

1차성과 2차성 막성 신염의 진단적 마커들의 가치

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Diagnostic Value Phospholipase A2 Receptor, IGG4, Aldose Reductase and Superoxide Dismutase in Determination of Primary Versus Secondary Membranous Glomerulonephritis

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Introduction and aims: Membranous glomerulonephritis (MGN) is the most common cause of the nephrotic syndrome in adults. Most cases of MGN are primary but secondary cause of MGN are frequently encountered. Determination of secondary MGN is crucial to initiate appropriate treatment. We investigated the diagnostic yield of 4 putative markers of primary MGN such as phospholipase A2 receptor (PLA2R), IgG4, aldose reductase (AR), and superoxide dismutase (SOD). We compared immunohistochemical expressions of those between primary and secondary MGN and analyzed those expression with clinicopathologic parameters.

Methods: We enrolled 119 patients who were diagnosed as primary and secondary MGN. We analyzed basic characteristics of patients and performed immunohistochemical staining for PLA2R, IgG4, AR, and SOD.

Results: The PLA2R, IgG4, AR expressions were dominantly positive in primary MGN ($p < 0.05$, all of three). However, the SOD expression did not differ between primary and secondary MGN ($p = 0.686$). The sensitivity and specificity of the individual markers for detection of primary MGN were 81% and 86% for PLA2R, 76% and 87% for IgG4, and 72% and 60% for AR. There was no correlation between PLA2R, IgG4, AR, and SOD expressions and clinicopathologic parameters of primary MGN.

Conclusions: It could be considered that immunohistochemical staining of PLA2R and IgG4 could be useful clue to differentiate primary MGN from secondary MGN with high sensitivity and specificity.

Key Words: 막성신염, PLA2R, IgG4

Membranous glomerulus nephritis, PLA2R, IgG4