

Abstract Type : Poster
Presentation No. : PAK 026

Acute kidney injury in patient with extramedullary plasmacytoma

Ji Hyun Jeon, Eun Kyoung Lee, Seong Chul Yoon, Jong Tae Cho, Chang hyun Park, So Mi Kim
Department of Internal Medicine-Nephrology, Dankook University Hospital, Korea, Republic of

Case Study: Background : Extramedullary plasmacytomas are plasma cell tumors that arise outside of bone marrow. Most patients present with symptoms related to the location of the mass, which are most frequently located in the head and neck region, while renal or retroperitoneal infiltration is very rare. Here, we report a case of a huge solitary retroperitoneal plasmacytoma.

Case presentation : A 39-year-old woman was referred to nephrology department for evaluation of oliguria which began 5 days ago. The patient had neither any remarkable past medical history, nor a family history relevant to such a complaint. At the time of admission, she had dyspnea and orthopnea. The initial laboratory examination showed elevated blood urea nitrogen(87mg/dL) and creatinine(14.53mg/dL) levels, hyperkalemia(5.8mEq/L), metabolic acidosis with a pH of 7.32 and bicarbonate of 14.9mmol/L. The chest radiograph represented bilateral pulmonary edema. Foley catheter insertion and pre-contrast abdominal pelvic computed tomography were performed on suspicion of acute kidney injury. Imaging work-up showed huge retroperitoneal mass from IMA origin site to right external iliac area with bilateral hydronephrosis due to engulfed both ureters by mass. We performed biopsy of the mass and disclosed that histology of the mass is extraosseous plasmacytoma. Immunohistochemical staining was positive for CD79a and lambda light chain, and was negative for CD20 and kappa light chain. Serum free kappa light chain(65.46mg/L) and free lambda light chain(218.46mg/L), beta-2 microglobulin(7.85mg/L) levels were elevated. Kappa/lambda free light chain ratio was normal. The bone marrow biopsy and PET-CT showed negative finding except of retroperitoneal areas. So, the patient confirmed solitary extramedullary plasmacytoma. Radiation therapy was chosen as the treatment and percutaneous nephrostomy was done for relieving post renal AKI due to ureter obstruction.

Conclusion : Obstructive AKI can arise from retroperitoneal mass, such as retroperitoneal extramedullary plasmacytoma.