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Spectrum of Nephrotic Syndrome in Adults: Experience in Single Tertiary Care Centre

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Introduction

The last decade has seen great advances in our understanding of the nephrotic syndrom. There are two ways in which one may define the nephrotic syndrome. One is clinical and comsprises massive albuminuaria, hypoaIbuminaemia and massive odema. The other is based on quantitation of urinary albumin excretion and is 3.5g/24hour/1.73 sq meter body surface area. Sometimes we find some patients with sever hypoalbuminemia who have lower measured protein excretion and nephrologist recommend clinical definition in them. It must be remembered that the nephrotic syndrom is just that a syndrom and it can be stage in the clinical presentation of a number of different disease .Here the aim is to study the spectrum of glomerular disease pattern in adult nephrotic patients as treatment will depend on that.

Material and Methods

Adult patient from June 2011 to May 2013 with nephrotic range protinuria were included in the study all patients had a baseline serum creatinine, urinalysis for active sediment, coagulation parameater, 24hr urine protine, viral markers. ANA was done when ever required. Every patient was subjected to USG guided percutaneous biopsy with 18 GAUZE gun biopsy needle and analyzed by light microscopy. Immunohistochemistry was done in selection patients were excluded.

Observation & Results

A total of 36 patients with nephrotic range protinuria were analyzed. Out of 36 patients 24 (67%) were male and 12(33%) were females. 10(28%) patients had active urinary sediments, odema was universal presentation in all 36 patients (100%), duration of edematous illness was from five (5) days to seven (7) years(mean 1.12yr). Marked fluid over lode was present in (8%) patients, who responded with high does diuretics, 9(25%) patients had renal failure (S.Cr.more than 1.4mg/dl) out of which 2(22%) patients presented with severe renal failure (S.Cr. more than 5mg/dl) and needed dialysis support before undergoing biopsy.

Histopathological finding on biopsy

DISEASE	NUMBER	PERSENTAGE
Minimal change disease (MCD)	15	44.44
Focal segmental glomerulosclerosis (FSGS)	9	25%
Mesangial prolifiration glomerulonephritis	1	2.77
Membranous glomerulonephritis(MGN)	5	13.99
Membranoprolifertive glomerulonephritis(MPGM)	1	2.77
Diffuse prolifirative glomerulonephritis (DPGM)	1	2.77
Lupus glomerulonephritis	2	5.55
Crescentric glomerulonephritis	2	5.55

Discussion

Our patient population were younger 13 to 45 years. All belonged to remote village area. Minimal change disease accounted for most common case (44%) FSGS was more common in those patients with prolong and undertreated edematous illness (mean duration of edematous illness was four month to seven year (mean 1.12year). IdIopath MGN affected younger age group (out of 5, 3 werew of less than 24 years)

Summary and Conclusion

Minimal change disease is common primary glomerular disease in adolescents and younger adults.

FSGS was more common in adults with prolong and undertreated edematous illness favouring the view that MCD and FSGS are same immunological disorder.

Presence of MGN in young age group is a new observation. Allergy as an inciting factor during field work may be topic of research.

Biopsy should be suggested in every young patient with nephrotic syndrome and not be treated empirically with steroid. This suggestion is important in view of our observation of MGN and MPGN being not so rare in younger patient

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