Transitional Cell Carcinoma with Distal Urethra: A Case Report

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2021/v33i64B35922

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/81576

Case Report

Received 25 October 2021
Accepted 29 December 2021
Published 30 December 2021

ABSTRACT

Introduction: Transitional cell carcinoma (TCC) of the ureter, also called urothelial cell carcinoma (UCC) of the ureter, are uncommon compared to similar tumors elsewhere along the urinary tract but are nonetheless the most common primary tumor of the ureter. Transitional cells can stretch and change form. The lining of the renal pelvis, ureters, bladder, and urethra is made up of them. In the body, there are many different types of cells, each with its function. Transitional cells can stretch and change form. They are the cells lining line the inside of the renal. When urine is stored in or flowing through these organs, the lining required cells that can stretch to extend. TCC of the kidney begins in the renal pelvis. TCC may begin in the ureters, bladder, or urethra. Patient Information: A 75 years old male was admitted to Acharya Vinoba Bhave Rural hospital sawangi meghe Wardha with chief complaints of low urine output vomiting, loss of appetite, swelling of the abdomen crampy abdominal pain that comes and goes. Therapeutic Intervention and Outcomes: The emerging technique of CT urography allows

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detection of urinary tract tumors and calculi, assessment of perirenal tissues, and staging of lesions; it may offer the opportunity for one-stop evaluation in the initial assessment of hematuria and follow-up of TCC. Similar MR imaging protocols can be used in patients who are not candidates for CT urography, although detection of urinary tract calcifications may be suboptimal.

Keywords: Transitional cell carcinoma; metastatic; spinal cord compression; acute ureteric colic; ureteric carcinoma.

1. BACKGROUND

Transitional cell carcinoma (TCC) is a type of upper urinary tract tumor that causes hematuria. It accounts for up to 10% of all neoplasms. Unlike bladder TCC, where a diagnosis is frequently done via a cystoscopy, and imaging plays a significant role in assessing upper tract illness [1,2]. Traditional imaging is used to diagnose upper tract TCC. Techniques excretory urography, retrograde pyelography, and ultrasonography are among the examples. In combination with endourologic procedures, continue to play an essential role. TCC is multicentric, therefore a full The whole urothelium should be inspected prior to the surgery. Staging, which is generally accomplished via the use of Magnetic Resonance Imaging (MR) or computed tomography (CT). To assess for metachronous lesions and recurrence, a thorough urologic and radiologic examination is required. Urography using a CT scan is a new technology that allows for the urinary tract infection detection of tumors and calculi, as well as the assessment of perirenal tissues and the lesions are staged. It is possible to allow for a one-stop destination in the first evaluation of hematuria and TCC review [3]. It may allow for a one-stop evaluation of hematuria and TCC follow-up in the first instance. Patients who aren't feeling well suitable for urography on CT can employ similar MR imaging methods, albeit illnesses detection calcifications may be inadequate [4,5].

2. PATIENT INFORMATION

75 years old male Sawangi meghe Wardha in Acharya Vinoba Bhave Rural Hospital with chief complaints of low urine output vomiting, loss of appetite, swelling of the abdomen, abdominal pain that comes and goes. Patient done the investigation like urine analysis, chest x-ray, cultures from multiple sources, lumbar puncture. After all investigation, results doctors diagnosed transitional cell carcinoma with distal urethra are typically for treatment, he was admitted to the hospital's critical care unit (ICU). The doctor will try to determine the cause and kind of infection by performing blood and urine tests, as well as X-rays or CT scans, before prescribing medications to the patient.

2.1 Medical Family and Psychosocial History

The patient had a medical history of small bowel intimation with the Distal urethra before 1 month. He took treatment for that but not cure. He belongs to a joint family. All family members are healthy except the patient. The patient looks anxious, depressed, and confused.

2.2 Relevant Past Intervention and Outcomes

History of small bowel intimation with Distal urethra 1 month and for that, He was admitted for 15 days in hospital he took treatment for that and his outcome was good.

2.3 Physical Examination and Clinical Findings

Abdominal distension (common during the distal blockages), gastrointestinal noises that are hyperactive (early) or hypoactive (late) in distal obstructions (late) are all physical examination findings (late). Strangulation is often accompanied by fever, tachycardia, and peritoneal symptoms. Vomiting/nausea (60-80 percent); Vomitus is in nature; it is typically bilious. Constipation/failure to pass gas (80-90 percent): SBO is usually discovered later in life. Distention in the abdomen (60 percent) Fever and tachycardia are late symptoms that may be related to strangulation. Height is 150 cm and weight is 50 kg. RBC is normal, Hb is normal11.2, platelets count is Low 1.19WBC is normal 2600cummm.

2.4 Timeline

1 month ago, he was admitted to the hospital for 15 days for the transitional cell carcinoma (TCC) treatment with the distal urethra. The medicine of
choice is hydrocortisone, injection Neomal, inj. levipril.

2.5 Diagnostic Assessment

Transitional cell carcinoma with distal urethra can be difficult to diagnose. High or low body temperature, a quick heart rate, and respiration rate, as well as possible or known infection, are all diagnostic criteria. Non-Laboratory Examinations, ECG - used to assess cardiac rhythm and damage. X-rays (computed tomography) Magnetic Resonance Imaging (MRI) is a method of imaging that uses radio waves to produce images. That uses radio waves to produce images (magnetic resonance imaging) Ultrasound.

2.6 Therapeutic Interventions

The patient was given Hydrocort 50 mg OD, inj Neomal 100 ml stat, inj levipril 500 mg twice a day, and inj pantop 40 mg once a day for medical care.

2.7 Follow Up

The patient's condition was improved. Important diagnostic and other test results that need to be followed up on preventing the progression of the disease and trying to reserve any signs and symptoms that have appeared, Doctor advised follow-up after 10 days.

3. DISCUSSION

TCC is more common in males than in women, which may be due to their increased abdominal pain, which allows for recurring bladder inflammation with additional wrapping and small bowel obstruction [6,7]. The medical manifestation because of this illness may be classified Along with follows, according to Bhandari and Mohandas Gandhi are two of the most well-known personalities in India (2009). The most common cancer is uterus cancer. While undergoing evaluation/laparotomy, it was discovered to have a characteristic of acute intestinal obstruction. The reason is that the history might be present. Transitional cell carcinoma with the distal urethra.

The illustration of intestines blockage predominates in our hypothetical situation, as it does in the majority of TCC patients. As a result, clinical examination for uterine cancer is commonly abnormal, because it's only physical symptoms of gastrointestinal blockage are present, are right illiac discomfort is seen Only a few cases have been reported, and it's mainly due to small bowel ischemia [3,6,7].

The results of the testing potassium and sodium levels were found to be normal. as well as an elevated serum creatinine level. Although it has been linked to Ischemia of the small intestine and has been observed to be higher in some studies, our investigation demonstrated a leukocyte count to be within the normal range. As a result, leukocytosis is not a reliable predictor of uterus cancer caused by mechanical obstruction [8]. A plain erect abdominal X-ray and a non-contrast abdomen/pelvic CT scan were used in this study. The simple similar to the previous series, an X-ray of an erect abdominal revealed levels of air fluid and there are no symptoms of uterine cancer [9,10]. Due to high preoperative creatinine levels, we used a CT scan of our patient's abdominal and pelvis without contrast. Evidence of mechanical obstruction was discovered using a CT scan in this investigation, but it was unable to determine the exact reason for obstruction [11]. In other studies, using a contrast-enhanced CT scan to demonstrate blockage, its definitive origin, and the presence of intestinal ischemia was highly useful [12,13]. Patients in the majority of studies, exploratory laparotomy was performed with diagnostic and/or therapeutic purposes in mind. In almost every case, an inflamed uterus wrapped around the terminal ileum was discovered intra-operatively. Due to delayed presentation, the accompanying in the majority of cases, the ileal loop was gangrenous, necessitating a nephroureterectomy as well as small intestine resection as a last resort [14,15].

In this situation, as in a few others, the gut was confirmed to be viable intra-operatively, which could be related to the first appearances of people wanting therapies and/or the use of preventative measures. In such cases, a simple Nephroureterectomy was proven to be a sufficient treatment. Except for one case that was successfully resolved, laparotomy was the most prevalent strategy employed in almost all cases. Postoperative infection caused one death, but TCC postoperative sequelae are usually not life-threatening and, as in our case, can be managed conservatively. With the paralytic ileus. Wound infection and complications related to comorbidities have also been described in other cases [16,17,18].
4. CONCLUSION

Patients with primary TCC of the distal ureter can be treated with distal ureteric resection. Long-term oncological outcomes appear to be equivalent to those of RNU patients. Furthermore, if adjuvant or salvage treatment is required, kidney preservation is desirable.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

CONSENT AND ETHICAL APPROVAL

As per university standard guideline, participant consent and ethical approval have been collected and preserved by the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Christou NV, et al. Surgical infection society intra-abdominal infection study. Prospective evaluation of management techniques and outcome. Arch Surg. 1993;128:193–199.
2. Fry D. Noninvasive imaging tests in the diagnosis and treatment of intraabdominal abscesses in the postoperative patient. Surg Clin North Am. (1994); 74:693–709. [PubMed]
3. Fry DE, et al. Determinants of death in patients with intra-abdominal abscess. Surgery. 1980; 88:517–523. [PubMed]
4. Geis W, Kim HC. Use of laparoscopy in diagnosis and treatment of patients with surgical abdominal sepsis. Surg Endosc. 1995;9:178–182. [PubMed]
5. Gerger D, et al. Management of abdominal sepsis. Lange beck’s Arch Surg. 1998;353:35–43.
6. Holzheimer RG, et al. Inflammatory response in peritoneal exudate and plasma of patients undergoing planned relaparotomy for severe secondary peritonitis. Arch Surg. 1995;130:1314–1320.
7. Krog J, Kvist E, Rye B: Transitional cell carcinoma of the upper urinary tract: prognostic variables and post-operative recurrences. Br J Urol. 1991;67(1): 32-6.
8. Corrado F, Ferri C, Mannini D, et al. Transitional cell carcinoma of the upper urinary tract: evaluation of prognostic factors by histopathology and flow cytometric analysis. J Urol. 1991; 145(6):1159-63.
9. Leder RA, Dumnick NR. Transitional cell carcinoma of the pelviccalyceal and ureter. AJR Am J Roentgenol. AJR Am J Roentgenol (abstract).1990;155 (4):713-22.
10. Patwa P, Phatak S, Pattabiraman S, Marfani G. Ultrasound and color doppler feature of transitional cell carcinoma of the endometrium with pathological correlation. Journal of Datta Meghe Institute of Medical Sciences University. 2019;14:429–431. Available:https://doi.org/10.4103/jdmimsu.jd mimsu_198_19
11. Dyer RB, Chen MY, Zagoria RJ. Classic signs in uroradiology. Radiographics. 2004;24 Suppl 1 (suppl 1): S247-80. DOI:10.1148/radiology.243s045509
12. Vikram R, Sandler CM, Ng CS. Imaging and staging of transitional cell carcinoma: part 2, upper urinary tract. AJR Am J Roentgenol. 2009;192 (6): 1488-93. DOI:10.2214/AJR.09.2577 [pubmed citation]
13. Browne RF, Meehan CP, Colville J et al. Transitional cell carcinoma of the upper urinary tract: spectrum of imaging findings. Radiographics. 25(6):1609-27. doi:10.1148/rg.256045517 [pubmed citation]
14. Current Diagnosis and Treatment Surgery Thirteenth Edition. Gerard Doherty. McGraw-Hill Medical. ISBN:0071635157 (find it at amazon.com)
15. Daniels RE. The goblet signs. Radiology. 1999;210 (3):737-8. DOI:10.1148/radiology.210.3. r99mr04737 - Pubmed citation.
16. Anjankar SD. Urethral protrusion of the Distal Urethra end of shunt. Journal of Pediatric Neurosciences. 2018;13:371–372. Available:https://doi.org/10.4103/JPN.JPN_5 4.18
17. Transitional Cell Anjankar VP, Anjankar AP, Anjankar AJ. Review of the impact of COVID-19 on medical education system. International Journal of Current Research and Review. 2020;12:183–186.
Abbastabar, Foad Abd-Allah, et al. Five Insights from the Global Burden of Disease Study 2019. Lancet. 2020; 396(10258):1135–59.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/81576