

## **Nephropath Teaching point 12**

### **Paraneoplastic Membranous Nephropathy**

**All are true about Paraneoplastic Membranous Nephropathy except**

- Associated with low prevalence of anti PLA2R1 antibodies
  - IgG1 and IgG2 are the most common subclasses
  - More than 8 inflammatory cells in a glomerulus is strong indicator of malignancy
  - Presence of Membranous nephropathy indicates a better clinical outcome
  - Majority of cases have no apparent malignancy at the time of diagnosis of MGN
- Recent studies have identified neutral endopeptidase, the M-type receptor for secretory phospholipase A(2) (PLA(2)R1) and cationic bovine serum albumin as target antigens of circulating and deposited antibodies in alloimmune neonatal, adult 'idiopathic' and early-childhood membranous nephropathy, respectively. A genome-wide association study has provided further evidence for a highly significant association between PLA2R1 and HLA-DQA1 loci and idiopathic membranous nephropathy in patients of white ancestry and their low incidence in cases with secondary forms of MGN.

[Ronco P, Debiec H. Pathogenesis of membranous nephropathy: recent advances and future challenges. Nat Rev Nephrol. 2012 Feb 28;8\(4\):203-13.](#)

- Lefaucheur et al. reported that paraneoplastic membranous nephropathy is characterized by an increased number of inflammatory cells in glomeruli compared with that seen in idiopathic membranous nephropathy.

[Lefaucheur C, et al. Membranous nephropathy and cancer: Epidemiologic evidence and determinants of high-risk cancer association. Kidney Int. 2006; 70:1510–1517.](#)

- IgG1 and IgG2 subtypes are markedly more prominent in the glomeruli of patients with paraneoplastic membranous nephropathy than in those with idiopathic membranous nephropathy.

[Ohtani H, et al. Distribution of glomerular IgG subclass deposits in malignancy-associated membranous nephropathy. Nephrol Dial Transplant. 2004; 19:574–579.](#)

- In the study by Lefaucheur et al (240 patients) in most patients with paraneoplastic membranous nephropathy, the diagnosis of cancer and membranous nephropathy was made within 1 year; however, only half of these patients had symptoms of cancer at the time of membranous nephropathy diagnosis.