MANAGEMENT OF ENCASEMED AORTA AND INFERIOR VENA CAVA TO THE RETROPERITONEAL TUMOR: A CASE REPORT

Po-Jen Hsiao, Chi-Ping Huang, Chao-Hsiang Chang, Hsi-Chin Wu, Chi-Rei Yang
Department of Urology, China Medical University Hospital, Taichung, Taiwan

Abstract:
We report a case of retroperitoneal leiomyosarcoma with encasement to the aorta and inferior vena cava (IVC). A 44-year-old man was admitted to the hospital because of an abdominal mass with symptoms of intermittent abdominal discomfort. Hematological examination and urinalysis revealed no abnormalities. Tumor markers were also within normal limits. A firm and unmovable 10cm*10cm sized tumor was palpable in the right umbilical abdominal region. Retroperitoneal tumor was diagnosed by an abdominal CT scan. CT showed the tumor occupied to the aorta to iliac bifurcations, IVC, and attached to right ureter, duodenum, spine and right psoas muscle. Pre operative surveys included an endoscopy of esophagus, gastric and duodenum, an angiography, a vena cava-graphic scan and lumbar spine MRI. No evidence of digestive systems and spinal invasion.

The patient was operated at laparotomy. The tumor with smooth surface was present in the retroperitoneal space in the right lower abdomen. Extirpation of the tumor was performed with a wedge resection of aorta to iliac bifurcations (7cm), IVC-iliac bifurcations (8cm) , and 3 cm of right ureteral partial excision, because IVC, iliac bifurcations and aorta were encased in the tumor and ascendant to the right ureter. We clamped Aorta and IVC to their bifurcations about 58 minutes. Then reconstruction of aorto-iliac bifurcations with Y Dacron (16-8) graft; reconstruction of IVC-iliac bifurcations with Y Gortex (20-10) graft were performed. Adhesion of tumors with possible invasion of right psoas muscle, right crus, and spinal ligment of vertebrate were dissected carefully. Ureteroureterostomy with double J insertion was undergone. Enlargement of nodes over right common iliac and inter cava-aorta regions were excised for frozen section. Frozen section of right ureter, right common iliac lymph node, lymph nodes along the inferior vena cava, and intercaval regions are all negative for malignancy.

No metastasis to the other organ and lymph nodes was recognized and the pathological diagnosis was leiomyosarcoma. Immunohistochemical studies revealed immunoreactivities for smooth muscle actin, MyoD1, and desmin stain. Postoperative course was uneventful, and the patient has been free from any metastasis and recurrence several months after the operation. Retroperitoneal leiomyosarcoma is a relatively rare entity. The prognosis is poor, because the delayed manifestation of symptomms leads to the delayed diagnosis. We consider that complete resection would promise an improvement in prognostic outcome even for patients with retroperitoneal leiomyosarcoma with invasion to aorta, IVC and ureter.