Special Issue

Vascular Malformation: From Pathophysiology, Clinical Manifestations to Novel Therapeutic Approaches

Message from the Guest Editors

Arteriovenous malformations (AVMs) are active angiogenic lesions consisting of tangles of abnormal vessels shunting blood directly from arteries to veins without a true capillary bed. The mechanism of AVM formation is not fully understood. Recent studies identified somatic mutations in genes in RAS-MAPK pathway in sporadic bAVMs and peripheral AVMs. However, the significance of these genes in AVM development needs to be studied further. The existing treatment modalities for AVM have considerable adverse effects. With the advance of imaging techniques, more asymptomatic AVM patients will be diagnosed. The treatment of asymptomatic patients has become increasingly controversial because the natural history of these patients may be less morbid than invasive therapy. Therefore, uncovering AVM pathogenesis and identifying targets for the development of specific medical therapies are urgently needed. This Special Issue focuses on the research topic of molecular mechanisms underlying AVM development and progression, clinical management, and targets for the development of new therapies. We welcome both original research and review manuscripts.

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