

E-BABE-Neutrophil Elastase is critical for glomerular filtration barrier injury in primary membranous nephropathy

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Abstract

At present clinical treatment of primary membranous nephropathy is still symptomatic, thus the curative effect is not sufficient, which is mainly due to the lack of understanding the mechanism of glomerular injury. The filtering barrier of the glomerulus consists of vascular endothelial cells, basement membranes and podocytes. Previous studies have focused on podocyte damages, but the mechanisms of vascular endothelial cells and basement membrane damage need to be further studied. Our previous research based on patients' renal punctures showed that the distribution density of neutrophil elastase in the glomeruli is closely related to the pathological stage of the disease; the glomerular vascular endothelial cells co-localized with this enzyme were obviously damaged (Endothelial cells lose normal morphology and impaired tight junctions), as well as degradation of basement membrane substances such as Collagen IV and Laminin $\beta 2$. This project aims to combine clinical patient samples and animal models, using laser confocal, flow cytometry, and in vitro cell culture experiments to reveal the role of neutrophil elastase in primary membranous nephropathy, to explore the mechanism of glomerular vascular endothelial cells and basement membrane damage, and further animal experiments will be conducted to evaluate taking neutrophil elastase as a therapeutic target protein in the treatment of primary membranous nephropathy.

journals and has been serving as an editorial board member of Youjiang Medical Journal

Speaker Publications:

Wang J (2017) Comprehensive Analysis of the Discordance of EGFR Mutation Status between Tumor Tissues and Matched Circulating Tumor DNA in Advanced Non-Small Cell Lung Cancer.



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Biography:

Jie Wang has completed his Master Degree at the age of 34 years from Guangxi Medical University. She is the director of Nephrosis Internal Department, a premier clinician and researcher. She has published more than 10 papers in reputed