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Nephrology

A CASE OF IGA NEPHROPATHY WITH NEPHROTIC RANGE PROTEINURIA – A RARE PRESENTATION

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KEYWORDS :

Introduction: -

IgA nephropathy (IgAN) is a mesangial proliferative glomerulonephritis characterized by diffuse mesangial deposition of IgA [1]. Also called as Berger disease, IgAN was first recognized in 1968 by Jean Berger when immunofluorescence techniques were introduced for the study of renal biopsy specimens. IgAN is unique among glomerular diseases in being defined by the presence of an immune reactant rather than by any other morphologic feature on renal biopsy, and the light microscopy changes are variable. IgAN is the most prevalent pattern of glomerular disease seen in most Western and Asian countries where renal biopsy is widely practiced with incidence of 2.5/100000/year[2]. The term benign recurrent hematuria was previously used for IgAN, but it is now known that IgAN is an important cause of end-stage renal disease (ESRD). It is likely that IgAN is not a single entity but rather a common response to various injurious mechanisms.

Case Report: - A 28 years old male patient presented with swelling over face more in morning for 3 days, later he started to develop bilateral pitting type of pedal edema after 3 days of onset of symptoms. There were no sign of uremia. He visited to nephrology opd at government medical college Aurangabad after 3 weeks of onset of symptoms, having urea – 30, creatinine – 0.6, serum albumin was 3.9 gm. %, patient serum electrolytes, liver function test, CBC were within normal limits. USG Abdomen and pelvis was within normal limits. His urine routine examination was suggestive of proteinuria. His 24 hours urine protein was 3.88 gm. /day. He was advised for renal biopsy and was admitted at government medical college Aurangabad for biopsy. Biopsy was after second day of admission, procedure was uneventful and biopsy specimen sent for histopathological examination i.e. light microscopy and immunoflorocenes which was suggestive of IgA nephropathy. During hospitalization patient received tablet telmisartan 40 mg OD and on second day after biopsy patient was discharged on same medication which was continued for 2 month and patient responded to treatment. On follow up visit after 2 months his 24 hours protein decreased to 0.63 gm. /day and Sr. albumin was 4.5 gm. %, and dose of tablet telmisartan was increased 40 mg OD and 20 mg HS per day. Throughout the course his renal function test were within normal limits.

Discussion: -

IgA nephropathy (IgAN) is a mesangial proliferative glomerulonephritis characterized by diffuse mesangial deposition of IgA. IgA nephropathy has clinical features of Macroscopic, Asymptomatic Hematuria and Proteinuria. Microhematuria with or without proteinuria (usually <2 g/24 h) is noted. Nephrotic-range proteinuria is rare presentation of IgA nephropathy. Acute Kidney Injury uncommon in IgAN (<5% of all cases) [3]. Patient may present as case of Chronic Kidney Disease who already have renal impairment and hypertension when they are first diagnosed with IgAN. Hypertension is common, as in other chronic glomerular disease; accelerated hypertension occurs in 5% of patients. Our patient had nephrotic-range proteinuria of 3.88 gm. /day without hematuria. He presented with swelling over body and facial puffiness. His blood pressure was within normal limits throughout the course. Use of angiotensin-converting enzyme (ACE) inhibitors /angiotensin receptor blocker (ARBs) in the treatment of IgAN as first-choice treatment for management of proteinuria and hypertension [4]. Our patient was treated with tablet telmisartan 40 mg OD. For 2 month and later on dose was increased to 40 mg od and 20 mg HS with titrating to which he responded and his 24 hours protein decreased from 3.88 gm. /day to 0.63 gm. /day. Sr. albumin was 3.9 gm. % which increased to 4.5 gm. %. His renal function were within normal limits at the time of presentation and during whole treatment course. Other treatment line are also available like tonsillectomy, steroid therapy, and immunosuppressant and fish oil which have shown benefits on selected IgA nephropathy cases [5, 6]. So according to KDIGO guidelines, we have managed patient without using immunosuppressive agents (Corticosteroids, tacrolimus), thus avoiding further consequences and side-effects of immunosuppressive therapy. KDIGO guidelines recommend that a trial of ACE inhibitors or ARBs of 3-6 months should be given in case of proteinuria of >1 gm. /day in adults and inspite of above conservative management if proteinuria persists > 1gm/ day, then immunosuppressive therapy should be considered.

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