

Review of: "The severity of glomerular endothelial cell injury is associated with infiltrating macrophage heterogeneity in endocapillary proliferative glomerulonephritis"

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Endocapillary proliferation is more common in nephritis, but studies about the relationship with its prognosis are few. This research is focusing on the link between endocapillary proliferation and prognoses, including 42 renal biopsy samples representing endocapillary proliferative lesions from poststreptococcal acute GN (PSAGN), Henoch-Schönlein purpura nephritis (HSPN), and lupus nephritis (LN). The further investigation found glomerular endothelial cell injury severity and infiltrating macrophage subtypes are associated with differences in the prognoses of various forms of GN with EP lesions. The number and frequency of CD163-positive cells (M2 macrophages) tended to be less severe in endothelial cell damage.

The conclusion of this research indicates that the severity of endothelial cell injury in GN depends on the disease and may be dictated by the different phenotypes of infiltrating cells. However, there are some points that I am interested in and confused.

PSAGN is an IC-type nephritis like HSPN and LN, progressing through a transient course with good prognosis in most pediatric cases. In this study, the result showed the number of CD34-positive endothelial cells and cells double-positive for CD34 and Ki67 increased, the latter indicating that they may be undergoing angiogenesis, which is the evidence of repair after injury and the reason for a better prognosis in PSAGN cases. However, the renal biopsy of PSAGN enrolled in the study did not include cases with crescent formation, which always had bad outcome in our experience. My interest is in the point whether endothelial cell damage and infiltrating macrophage subtypes in the cases of endocapillary proliferative lesions accompanied by crescent formation was closer to the PSAGN or the HSPN and LN cases enrolled in the study. This answer may be valuable for trying to find markers that can predict prognosis in some PSAGN.