Clinical Vignette

Leukocytoclastic vasculitis and subacute bacterial endocarditis

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A 68-year-old woman with moderate chronic renal insufficiency and type II diabetes mellitus presented with acute coronary syndrome and acute pulmonary edema. She received coronary artery bypass surgery and valvuloplasty for mitral regurgitation. She developed diffuse vasculitic rash over thighs (Panel A), antecubital fossae and palms 18 days after the operation. Her renal function deteriorated and required temporary hemodialysis support. Skin biopsy showed leukocytoclastic vasculitis. Renal biopsy revealed diabetic glomerulosclerosis. Glomerular endocapillary proliferation was noted. Clumps of neutrophils were identified within the capillary lumen (Panel B). Abundant neutrophils were found within the vessels with spillage into the interstitium (Panel C). Echocardiogram showed degenerative aortic valve with vegetation and confirmed the diagnosis of infective endocarditis. Her renal function improved after antibiotics. However, she died of congestive heart failure and ischemic cardiomyopathy 6 weeks after development of vasculitic rash.

Panel A. Diffuse vasculitic rash over thighs.
**Panel B.** Top photo: Sclerosed glomerulus showing hyaline arteriolosclerosis involving both the afferent and efferent arterioles (arrows). H&E stain 400x.
Bottom photo: Glomerulus showing global endocapillary proliferation. Clumps of neutrophils are identified within the capillary lumen (arrows). H&E stain 400x.

**Panel C.** The interstitium shows patchy inflammatory infiltrates, predominately neutrophils, and occasional lymphocytes. Abundant polymorphs are found within the vessels with spillage into the interstitium (arrows). H&E stain 400x.