S47-3 Protective effects of cilostazol, an antiplatelet drug, on infarction and hemorrhagic transformation after ischemia

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Cilostazol, an antiplatelet drug used to treat intermittent claudication, has been reported to offer neuroprotection and endothelial protection in animals with ischemic brain injury. Here, we evaluated the protection afforded by cilostazol against ischemic brain injury and hemorrhagic transformation. Mice subjected to a 2-h filamental middle cerebral artery (MCA) occlusion were treated with cilostazol (10 mg/kg, intraperitoneally just after the occlusion) or with vehicle. Histological outcomes (infarct volume and hemorrhagic transformation) and Evans blue extravasation were assessed after reperfusion. Mean infarct volume, hemorrhagic transformation, and Evans blue extravasation were all significantly reduced in the cilostazol-treated group. Thus, cilostazol protected against ischemic brain injury and hemorrhagic transformation in mice subjected to transient focal cerebral ischemia.