

NIH protocol in lupus nephritis

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Abstract: SLE is a multisystem disorder of multifactorial etiology. In this study, the treatment modality recommended for lupus nephritis was given and the outcome was studied for a period of 2 years and followup for 5 years.

Patient and methods: 52 patients in Govt. Medical College, Kozhikode of renal biopsy proven cases of SLE nephritis was given this modality of treatment. The drugs used were cyclophosphamide, azathioprine, mycophenolatemoeftil and glucocorticoid. All patients satisfied the 1982 revised American College of rheumatology criteria 4 out of 11 either serially or simultaneously during the study period.

Results: The remission attack at 3 points were studied. Proteinuria, serum creatinine and urinary sediment.

Conclusion: The clinical, biochemical and serological outcome was studied.

Keywords: ANA, Antids DNA

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I. Introduction

1. The prognosis of SLE nephritis was dismal previously. With the introduction of NIH protocol the survival rate improved and the quality of life was better.

II. NIH protocol

Various regimes are followed. Here the treatment modality was intravenous cyclophosphamide 500mg IV every 2 weeks for 6 months followed by maintenance dose of Azothioprine 2mg/kg/day or mycophenolatemoeftil 2gram daily for 2 years. Intravenous glucocorticoid 500-1000mg of methyl prednisolone per day for 3 days followed by maintenance dose of oral glucocorticoid 0.5 to 1mg/kg/day was used. Steroids used in flareup cases. Class V nephritis IV cyclophosphamide 0.5-1mg/kg IV monthly for 6 months and supplement it with azathioprine or mycophenolatemoeftil.

III. Patients and methods

52 patients in Govt. Medical College, Kozhikode in the period January 2013 to June 2015 was studied. Renal biopsy proven cases of class III, IV, V nephritis were included. Routine investigation included blood routine, renal function, ECG, X-ray. Immunological study included ANA and ANTIDs DNA, rheumatoid factor, lupus antiocoagulant, anticardiolipin antibody, renal biopsy, complement and immunofluorescent study.

1.Exclusion criteria

Other collagen vascular diseases with renal involvement were excluded.

2.Statistical analysis

Male: Female is 1:9. Mean age 25.9 ± 9 . Peak incidence 3rd decade

IV. Figures And Tables

Table 1: Initial presentation

	Number	Percentage
Rash	29	55%
Polyarthritis	27	51%
Fever	27	46%
Bleeding	14	25%
CNS	5	9%
GIT	4	7%
Others – Raynauds	2	3%

Table 2: Renal presentation

	Number	Percentage
Edema	25	48%
Hypertension	19	36%
Renal failure	40	76%

Table 3: Immunological study

	Number	Percentage
ANA	42	80%
ANTIids DNA	32	61%
Seronegative	10	19%

Table 4: Renal histology

	Number	Percentage
Class II	2	3%
Class III	4	7%
Class IV	41	78%
Class V	4	7%
Class VI	1	2%

Table 2: Laboratory parameters

	Number	Percentage
Proteinuria	87	71%
Haematuria	37	21%
Active urine sediment	15	20%
Serum creatinine >1.5mg%	35	67%
Blood urea >45mg	40	76%
Serum protein (albumin <3gm)	12	25%
Serum cholesterol >220gm	12	23%

V. Results Of The Study

NIH protocol given for 52 patients.

44/52 completed without interruption

2/52 drop out

6/52 completed with interruption

85% had followup for 5 years

4 patients died

Treatment results: 5/52 had persistent proteinuria. Cardiac infarcts were 9 times high with high dose prednisolone (Johnson et al 1989).

After 8 weeks proteinuria decreased, serum C3, C4 normal.

After 6 months creatinine decreased, proteinuria <1gram for 24 hours, renal parameters improved.

After 12-24 months renal parameters showed 65-80% improvement

VI. Conclusion

This prospective study showed that immunosuppressive therapy was effective introducing the mortality and end stage renal disease. Protocol was less expensive and had good compliance.

References

Journal papers

- [1]. New England Journal of Medicine February 9, 2009 (Mycophenolatemofetil and azothioprine in maintenance therapy of lupus nephritis).
- [2]. New England Journal of Medicine March 6, 1989. NIH protocol for lupus nephritis.
- [3]. New England Journal of Medicine November 24, 2005. Treatment with mycophenolatemofetil or IV cyclophosphamide in lupus nephritis.

1Rosy Philips. "NIH protocol in lupus nephritis ." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) , vol. 17, no. 01, 2018, pp. 19–20.