"Spreading depolarizations in stroke: causes and consequences"

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Research Abstract
Spreading depolarizations (SDs) are depolarization waves that originate within injured brain tissue and propagate slowly throughout and beyond in a manner similar to the spreading depressions first described by Leão. Recent data suggest that in the setting of ischemic stroke, supply-demand mismatch transients within metastable peri-infarct hot zones trigger SDs. Once triggered, they contribute to infarct growth by imposing a heavy metabolic burden and decreasing blood supply via vasoconstriction. Unequivocal demonstration of SDs in human stroke has recently put SDs under the spotlight as a novel clinical target to minimize infarct growth in acute brain injury and stroke.

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