

CLINICAL PROFILE AND OUTCOME OF PATIENTS WITH BIOPSY PROVEN THROMBOTIC MICROANGIOPATHY IN A TERTIARY CARE CENTRE

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ABSTRACT

Introduction: Thrombotic microangiopathy (TMA) describes a group of syndromes with multiple etiologies characterized by microangiopathic hemolytic anemia (MAHA), thrombocytopenia and organ injury. It is sometimes first detected on a renal biopsy performed for evaluation of renal dysfunction.

Aims of the study: To evaluate the clinical profile, etiological factors and outcome of patients with TMA.

Material and Methods: This was a retrospective observational study carried out at our department among the patients presented with RPRF with evidence of TMA in native kidney biopsy. Records were reviewed and analysed from 1st January 2022 to 30th December 2023. A total of 17 patients were listed for the study.

Results: Incidence of TMA was found to be 14.7%. Median age 32.5 years, creatinine was 8.7 mg/dl. Hypertension (52.9%) followed by Headache (47.1%) were most common presenting symptoms. Complement serology were mostly normal. Most common etiology of TMA was malignant hypertension (41.2%) followed by IgA nephropathy (29.4%) and lupus nephritis (11.7%). 2 patients with etiology of lupus nephritis with TMA received plasmapheresis for 5 days, both showed significant improvement in renal function following TPE. 11 patients required dialysis. On follow up time of 6 months, one patient died, 8 remain on dialysis and 8 have stable renal function. Patient who expired had developed acute left ventricular failure due to accelerated hypertension.

Conclusion: This study showed that malignant hypertension followed by IgA nephropathy and lupus nephritis were common etiology for TMA. Hypertension followed by Headache were most common presenting symptoms. plasmapheresis was beneficial in patients with lupus nephritis associated TMA.

Keywords: Biopsy, Early Diagnosis, Anemia, Plasmapheresis, Thrombotic Thrombocytopenic Purpura.