatening complications like malignancy and sepsis.<sup>1</sup>

#### **Case Report**

A thirty years old female presented with intermittent leakage of urine from left edge of abdominal scar. Her emergency caesarean section was done in May 2009 due to previous three Caesarian Sections. The last was followed by caesarean hysterectomy. Then she developed wound dehiscence that was closed after resuturing. Later patient had a urinary leak from left edge of the abdominal scar



Figure: VCF communication on skin.

along with recurrent urinary tract infections. There was no voiding difficulty and fever. Routine examination and renal function tests were normal. Intravenous urogram, (IVU), voiding cystourethrogram (VCU) were done which showed a communication between bladder and cutaneous opening in left corner of abdominal wound (Figure). The patient was put on indwelling bladder catheter for 03 weeks resulting in the abatement of urinary leak. Parental antibiotics were given, and daily Pyodine dressing was done on cutaneous site of fistula. After 03 weeks of above treatment and removal of indwelling Foley's Catheter, normal voiding was restored. As the presentation occurred at an early stage and the defect was small with no associated urinary pathology, conservative treatment cured this rare vesicocutaneous fistula.

## Discussion

Vesicocutaneous fistula is rare. Common causes includes, extensive trauma with pelvic fractures,<sup>2</sup> after irradiation of pelvic malignancies,<sup>3</sup> postoperative causes like radical hysterectomy,<sup>4</sup> and hip arthroplasty.<sup>5</sup> A few cases have been reported as sequel to a large bladder calculus.<sup>6</sup> Anecdotal cases of vesicocutaneous fistula from inguinoscrotal hernia,<sup>7</sup> antenatal bladder aspiration,<sup>8</sup> Bladder instability,<sup>9</sup> factitious,<sup>10</sup> actinomycosis<sup>11</sup> have been also reported. IVU, VCU, and a cystoscopy would be useful in making a diagnosis. Other cross sectional imaging such as CT scan and MRI is needed if the fistulous tract is complicated or malignant changes are present, which make the management of this lesion mandatory. Open surgical management with excision of the fistulous tract and interposition with myocutaneous flap is ideal for large fistulae. Extensive skin loss can be replaced by skin grafting.

## References

1. Kishore TA, Bhat S, Jhon PR. Vesicocutaneous fistula arising from a bladder diverticulum. *Indian J Med Sci* 2005; 59: 265-7.
2. Kotkin L, Koch MO. Morbidity associated with non operative management of extraperitoneal bladder injuries. *J Trauma* 1995; 38: 895-8.
3. Lau KO, Cheng C. A case report. Delayed vesico cutaneous fistula after radiation therapy for advanced vulvar cancer. *Ann Acad Med Singapor* 1998; 27: 705-6.
4. Petru E, Herzo Kurschel S, Tamussino K, Winter R. Vesico cutaneous fistula mimicking an abdominal wall abscess 2 years after radical abdominal hysterectomy. *Gynecol Oncol* 2003; 90: 494.
5. Gallmetzer J, Gozzi C, Herms A. Vesicocutaneous fistula 23 years after hip arthroplasty. A case report. *Urol Int* 1999; 62: 180-2.
6. Motiwala HG, Joshi SP, Visana KN, Baxi H. Giant vesical calculus presenting as vesicocutaneous fistula. *Urol Int* 1992; 48: 115-6.
7. ManiKandan R, Burke Y, Srirangam SJ, Collins GN. Vesicocutaneous fistula :an unusual complication of inguinoscrotal hernia. *Int J Urol* 2003; 10: 667-8.
8. Cusick EL, Schmitt M, Droule P, Didier F. Congenital vesicocutaneous fistula following antenatal bladder aspiration. *Br J Urol* 1996; 77: 930-2.
9. MacDermott JP, Palmer JM, Stone AR. Vesicocutaneous fistula secondary to bladder instability. *Br J Urol* 1990; 6: 430-1.
10. Serafin D, Diamond M, France R. Factitious vesicocutaneous fistula: an enigma in diagnosis and treatment. *Plast Re Constr Surg* 1983; 72: 81-9.
11. Deshmukh AS, Kropp KA. Spontaneous vesicocutaneous fistula caused by actinomycosis: case report. *J Urol* 1974; 112: 192-4.