Platelet inhibition

Insufficient platelet inhibition has been associated with an increased incidence of thromboembolic complications in cardiology patients undergoing percutaneous coronary intervention.

Data regarding the relationship between insufficient platelet inhibition and thromboembolic complications in patients undergoing neurovascular surgery remain controversial.

Optimal platelet inhibition is an important therapeutic adjunct in patients with carotid artery stenosis undergoing carotid artery stenting (CAS).

Clopidogrel resistance is associated with increased periprocedural thromboembolic complications from neurovascular stent placement procedures. The addition of cilostazol to dual antiplatelet therapy (DAT) has been reported to reduce platelet reactivity and to improve clinical outcomes after percutaneous coronary intervention.

Adjunctive cilostazol (triple antiplatelet therapy) in clopidogrel-resistant patients reduces the rate of clopidogrel resistance and suppresses new ischemic lesions without hemorrhagic complications, as compared with standard DAT. Antiplatelet management based on the evaluation of antiplatelet resistance would be required for prevention of perioperative thromboembolic complications in CAS [1].

1)
Nakagawa I, Wada T, Park HS, Nishimura F, Yamada S, Nakagawa H, Kichikawa K, Nakase H. Platelet inhibition by adjunctive cilostazol suppresses the frequency of cerebral ischemic lesions after carotid artery stenting in patients with carotid artery stenosis. J Vasc Surg. 2013 Nov 14. pii: S0741-5214(13)01702-3. doi: 10.1016/j.jvs.2013.09.011. [Epub ahead of print] PubMed PMID: 24239116.