An Isolated Infected Retroperitoneal Enteric Duplication Cyst Mimicking Renal Carcinoma: A Rare Presentation

Dear Editor,

Enteric duplication cysts (EDCs) are rare congenital anomalies, which occur anywhere between mouth and rectum.[1] In 1961, Melish and Koop defined "enteric duplications" as spherical or tubular structures that possess a mucosal lining characteristic of one or more portions of the alimentary tract supported by muscular and serosal layers.[2] In rare cases, duplication cysts are isolated from the digestive tract and have a unique blood supply, known as Isolated Enteric duplication cysts (IEDCs).[3] The incidence rate of EDCs is 1 in every 4,000 to 5,000 live births.[4]

Herein, we report this rare case in 13-year-old female, who presented with left flank pain associated with fever and vomiting since a month. Her hematological, liver function test, renal function test, and urinalysis were within normal limits. She was put on a course of antibiotics, but her symptoms persisted. Ultrasound [Figure 1a], contrast MRI abdomen [Figure 1b] and CT urography [Figure 1c] revealed a partly exophytic complex left renal cystic lesion at its upper pole showing solid enhancing areas and coarse calcification, with possible differentials being mitotic etiology or infected cyst. In view of the above mentioned imaging findings, histopathological examination was advised to rule out malignancy. Laparoscopic left nephrectomy was done. Grossly specimen, measured 8 × 4 × 3 cm, showed an ulcerated cystic gray white lesion at upper pole of kidney [Figure 1d]. Microscopically, it revealed mucosal lining with underlying smooth muscle associated with marked inflammation [Figure 1e and f]. Features were consistent with inflamed retroperitoneal isolated EDC with organizing abscess and unremarkable renal parenchyma. In this case, preoperatively, it mimicked renal cell carcinoma, which is an unusual presentation of this rare anomaly; hence, a definitive diagnosis was made by constellation of clinical, imaging, and most crucial histopathological examination to come to a final conclusion.

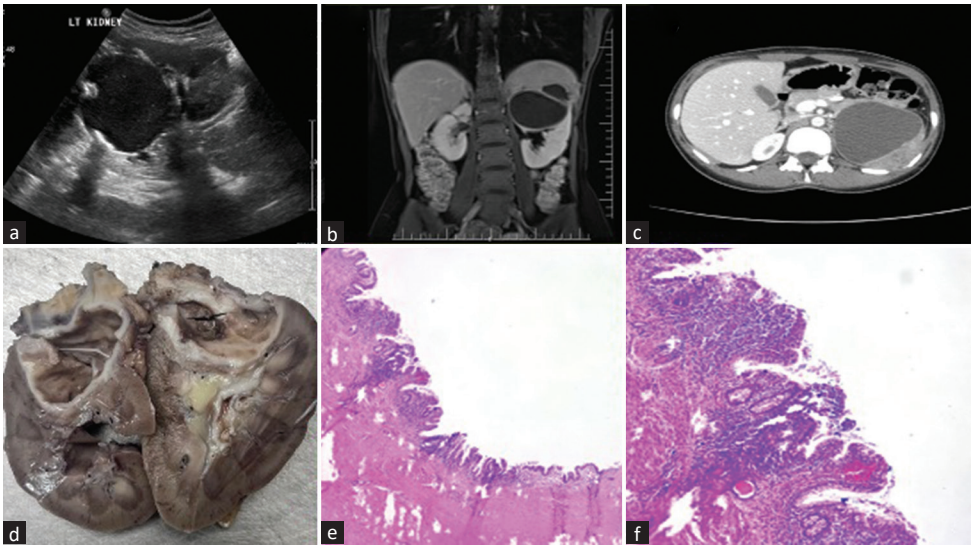

Figure 1: (a) Ultrasonography showing thick-walled lobulated cystic lesion at upper pole of left kidney with internal echoes and echogenic foci, suggestive of complex cystic lesion; (b) MRI abdomen: Thin-walled cystic lesion at the upper pole of left kidney with heterogeneously enhancing solid component; (c) CT urogram: Complex partly exophytic left renal cystic lesion at the upper pole with solid enhancing areas and coarse calcification. (d) Gross photograph of nephrectomy specimen showing an ulcerated cystic lesion at upper pole of the left kidney, (e) Microphotograph showing colonic mucosa with underlying smooth muscle component along with inflammation (hematoxylin and eosin stain: ×100), (f) Microphotograph showing colonic mucosa with underlying smooth muscle and inflammation (hematoxylin and eosin stain: ×400).

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Conflicts of interest

There are no conflicts of interest.

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Tunneled Dialysis Catheter Perforating the Myocardium can Occur as a Delayed Complication

Dear Editor,

Cardiac perforations from central venous catheters can be catastrophic and are usually noticed immediately after the catheter insertion. We report a rare case of delayed catheter tip migration into the pericardial space due to a long-term tunneled hemodialysis (HD) catheter.

A 70-year-old female with end-stage kidney disease and on maintenance HD through right jugular tunneled HD catheter (14.5 Fr) which was inserted 9 months ago came for a routine HD session and was noticed to have aspiration of straw-colored fluid of about 15 ml from both the catheter ports with no blood flow. CT chest confirmed the catheter tip in the pericardial cavity perforating the inferior surface of the right atrium [Figure 1]. Echocardiogram did not show significant pericardial effusion. Under close supervision of a cardiac surgeon and taking control of the right atrial perforated site by taking purse string sutures after mini-thoracotomy, the tunneled catheter was pulled back by a few centimeters to keep the catheter tip in mid right atrial position. Purse string sutures were tightened after pulling the catheter out of the pericardial space. No major complications including hemopericardium were noted.

Although rare, cardiac perforations from the catheters can be lethal and can lead to life-threatening complications such as pericarditis, pericardial effusion, hemopericardium, cardiac tamponade, and arrest. These most commonly arise early due to trauma from the introducer needle, guidewire (particularly if the stiffer side is inserted instead of the soft j-tipped end), dilators, or the catheter itself. The incidence of such complications was reduced in recent years due to new-generation catheters, and procedures were guided by ultrasonography or fluoroscopy. Perforations resulting from tunneled catheters can be catastrophic due to their larger diameter. The exact reasons for right atrial perforation as a delayed complication, after 9 months in our case are unknown. Probably with catheter migration or a deeper tip position into the right atrium indenting its inferior surface and with repeated cardiac contractions, the catheter tip might have eroded and perforated the right atrial wall. As the catheter itself acts as a barrier to bleeding, unsupervised manipulation or removal of these large bore catheters can be catastrophic as the perforated site can allow the entry of blood into the pericardium causing hemopericardium and catastrophic tamponade. Early recognition of this complication and proper management saved the patient from a potentially fatal situation.

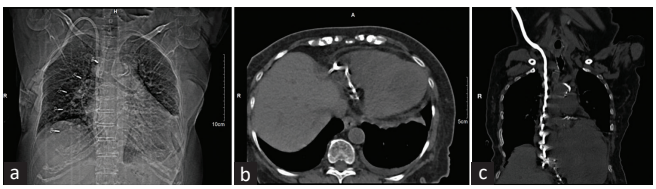

Figure 1: High-resolution CT chest (a) topogram, (b) axial, and (c) reconstructed coronal images showing the tip of the tunneled dialysis catheter in the pericardial cavity.

Declaration of patient consent

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Conflicts of interest

There are no conflicts of interest.

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