In central serous chorioretinopathy (CSC), the macula is detached because of fluid leakage at the level of the retinal pigment epithelium. The fluid appears to originate from choroidal vascular hyperpermeability, but the etiology for the fluid is controversial. The choroidal vascular findings as elucidated by recent optical coherence tomography (OCT) and wide-field indocyanine green (ICG) angiographic evaluation show eyes with CSC have many of the same venous patterns that are found in eyes following occlusion of the vortex veins or carotid cavernous sinus fistulas (CCSF). The eyes show delayed choroidal filling, dilated veins, intervortex venous anastomoses, and choroidal vascular hyperpermeability. While patients with occlusion of the vortex veins or CCSF have extraocular abnormalities accounting for the venous outflow problems, eyes with CSC appear to have venous outflow abnormalities as an intrinsic phenomenon. Similar choroidal vascular abnormalities have been found in peripapillary pachychoroid syndrome. However, peripapillary pachychoroid syndrome has intervortex venous anastomoses located in the peripapillary region while in CSC these are seen to be located in the macular region. Spaceflight associated neuro-ocular syndrome appears to share many of the pathophysiologic problems of abnormal venous outflow from the choroid along with a host of associated abnormalities. These diseases vary according to their underlying etiologies but are linked by the venous decompensation in the choroid that leads to significant vision loss. Choroidal venous overload provides a unifying concept and theory for an improved understanding of the pathophysiology and classification of a group of diseases to a greater extent than previous proposals.