Ureteral Obstruction and Erosion in Advanced Testicular Tumor with Lymph Node Metastasis

Dear Editor,

A 23-year-male patient with no history of trauma presented to the outpatient department with left testicular swelling and pain in the left lumbar region for 2 months. After diagnostic evaluation with contrast-enhanced computed tomography (CECT) scan and serum tumor markers, he was diagnosed as left testicular nonseminomatous germ cell tumor (NSGCT), Stage IIIC, and poor-risk disease. His baseline serum alpha-fetoprotein, serum beta (human chorionic gonadotropin), and (lactate dehydrogenase) were 0.91 ng/ml, 11,31,900 mIU/ml, and 855 IU/l, respectively. Double-J ureteral stent placement was done for left side hydronephrosis. A high inguinal left orchidectomy was done. Histopathological examination showed immature cystic teratoma, pT3 lesion. He was planned for 4 cycles (bleomycin, etoposide, and cisplatin) based chemotherapy followed by surgery in a multidisciplinary tumor board. The patient received all cycles of the chemotherapy regimen without any major chemo-induced toxicities. Postchemotherapy tumor markers decreased and reached within normal limits. The CECT of the abdomen and pelvis showed a left para-aortic nodal mass of size 5.2 cm × 4.7 cm with the displacement of left renal vessels and loss of fat plane to the adjacent psoas major muscle. It was encasing and eroding the left ureter, suggested by contrast extravasation in the periureteric region [Figure 1]. Imaging findings were suggestive of partial response as per response evaluation criteria in solid tumors. He was planned for retroperitoneal lymph node dissection (RPLND) after proper informed consent. Intraoperatively, multiple hard para-aortic and interaortocaval lymph nodes were densely adherent to transverse mesocolon. It had encased the inferior mesenteric vein and left branch of the middle colic artery. The left ureter was traversing through the retroperitoneal mass. RPLND was performed by the "split and roll technique."[1] En bloc resection of the specimen with the middle third of the transverse colon and a small segment of the anterior ureteric wall was performed. End-to-end hand-sewn four-layered colo-colic anastomosis was performed to maintain bowel continuity. Primary ureteric reconstruction after adequate mobilization was done over the stent [Figure 2]. The patient recovered uneventfully and was discharged from the hospital on the 10th postoperative day. Histopathological examination of the RPLND specimen demonstrated no viable tumor. Fourteen lymph nodes were harvested from para-aortic, paracaval, mesocolic, and interaortocaval regions. It had shown reactive changes and focal necrosis with no evidence of malignancy. The patient was kept on regular follow-up with serum tumor markers. He is asymptomatic and disease-free until the last follow-up after 17 months of presentation.

Gross retroperitoneal lymphadenopathy in advanced testicular germ cell tumors is a known clinical entity. Combined treatment modalities improve the outcomes of these tumors.[2,3] Ureteral obstruction and the resultant hydronephrosis may cause renal impairment and urinary tract infection in the future. Ureteral stent placement is a day care procedure with minimal morbidity and it is commonly done for optimizing obstructive uropathy.[4] It allows the completion of chemotherapy without any drug dosage modification. In our case, meticulous surgical dissection of the ureter in postchemotherapy RPLND after

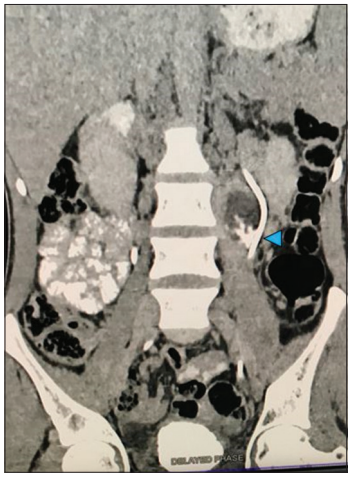

Figure 1: Contrast-enhanced computed tomography showing para-aortic nodal mass eroding the left ureter with extravasation of contrast (green arrowhead)

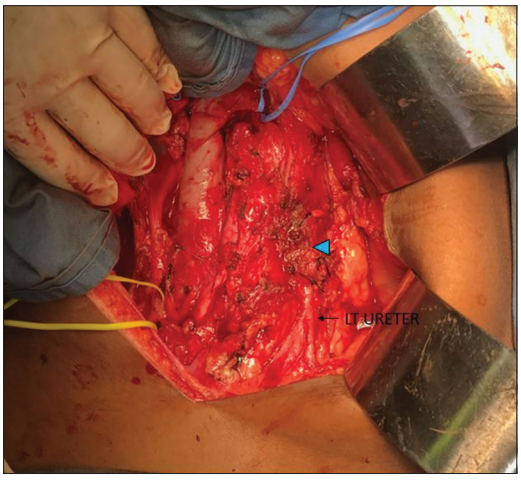

Figure 2: Intraoperative image showing retroperitoneal nodal dissection site with ureteric repair over stent (green arrowhead)

stenting ameliorates hydronephrosis. Such a rare case scenario should be treated with curative intent at high volume centers with multidisciplinary expertise because of the good prognostic behavior of the disease.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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