

# MEMBRANOUS GLOMERULONEPHRITIS AND SYPHILIS CASE STUDY

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The number of infectious syphilis diagnoses has increased in Australia and other developed countries since 2011 and is predominantly seen in men who have sex with men (MSM). More recently, cases in women and congenital syphilis cases have increased. Membranous glomerulonephritis (MGN) is a rare complication of secondary syphilis. It presents with nephrotic syndrome and resolves rapidly with penicillin treatment. Although historically rare, as the incidence of syphilis increases, it remains an important differential for causes of MGN. We report a case of a 30 year old female who was referred from primary care to Sydney Sexual Health Centre with positive syphilis serology after a routine screening with her primary care doctor. Her RPR (Rapid Plasma Reagin) was 1:32 and her Human Immunodeficiency Virus (HIV) test was negative. This was preceded by a diagnosis of MGN with nephrotic syndrome 4 months earlier. She was treated with prednisolone, ACE inhibitors and trimethoprim/sulfamethoxazole during her admission to hospital after presenting with peripheral oedema and malaise. Her investigation in hospital included anti-nuclear antibodies, anti-neutrophil cytoplasmic antibodies, extractable nuclear antibodies, Complement C3/C4 and glomerular basement membrane antibodies, all of which was normal. Syphilis serology was not performed during this admission. A renal biopsy showed stage I/II glomerulonephritis and staining was negative for *Treponema pallidum* and polymerase chain reaction (PCR) testing was also negative though in immune complex mediated MGN, these specific tests are not expected to be positive. Identifying two conditions that are typically rare in young females, together with the unusual course of her illness and a concurrent serological history consistent with secondary syphilis illness, syphilitic MGN was diagnosed. Although it cannot be confirmed retrospectively, establishing the diagnosis would have been of prognostic and therapeutic value, including partner notification and highlights the need to consider syphilis as a differential diagnosis in people with MGN.

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