

Dear Sir,

Anticoagulation, antiplatelets and ocular haemorrhage

Many internists and ophthalmologists alike are uncertain of the significance of antiplatelet drugs and systemic anticoagulation therapy side-effects in patients with ocular neovascularisation. While controversies still exists regarding the safety of these drugs with regard to risks of ocular haemorrhage, recent reports had help to clarify some of these issues.

The early treatment in diabetic retinopathy study⁽¹⁾ had shown that aspirin in cardiovascular diseases prophylaxis doses did not affect the severity or the duration of vitreous/preretinal haemorrhages significantly in diabetic patients, when compared to patient who had placebo. In patients requiring antiplatelet therapy, proliferative diabetic retinopathy is not a contraindication.

However, in patients who were to commence systemic anticoagulation treatment with warfarin or heparin, an ocular consultation should be sought as systemic anticoagulation can increase the risk of bleeding in patients with neovascularisation. While no figures were available in the literature regarding relative risks of severe bleeding in patients with proliferative diabetic retinopathy who had systemic anticoagulation, many reports of severe vitreous haemorrhage in patients with age-related macular degeneration with choroidal neovascularisation were available^(2,3). In view of the abnormal fragility of retinal new vessels, it is likely that similar haemorrhagic risks seen in choroidal neovascularisation apply to diabetic neovascularisation as well. Not surprisingly, occasional spontaneous ocular bleeding such as subconjunctival haemorrhage, lacrimal duct bleeding and hyphema were encountered in patients receiving long term systemic anticoagulation with warfarin⁽⁴⁾. On the balance, however, with the proviso that patients at risks such as those with proliferative diabetic retinopathy and age-related macular degeneration were jointly managed by the internists and ophthalmologist, there is no ocular contraindications for the use of systemic anticoagulation.

The incidence of sight threatening complications in patients who underwent ocular surgery such as cataract surgery who received long term systemic anticoagulation therapy with warfarin was not significantly different from patients who were not on such treatment^(5,6). Furthermore, no differences in major haemorrhagic events were noted among patients who had their anticoagulation treatment stopped in the perioperative period

for ocular surgery when compared to patients who did not stop therapy⁽⁶⁾. However, the risks of minor bleeding were higher in both these patient groups when compared to match-controlled patients. Nevertheless, occasional serious ocular complication had been reported regarding aspirin treatment in patients undergoing vitreoretinal surgery⁽⁷⁾. Prudence must be exercised when patients are to undergo posterior segment or oculoplastic surgery. Lastly, it is noteworthy that aspirin therapy did not seem to have effect on rebleeding tendency in patients with hyphema secondary to ocular trauma⁽⁸⁾.

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