Letter by Gallerini et al Regarding Article, “Characteristics and Outcomes of Patients With Multiple Cervical Artery Dissection”

To the Editor:

We read with great interest the study of Bejot et al evaluating the characteristics and outcomes of patients with single and multiple cervical artery dissection (CeAD). In particular, good outcome (with only 12% of moderate-to-severe handicap at 3 months and none had died) was observed irrespectively of single or multiple vessel involvement. As major ischemic stroke because of artery-to-artery embolism is reasonably the main cause of disability in such patients and its prevention with antithrombotic therapy is considered effective, early diagnosis of dissection plays a key role to administer proper therapy, to prevent major stroke, and to reduce long-term disability. Thus an efficient and homogeneous diagnostic workup might contribute to explain the good outcome reported in both groups of patients with CeAD.

This issue seems particularly relevant in patients presenting with mild symptoms (such as cervical pain, headache, dizziness, cranial nerve involvement, Horner syndrome, or slight focal signs, especially when isolated and transient) but, as correctly stated, has probably been understimated in the article by Bejot et al, who recruited cases through neurology departments, mostly in tertiary centers.

To elucidate this issue, we considered 18 consecutive patients with spontaneous CeAD presenting with mild symptoms (men, 8; women, 10; mean age, 54 years old; range, 31–87). Among 22 dissected arteries, 15 vertebral and 7 carotid were considered; CeAD was single in 14 cases, multiple in 4 cases. The symptoms were isolated pain, isolated dizziness, isolated lower cranial nerve involvement, Horner syndrome, or slight focal signs, especially when isolated and transient) but, as correctly stated, has probably been understimated in the article by Bejot et al, who recruited cases through neurology departments, mostly in tertiary centers.

Among 22 dissected arteries, 15 vertebral and 7 carotid were considered; CeAD was single in 14 cases, multiple in 4 cases. The symptoms were isolated pain, isolated dizziness, isolated lower cranial nerve involvement, or mild and transitory focal signs. An extensive neurovascular evaluation, including neurological examination, cranial computed tomography or MRI scan, duplex scan of cervical arteries, and transcranial Doppler, computed tomographic angiography, was performed within 24 hours since arrival at emergency department. CeAD was defined by the presence of a mural hematoma, aneurismal dilatation, long tapering stenosis, intimal flap, or double lumen. Only 5 patients were shown to have brain infarction on neuroimaging. After diagnosis of dissection, patients were admitted to the Neurovascular Unit and treatment with anticoagulant or antiplatelet was promptly started.

Outcome was evaluated at 3 months with modified Rankin Scale. All patients presented a score <2; none died. None experienced recurrence of CeAD. No differences were seen between single and multiple CeADs. Of note, in 2 additional patients presenting with severe stroke because of unilateral carotid dissection (who developed massive brain infarction), accurate past medical history revealed neglected symptoms of dissection (cervical pain) in the week before admission.

Results from our case series support the hypothesis that early treatment may have a dramatic effect in risk reduction of death and disability (because of major stroke occurrence) in patients presenting with mild, nondisabling symptoms of dissection. Further study with larger groups of patients are needed to validate this observation.

Disclosures

None.

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References

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