



The Role for Concomitant Medical Therapy in the Urologic Management of Idiopathic Retroperitoneal Fibrosis

Javier E. Santiago¹, Richard D. Swartz², Sapan N. Ambani¹

¹Department of Urology, Michigan Medicine; ²Department of Nephrology, Michigan Medicine

INTRODUCTION

Traditionally, primary management of ureteral obstruction (UO) due to idiopathic retroperitoneal fibrosis (iRPF) included ureterolysis, however medical management is increasingly applied to patients with reported efficacy but with uncertain consequences. In this study we offer a report of outcomes with attention to treatment course for medically managed patients who have ureteral involvement

METHODS

A retrospective review of iRPF patients diagnosed from 2002-2018 was performed. Patients with hydronephrosis due to ureteral involvement requiring renal decompression with ureteral stent that were initially managed with medication and who did not undergo initial ureterolysis were included. Additionally, patients with RPF due to non-immunologic causes, e.g. malignancy, sequelae from prior operation, stone related trauma, etc. were excluded. Relapse was defined as recurrence of obstructive uropathy requiring renal decompression with stent or nephrostomy tube.

CONCLUSIONS

Medical management with primarily steroids and Cellcept resolved ureteral obstruction in 67% of patients without the need for surgery beyond temporary renal drainage, with few cases of worsening CKD while and a minority with side effects to medications. To date, this is the largest reported series of relatively homogenously medically managed RPF patients with obstructive uropathy requiring Urologic intervention. These data can be used to counsel patients and advise urologists of the advantages and disadvantages of proceeding with medical management for ureteral obstruction from iRPF.

RESULTS

Demographics	
Median Age at Diagnosis	56 years
Median Follow Up (years)	Clinic: 4.7 Radiologic: 3.6
Sex	M 33 (67%) F: 16 (32%)
Tobacco History	34 (69%)
Medical Regimen	Steroids + Non-steroids: 44 (90%) Steroids Alone: 3 (6%) Non-Steroids Alone: 2 (4%)
Ureteral Anatomical Region	Proximal: 43 (88%) Mid: 6 (12%)
Laterality	Bilateral: 35 (71%) Unilateral: 14 (29%)
Documented Biopsy Prior to Treatment	32 (65%)
Elevated Inflammatory Markers	ESR: 5 ESR+CRP: 31 IgG4: 6 Anti-RNP: 1 Normal: 3

Event	Total Patient Events	Mean Time to Event (years)
Ureteral Obstruction Relapse	9 (18.3%)	3.8
Nephrostomy Tube for stent failure	3 (6%)	2.2
Medication Side Effect	5 (10.2%)	1
Nephrectomy	4 (8.1%)	5.8
Ureterolysis	8 (16%)	2.2

Renal Function	
Creatinine at Last Evaluation (mean)	1.24 mg/dL
Radiographic Renal Atrophy (of total cohort)	16 (32%)

Comparison to Existing Literature

	No. Patients with Ureteral Stent for UO	Successful Stent Removal with Medical Management (%)	Stent Duration (days)	Relapse (%)	Time to Relapse (years)	Ureterolysis	Nephrectomy (%)
Santiago, Ambani, Swartz	49	67	474 (median)	18.3	3.8	16%	8.1%
Raffiotta et al.	22	72	-	38	5.19	5/35 original cohort	-
Moriconi et al.	20	55	-	39	1.25	3/43 original cohort	-
Scheel et al.	16	N/A 86% of obstructed ureters stent free	408 (mean)	-	-	-	-
Adler et al.	7	71	168 (mean)	-	-	-	-