and can be of epithelial or non-epithelial origin. Non-epithelial tumors originate in the mesoderm and include fibromas, leiomyomas, neurofibromas, hemangiomas, and FEP[5]. Although rare, FEPs are the most common benign lesions of the ureter. They are mesodermal lesions consisting of hyperplastic connective tissue with vascular stroma and covered by urothelium. Although the etiology of FEPs is unknown, it is believed that they are slow-growing congenital lesions or result from chronic urothelial irritation caused by inflammation, infection, trauma, or obstruction. They are more common men, at a ratio of 3:2, most are solitary lesions, and most are less than 5 cm in length[6,7]. Hematuria is the most common symptom, although an FEP can manifest as low back pain or, less frequently, dysuria and pollakiuria.

FEPs have a highly variable presentation and can be evaluated using various imaging techniques, which facilitate the localization and diagnosis of the lesion. Intravenous urography and retrograde ureterography are the main imaging modalities employed in the evaluation of a ureteral lesion[5]. Because of the development of faster sequencing techniques, magnetic resonance imaging has been used with increasing frequency, having a number of benefits, such as allowing multiplanar imaging, providing excellent soft tissue contrast, and not exposing patients to ionizing radiation. It can delineate the extent of the tumor, providing important information for therapeutic planning and for making a more accurate diagnosis. When the imaging shows that there is no local invasion, regional lymph node involvement, or distant metastases, it supports a diagnosis of benign ureteral lesion. FEPs typically appear as thin, elongated, generally smooth filling defects that are often found in the proximal ureter and are sometimes accompanied by ureterohydronephrosis[5]. The presence of urine around the filling defect, a polypoid outgrowth, and a long ureteral mass are imaging features highly suggestive of FEP[7,8]. Histological confirmation should always be obtained before definitive treatment is administered[6].

Although the treatment of choice is minimally invasive local resection, it is not uncommon for segmental ureterectomy or nephroureterectomy to be performed when there is uncertainty in the preoperative diagnosis. In the case of renal exclusion due to prolonged obstruction, the treatment of choice is nephroureterectomy[9,10].

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Obstructive colorectal cancer presenting as constipation during pregnancy

Dear Editor,

A 36-year-old woman who was 16 weeks pregnant presented with chronic constipation that had worsened in the last 2 weeks, progressing to cessation of the elimination of gas and feces, together with abdominal distention and vomiting, as well as diffuse abdominal pain, predominantly in the left iliac fossa. A rectal enema provided no clinical improvement. The patient reported never having undergone surgery. Physical examination showed a distended abdomen and increased bowel sounds with a metallic tone. On deep palpation, there was pain, which was most severe in the left iliac fossa. There were no signs of peritonitis. Laboratory tests showed no significant alterations. Magnetic resonance imaging (MRI) of the pelvis showed diffuse distention of the colon (Figure 1A), with an expansile formation, at the rectosigmoid junction, characterized by irregular, concentric thickening, measuring 4 cm, and located approximately 20 cm from the anal canal (Figures 1B and 1C). No suspicious locoregional lymph nodes were observed. Conventional rectosigmoid resection and primary anastomosis were performed (Figure 1D). No macroscopic metastases were identified during the surgical procedure. A pathology study of the surgical specimen revealed an invasive, tubular, moderately differentiated, mucinous adenocarcinoma with lymphovascular invasion. Ultrasound in the immediate postoperative period showed a single fetus, with a heartbeat, and a normally implanted placenta. The evolution was satisfactory, and the patient was discharged on postoperative day 8.

The overall incidence of cancer in pregnant women ranges from 0.07% to 0.1%. Colorectal cancer during pregnancy is a rare entity, with an incidence of 0.002%[1–3]. There are a number of risk factors for colorectal cancer in pregnant women[4]: include advanced age; a personal or family history of adenomatous polyps; inflammatory bowel disease; a family history of colorectal cancer; a diet high in fat and animal protein; obesity; smoking; and alcohol consumption.

Mucinous adenocarcinoma is characterized by pools of extracellular mucin that compose more than 50% of the tumor volume. The mucinous component is one of the factors that influence patient survival. At any stage of differentiation, mucinous adenocarcinoma is considered a locally aggressive tumor with a poor prognosis[5].

In pregnant women, acute abdominal symptoms often pose a diagnostic challenge. Although ultrasound is the first-line imaging method, additional tests are often required. With the development of faster sequencing techniques, MRI has come to provide important benefits, including multiplanar imaging and

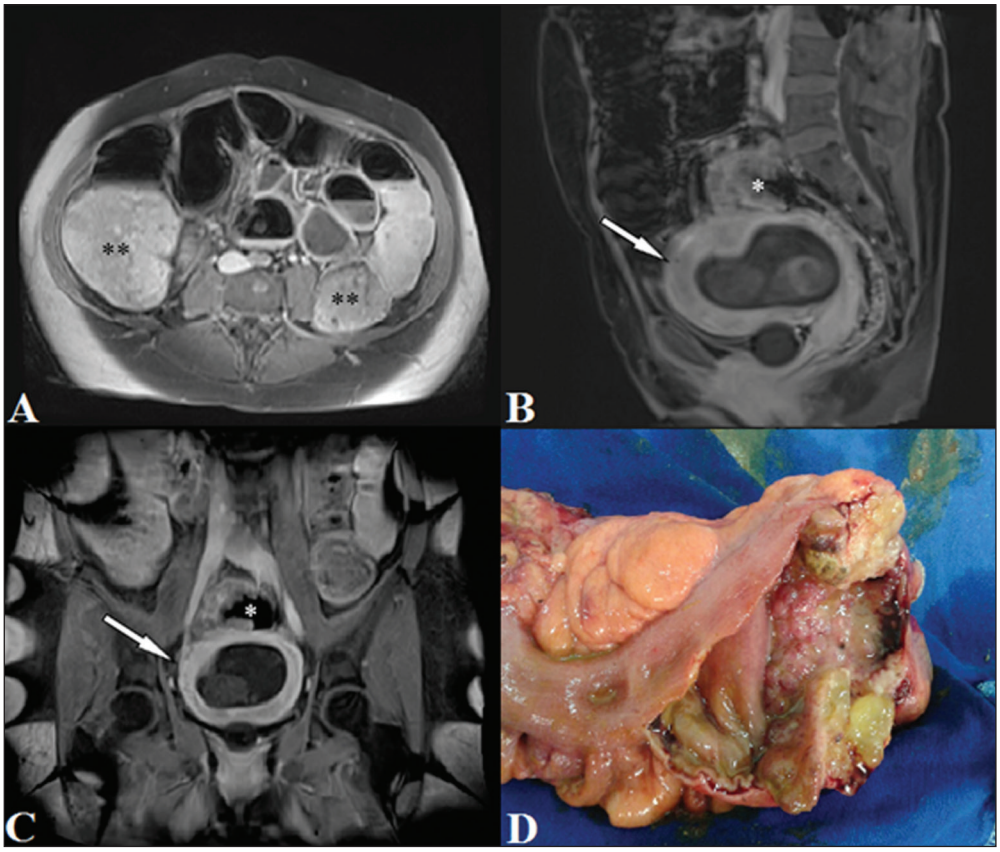

Figure 1. MRI of the abdomen in the axial plane (**A**), showing distention of the colon (asterisks). Images in the sagittal and coronal planes (**B** and **C**, respectively), showing an obstructive tumor in the lower rectum (asterisk) and a gravid uterus with the gestational sac (arrow). In **D**, surgical specimen showing an irregular, stenotic lesion.

excellent soft tissue contrast, which, together with the fact that it does not involve the use of ionizing radiation, make it potentially more accurate than preoperative biopsy for the detection of mucinous adenocarcinoma[6–10].

The treatment of colorectal cancer in pregnant women is complex and involves aspects such as gestational age of the fetus, tumor stage, and fertility preservation. During the first half of pregnancy, the treatment should be the same as that administered to a patient who is not pregnant. In the second half of pregnancy, the treatment should be postponed until the fetus is viable. After having given birth, the patient can undergo surgery. The main drugs used in adjuvant chemotherapy are considered safe for use in pregnant women from the second trimester onward. Radiotherapy is known to be beneficial in the preoperative and postoperative period of surgery for rectal tumors and can be indicated in special cases of tumors of the colon. However, it is contraindicated during pregnancy, and its effects on the fetus are unpredictable[11].

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