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A Rare Case of Ureteroileal Fistula from Indian Tertiary Care Center

Richa Sharma[1*], Pankaj Verma[2], Manish Gupta[3], Dinesh Gupta[4] and Vijay Sharma[5]

[1]*Department of Community Medicine, Regional Institute of Health, Medicine, research, Jaipur, India*

[2]*Department of Radiology, Manipal Hospitals, Jaipur, India*

[3]*Department of Urology, Manipal Hospital, Jaipur, India*

[4]*Department of Oncosurgery, Manipal Hospital, Jaipur, India*

[5]*Department of Gastroenterology, Manipal Hospital, Jaipur, India*

[*]**Corresponding author:** Richa Sharma, Department of Community Medicine, Regional Institute of Health, Medicine, Research, Indira Colony, Bani Park, Jaipur, India, Tel: 9928015254; E-mail: drrichas@gmail.com

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Abstract

A sixteen-year-old girl reported to department of Gastroenterology, Manipal Hospital, Jaipur with history of chronic diarrhoea, this diarrhoea was there for 3 months, with watery stool, diarrhoea having no relation to food intake, times of the day, not relieving with any medicine tried, patient seen my many gastroenterologists earlier normal duodenoscopy and full colonoscopy, no ileoscopy done. There was a history of laparoscopic cholecystectomy a few months back for symptomatic gall stones, she could clearly describe that after cholecystectomy one week was uneventful, then she developed diarrhoea, they met the surgeon, as many people develop bile acid induced diarrhoea after cholecystectomy same diagnosis was kept, she was given few days cholestyramine, antimotility drugs and metronidazole but with no benefit.

Keywords: Ureteroilial fistula; Urinary intestinal fistula

Introduction

It presents a case of a sixteen-year-old girl who was reported to Department of Gastroenterology, Manipal Hospital, and Jaipur with a history of chronic diarrhea. The diarrhoea was there since 3 months, with watery stool which was having no relation to food intake, times of the day, not relieving with any kind of medication tried. Patient went to many gastroenterologists earlier. She underwent normal duodenoscopy and full colonoscopy. No ileoscopy has been done.

Case Presentation

On further visit of that sixteen-year-old girl to surgeon and gastroenterologist, diagnosis was kept as bile acid diarrhoea still treated conservatively on the recommended line, while the family of the girl was reassured for gradual recovery, but diarrhoea did not improve, bile acid binding agent did not work, course of anthelminthic, antidiarrheal, modified diet did not work, there was insignificant weight loss, family was distressed, met me at OPD parents and the girl all were weeping as she was troubled due to watery diarrhoea day and night, unable to sleep. Two points she told after detailed discussion that after more water intake diarrhea worsens and before motion, she felt pain in the right iliac fossa. As we suspected some kind of spurious diarrhea due to surgical complication and communication of intestine and ureter, we sent stool sample of the patient for stool urea and stool creatinine measurement, stool creatinine was 30 mg/dl and stool urea was 700 mg/dl. It supported the diagnosis of spurious diarrhea (urine coming from bowel as the watery stool). Now at our center, the patient underwent contrast-enhanced Compound tomography of the abdomen; it revealed communication of ileum lower end with right ureter lower one third. Now diagnosis of Ureteroileal fistula was confirmed. The patient was referred to the Urologist, she underwent cystoscopy, urinary bladder was normal, right ureteric stent was placed, Foleys catheter placed to decrease pressure in bladder for one month, diarrhoea stopped, patient improved, later on, follow up after removal of Foleys catheter she was doing fine and she was satisfied with the treatment.

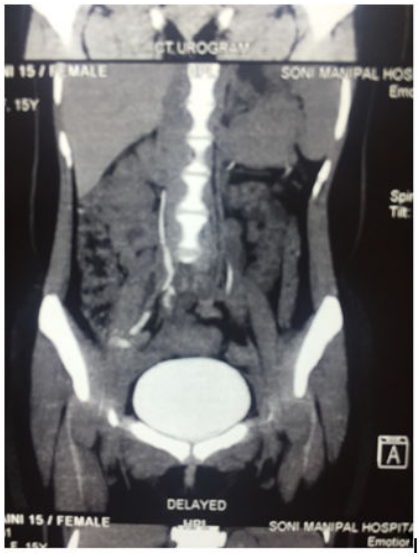

Figure 1: Ureteroilial fistula clearly visible at the lower one third of the right ureter with the help of CECT whole abdomen.

Discussion

Uroenteric fistulae can occur between any part of the urinary tract and the small and large bowel (Figure 1). Classification is generally based on the organ of origin in the urinary tract and the termination of the fistula in the segment of the gastrointestinal tract. Surgery is often necessary. Congenital fistulae are rare, with most being acquired. Uroenteric fistulae most frequently occur in a setting of inflammatory bowel disease. Imaging often helps in the diagnosis. Management of urinary fistulae includes adequate nutrition, diversion of the urinary tract, diversion of the gastrointestinal tract, treatment of underlying inflammatory process or malignancy and surgery [1].

Fistula's which communicate between the Urinary system and intestine are rare, and among them, fistulas that involve the urinary and intestinal tracts means Vesicointestinal fistulas are the most common, vesicoureteric fistulas are caused by diverticulitis, carcinoma colon [2]. Ureterocolonic fistulas are caused by the inflammatory condition of the urinary system or colon like an untreated perinephric abscess, calculus pyonephrosis.

Intestinovesical fistula has been described as of five types according to the etiology; which include:

- Congenital
- Traumatic
- Inflammatory
- Neoplastic
- Foreign body

The same classification can be useful for the Ureteroileal fistula [3]. One case report of tubercular ureteritis, pyelitis and pyelonephritis had a Ureteroileal fistula [4]. Post radiotherapy of carcinoma uterus and carcinoma cervix many patients developed ureteroileal fistula; one case report of perforating abdominal trauma with chronic chloride resorption from ileum have been reported [5]. A review of the literature shows that involvement of the ureter secondary to inflammatory bowel disease is rare, it has never been reported with ulcerative colitis, and there are a few reports of patients developing Ureteroileal fistulas due to Crohn's disease [6]. One old case series reported three patients, who developed the ureteroileal fistula postoperatively, including one after radical pelvic surgery for advanced ovarian carcinoma, one following failed transureteroureterostomy and one after a repeat left ureteral reimplant with a pelvic abscess [7]. Infection and/or urinary leakage had a major role in these cases, like other previously reported fistulas. Most of the earlier reported patients underwent surgical excision or revision; many patients were managed successfully with percutaneous nephrostomy or indwelling ureteral stents [8]. Crohn's disease patients are managed with Infliximab with or without ureteric stenting and bladder catheterization [9]. There are a few case reports of the Ureteroileal fistula with diverticulitis, many of these cases are managed by diverting sigmoid colectomy, colostomy with ureteric stenting; after 4 weeks retrograde pyelogram was done to document healing of fistula and anastomosis of colon was done after resection of diverticulitis [10]. Now a day most of the cases are managed by conservative treatment; by successful conservative management today we can avoid operative intervention in these rare fistulas. All the surgeons should be especially careful while operating close to the ureter [11,12].

Conclusion

It was a very rare case of Ureteroileal fistula which developed post laparoscopic surgery trauma in a young girl, this patient presented with chronic spurious diarrhoea, multiple investigations done for chronic diarrhoea, endoscopies were non diagnostic and finally contrast compound tomography revealed fistulous s communication between ileum and ureter. Our patient was managed conservatively with right ureteric plastic stenting and Foley's catheterization. Patient responded well to conservative treatment.

References

1. Gill HS (2016) Diagnosis and surgical management of uroenteric fistula. Surg Clin North Am 96: 583-592.
2. Flaster SL, Bush IM (1973) Ureteroileal fistula: Report of a case complicated by increased chloride reabsorption from the ileal segment. J Urol 109: 589-591.
3. Nieh PT (1983) Ureteroileal fistulas. J Urol 130: 555-557.
4. Suhler A, Garbit JL, Blitz M (1995) Uretero-intestinal fistulas. Ann Urol (Paris) 29:15-17.
5. Valerio S, Fornasiero G, Antoniazzi G, Bassi E (1992) Ureterocolic fistula: A case report. Arch Esp Urol 45: 95-96.
6. Maeda Y, Nakashima S, Misaki T (1998) Ureterocolic fistula secondary to colonic diverticulitis. Int J Urol 5: 610-612.
7. Krishna AV, Dhar N, Pletman RJ, Hernandez I (1977) Spontaneous closure of ureterocolic fistula secondary to diverticulitis. J Urol 118: 476-477.
8. Pai A, Coralic J, Park JJ, Marecik S, Prasad LM (2013) Spontaneous ureterocolic fistula secondary to diverticulitis: Report of a case and review of literature. Int J Colorectal Dis 29: 417-418.
9. Osawa G, Tanaka Y, Andoh H, Yoshimatsu K, Ogawa K (2007) Ureterocolic fistula secondary to colonic diverticulitis. Article in Nihon Gekakei Rengo Gakkaishi. Journal of Japanese College of Surgeons 32: 52-54.
10. Klarenbeek BR, de Korte N, van der Peet DL, Cuesta MA (2012) Review of current classifications for diverticular disease and a translation into clinical practice. Int J Colorectal Dis 27: 207-214.
11. Humes DJ, West J (2012) Role of acute diverticulitis in the development of complicated colonic diverticular disease and 1-year mortality after diagnosis in the UK: A population-based cohort study. Gut 61: 95-100.
12. Krishna AV, Dhar N, Pletman RJ, Hernandez I (1977) Spontaneous closure of ureterocolic fistula secondary to diverticulitis. J Urol 118: 476–477.