

To Aspirin, to Clopidogrel or to Both for Preoperative CAS?

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This issue of the AMM harbors a study on postoperative cervical hematoma to patients who underwent carotid surgery. It is an observational retrospective study on 100 consecutive patients operated on during the last two years (2009–2011) in the Clinic of Cardiovascular Surgery of the local county emergency hospital. That is, after the publication of the ESVS Guidelines on invasive treatment for carotid stenosis, stating among others, that the only RCT on dual antiplatelet treatment in CAS (carotid artery stenosis) "was found to be associated with a significant reduction in the neurological complication rates (25% vs. 0%) without an additional increase in bleeding complications" [1,2].

Speculating on the opinion suggesting that "dual preoperative antiplatelet therapy would be more efficient than monoantiplatelet treatment in preventing perioperative ischemic events", the authors aimed at evaluating this by trying to find correlations between preoperative antiplatelet therapy and postoperative cervical hematoma [3,1,4].

They did this by dividing the patients into two groups: those on single antiplatelet drug – 48 patients (either aspirin 75–100 mg or clopidogrel 75 mg). The second group comprised patients on dual antiplatelet, that is on both drugs.

The groups compared were quite homogenous since there was no statistical difference as to their gender or age, but belonged to the age group considered to be at risk for postoperative hemorrhage. The dominant procedure was eversion endarterectomy, considered to be a lower risk procedure for bleeding. Overall, the patients on dual antiplatelet therapy bled more than those on a single drug. Statistical analysis showed that the chances for a patient on a single antiplatelet drug to develop cervical hematoma were significantly lower ($p=0.022$).

Only that there is no information as to the subgroup the patients belonged to. A previous study highlighted on the high risk patients, diabetics or having a history of cardiac surgery, who could benefit of extended dual antiplatelet therapy [4]. Moreover, "aspirin is recommended before carotid endarterectomy to reduce the risk of peri-operative coronary events and has not been found to increase the risk of bleeding" [5,6,7].

The study is not to be disregarded since it seems to be unprecedented in our surgical landscape, but there are some drawbacks:

1. it is a retrospective single center study;
2. the subgroup risks are not considered;
3. the authors did not study the link between the actual surgical procedure and bleeding for understandable reasons;
4. one can only speculate on the team of surgeons as to their uniform performance, since there is no information as to it;
5. the authors did not investigate the differences between aspirin and clopidogrel postoperative bleeding complications in the single antiplatelet group.

I remember that in my tender age, when studying French, my teacher used to redden my homework and then with a smile, she uttered: very good, you improved your French.

This is the message I want to send to the readers. Do not be very harsh on a study ran on postoperative CAS surgery complications. It is just the beginning of a long, we hope, prospective story of research on the topic.

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