

ULTRASONIC INACCURACIES IN DIAGNOSIS OF ACUTE OBSTRUCTIVE RENAL FAILURE SECONDARY TO RETROPERITONEAL MASS.

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A 70-year-old male with history of multiple myeloma (MM), Bence-Jones proteinuria, and plasmacytoma of the retroperitoneum and pelvis was admitted for acute renal failure (ARF) and oliguria. Patient's baseline creatinine was 0.8 a month prior to admission and creatinine was 7.2 on admission

Patient was diagnosed with MM with IgG Kappa in July 2007 - had autologous stem cell transplant, with relapse in January 2008. He then had multiple cycles of chemotherapy. A bone marrow biopsy on September 2008 showed relapse of multiple myeloma. A CT scan 3 weeks prior to admission showed multiple new soft tissue masses in pelvis, retroperitoneum, as well as along the bladder and duodenum. He was treated with 1 cycle of cytoxan 3 weeks prior to admission.

Patient had no vomiting, diarrhea or change in oral intake. He had a normal serum uric acid. His renal ultrasound on admission showed no evidence of hydronephrosis in either kidney.

The patient had anuria, ARF, and known extensive pelvic tumor. A cystoscopy and retrograde pyelogram was done despite normal ultrasound images to rule out pelvic tumor causing ureteral stenosis

The retrograde pyelogram revealed stenosis bilaterally in distal ureters and impingement of urine out flow. There was no obvious dilation of ureter and renal pelvis bilaterally.

In conclusion, ultrasonography can be used as a noninvasive technique to diagnose obstructive uropathy, however false negative sonograms can occur with retroperitoneal masses or fibrosis. Further imaging should be considered in patients with acute onset of oligouria and history of malignancy in the pelvis.