Coexisting direct and indirect mechanism of renal damage in monoclonal gammopathy

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Monoclonal gammopathy of clinical significance (MGCS) is an umbrella term which has been coined to include myriad conditions attributed to monoclonal proteins which are capable of inducing end-organ damage but do not meet the criteria for the diagnosis of symptomatic multiple myeloma, Waldenstorm macroglobinaemia or chronic lymphocytic leukaemia. The term, monoclonal gammopathy of renal significance (MGRS), also become increasingly recognized by nephrologists and hematologists as a spectrum of renal diseases related to the monoclonal gammopathy. The mechanisms of renal damage in MDRS may involve by direct deposition of the monoclonal immunoglobin or by activation of the alternative pathway of complement by the monoclonal immunoglobin and often these mechanisms may coexist in the same patient. Here, we present a case of thrombotic microangiopathy which later found to have amyloid nephropathy in subsequent renal biopsy in previously diagnosed patient of monoclonal gammopathy. The patient initially presented with haemoptysis and haematuria secondary to severe thrombocytopenia and evidence of microangiopathic haemolytic anaemia in prompt peripheral blood smear. Urgent treatment with plasma exchange was started and the patient responded favourably to the treatment. Subsequent renal biopsy revealed L chain-type amyloidosis.