

Leiomyosarcoma of renal vein presenting as flank pain : A CASE REPORT

Yongmin Kim^{1*}, Yuntae Kim^{1†}, Soo a Kim¹, Kiyoung Oh¹, Mingeun Park², Jinmyung Kwak³

Soon Chun Hyang University Cheonan Hospital, Department of Rehabilitation Medicine¹,
Soon Chun Hyang University Bucheon Hospital, Department of Rehabilitation Medicine²,
Soon Chun Hyang University Seoul Hospital, Department of Rehabilitation Medicine³

Introduction

Primary vascular leiomyosarcoma is a very rare malignant neoplasm that arises from the smooth muscle tissue. Vascular leiomyosarcoma only accounts for 0.5% of all soft tissue sarcomas and the symptoms of venous leiomyosarcoma are often insidious and nonspecific because of its anatomical location and slow growth. Its low prevalence and atypical symptoms usually cause the tumors to grow large prior to detection. We report a rare case of leiomyosarcoma of the left renal vein found by an additional test while treating the flank pain.

Case presentation

A 52 year old female patient visited to our clinic with left flank and abdominal pain. The pain occurred one and half year ago and worsened from two months ago. She had a history of myomectomy 17 years ago and hysterectomy 1 year ago. Pain occurred more than 4 or 5 times a day without any special aggravating factor and it also happened at night. . It improved a little with the activity but aggravated in sitting long and resting time. The pain was a throbbing aspect, visual analog scale 6~7, and there was no tenderness at the left costovertebral angle. There were no systemic symptoms such as fever, myalgia and weight loss. In the local clinic, upper gastrointestinal endoscopy and colonoscopy were performed, but no particular findings were seen. In our clinic, left T11, T12, and L1 intercostal nerve blocks were performed three times and each injection seemed to relieved pain temporarily, but the pain became worse again and she couldn't take sleep well due to pain. Additionally, trigger point injection on left external and internal oblique abdominis muscles were performed but not effective. Abdomen-Pelvic Computed Tomography (APCT) was performed to confirm whether other problems were overlooked. APCT findings showed the diameter of the left renal vein was increased and there was a lobular enhancing mass of about 7cm extent inside. [Figure1] Intravenous leiomyomatosis was observed and leiomyosarcoma was suspected. Surgery was performed because it was considered that surgical resection was necessary under the cooperation of surgery and hematoncology department. In the surgical findings, there was about 7 cm mass adjacent to the left renal vein. Renal vein and artery were ligated after renal vein detachment and left kidney was resected. Leiomyosarcoma was identified in histologic biopsy. The patient did not complain of flank pain anymore. The chemotherapy and adjuvant radiotherapy have been performed since then.

Conclusion

Flank pain can be caused by a variety of causes. In particular, in this patient, the diagnosis was delayed because there was no suspicious symptom of systemic disease. Therefore, if there is no adequate improvement in the treatment of flank pain, it is necessary to consider other systemic disorders.



fig1. APCT findings showed dilated left renal vein (arrow head) and lobular enhancing mass in left renal vein (white arrow)