

## **MEMBRANOUS GLOMERULONEPHRITIS SECONDARY TO SYPHILIS**

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Membranous glomerulonephritis (MGN) is one of the most common forms of nephrotic syndrome in adults. It is typically idiopathic, but can be secondary to other causes as well. Syphilis is one of the rarest causes of MGN and can present a diagnostic challenge.

A 42-year-old male was admitted to the hospital complaining of weight gain, bilateral pedal edema, and generalized body swelling. Swelling was preceded by papular rash, which started at the trunk and abdomen and gradually developed over the palms and soles. Physical examination revealed marked periorbital edema and 3+ pre-tibial pedal edema. Urinalysis revealed proteinuria and hematuria. A twenty-four hour urine collection revealed 12.56 gm of protein. Laboratory data showed BUN was 45mg/dl and serum creatinine was 2.8mg/dl. Further workup revealed hypoalbuminemia, hypertriglyceridemia and positive serology for syphilis with a positive RPR and FTA Abs. HIV serology, hepatitis panel, ANA and ANCA were negative. Renal biopsy revealed granular deposits of IgG, C3, and C1q along the capillary basement membrane. Electron microscopy showed subepithelial deposition of immune complexes which confirmed the diagnosis of MGN. The correlation of clinical and serological findings with the renal biopsy was consistent with MGN secondary to syphilis. Treatment was initiated with IM penicillin G weekly for three weeks. The patient's edema improved dramatically. Normalization of renal function was observed at the six-week follow-up appointment. Additionally, the rash had subsided and proteinuria improved to 0.18 gm/24 hr. Complete resolution of the patient's nephrotic syndrome following Penicillin therapy supports syphilis as the cause of the disease.

This case illustrates the association between secondary syphilis and MGN. Even though nephrotic syndrome caused by syphilis is rare, it is very important to recognize the clinical picture of syphilis and its renal complication, which is crucial for the administration of appropriate therapy.