

CASE REPORT

URETEROCUTANEOUS FISTULA WITH PERSISTING STONE IN URETERAL STUMP LONG TIME AFTER NEPHRECTOMY

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ABSTRACT: Ureterocutaneous fistula could be Urological, Gynecological or due to malignancy and trauma. However ureterocutaneous fistula due to persistent stone in ureteral stump long time after nephrectomy is rare. We report this case and its management due to its rarity. **INTRODUCTION:** An ureterocutaneous fistula is defined as abnormal communication between the urinary tract and skin. It may arise from the urinary tract anywhere from kidney to the urethra. Ureterocutaneous fistula may occur as a result of chronic infection especially in the setting of calculus disease.¹

KEYWORDS: Ureterocutaneous fistula, nephrectomy, ureteral stump.

CASE REPORT: Sixty seven years old female presented with complaint of pain abdomen, nausea and vomiting and anorexia since one month. She had recurrent urinary tract infection since last 9 month. She had a history of cholecystectomy and hysterectomy. She had undergone nephrectomy 11 yr. back for non-functioning kidney caused by pyonephrosis. Physical examination revealed pus discharge at previous retroperitoneal drain site. Urine analysis showed plenty of pus cell, culture and sensitivity of urine showed staphylococcus aureus which was sensitive to Nitrofurantoin and Amikacin. Hemoglobin was 8.5 gm/dl, Total count was 11200/mm³, kidney and liver function tests were normal.

Ultrasonography of abdomen revealed ureteric stone in right ureter. Fistulogram showed ureterocutaneous fistula communicating with ureter and bladder. Operation was done in supine position with midline incision and the fistulous tract was identified with the help of methylene blue instillation through the external opening of the fistula before initiation of operation. Patient had undergone surgical treatment consisting of fistulectomy and ureterectomy.

DISCUSSION: Ureterocutaneous fistula is an abnormal communication between the skin and urinary tract. Ureterocutaneous fistula could be spontaneous or secondary to gynecological - urological surgery, malignant disease, trauma or iatrogenic. Rare causes such as aortic surgery with infected aortic prosthesis were also recorded.² A ureterocutaneous fistula after nephrectomy is very rare complication and so far only a few cases have been reported.³⁻⁵

Diagnosis was made through history, physical examination and fistulography. Management of ureterocutaneous fistula involves surgical excision. Vazques Alonso et al. reported ureterocutaneous fistula due to stone in ureteral stump 18 years after nephrectomy.³ Our patient presented to us eleven year after nephrectomy. Missed infected stone in uretral stump was the cause of ureterocutaneous fistula. Thus our recommendation is to do complete nephroureterectomy to avoid such complication in future.

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CONCLUSION: Ureterocutaneous fistula after nephrectomy is rare. Diagnosis must be done by fistulography. Infected in ureteral stump must be addressed to prevent the occurrence of post-operative complications such as ureterocutaneous fistula.

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Fig. 1: Ureterocutaneous fistula at previous drain site after nephrectomy



Fig. 2: Fistulogram showed fistula, ureteral stump and contrast in the bladder

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Fig. 3: Fistulous tract after surgery

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