Carotid dissection: should anticoagulants be used?

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Abstract

Point of view: Yes

Carotid dissection is a frequent cause of stroke in the young adult, often producing devastating deficits. After the acute phase, recurrence of dissection and of stroke is rare. Anticoagulants, antiplatelet drugs and less often endovascular interventions or vascular surgery are used to reduce the risk of recurrence. Until recently, anticoagulation was the most used preventive treatment. Two dangers of anticoagulation are often feared: enlargement of the intramural hematoma and severe intracranial or systemic bleeding. There is no evidence from serial imaging and clinical studies that anticoagulation causes increase in size of the intramural hematoma. Two systematic reviews did not find any difference on the comparative efficacy of anticoagulants and antiplatelets to prevent recurrent strokes. A recent RCT—CADISS—found no difference in efficacy of antiplatelet and anticoagulant drugs at preventing stroke and death in patients with symptomatic carotid and vertebral artery dissection but stroke was rare in both groups, and much rarer than reported in some observational studies. The study has however several methodological limitations, including being a feasibility trial not reaching the target no of inclusions, having a lower than expected no of endpoints, the diagnosis of dissection was not confirmed after review in many cases and several non-included patients meet inclusion criteria for randomization. The risk of bleeding with anticoagulants is overestimated in patients with dissection. Patient with dissection are younger and healthier and the period of anticoagulation is shorter than in elderly patients with AF.