

## **RETROPERITONEAL FIBROSIS CAUSING ACUTE KIDNEY INJURY: CURRENT THERAPEUTIC APPROACHES**

Deepak Jasuja , Deaconess Health System, Evansville, IN, USA

Retroperitoneal Fibrosis (RF) is characterized by a periaortic soft tissue mass that envelops the aorta and the Inferior Venacava and extends laterally to entrap one or both ureters. Hydronephrosis leading to progressive renal failure is its most frequent complication, present in 75% cases at diagnosis. (1)2/3<sup>rd</sup> cases have unknown etiology and are considered as Idiopathic Retroperitoneal Fibrosis. (IRF)

Clinical presentation of RF is insidious with vague constitutional symptoms and low back pain which is nonresponsive to anti-inflammatory drugs. Aim of initial management is to restore the patency of urinary tract including placement of stents/ nephrostomy followed by laparoscopic or open ureterolysis. Obstruction may reoccur in 22% of responders to surgery. Corticosteroids alone or with immunosuppressants have allowed good renal and patient long-term survival in small studies.

We present a 48 year old white male who presented with nonspecific abdominal pain and persistent vomiting over three weeks. Pain was band-like around the lower back radiating to bilateral lower quadrants. Past medical history included back surgery following MVA along with L1-L2 disk replacement 6 years ago. Pertinent labs included a BUN of 39, creatinine of 7.9, and ESR of 40. CT scan revealed an infrarenal retroperitoneal mass surrounding the aorta and Inferior Vena Cava, causing bilateral hydronephrosis. Patient had bilateral ureteral stenting done followed by open ureterolysis. Biopsy of the mass was consistent with IgG 4 positive IRF. Patient's creatinine came down to 2.3 at the time of discharge. He was then started on Prednisone 60 mg orally daily which was tapered over 8 weeks, with his kidney functions returning to baseline (Serum Creatinine 0.8)

Little is known about the optimal dosage and duration of therapy for retroperitoneal fibrosis. There is no large prospective study comparing efficacy of different therapeutic approaches. It is imperative that the patient with RF should be regularly monitored to promptly diagnose and treat the renal and systemic recurrences of the disease.