Chiropraxy: friend or foe?

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Abstract

Cervical trauma is a well-established cause for extracranial arterial dissection. However, there is a paucity of studies characterizing the type and intensity of trauma. A 40-year-old female presented to an outside hospital with complaints of right-sided weakness and paraesthesia. While at the emergency department she developed tetraparesis, nystagmus and anaesthesia. Previous history was unremarkable except for a session of chiropractic cervical manipulation that she had 1 hour before the first symptoms appear.

CT had no lesions and CTA revealed an occlusive thrombus on the basilar artery. She was started on alteplase and transferred to our tertiary hospital for endovascular treatment. Angiography confirmed an occlusion of the basilar artery and showed a dissection of the left vertebral artery. Thrombectomy was performed with complete recanalization. She was admitted to the ICU and quickly extubated. In the next day, she had a complete recovery of her symptoms, remaining only a flattened nasolabial fold (NIHSS 1). MRI showed a small ischemic lesion of the pons. At discharge, she was started on antiplatelet therapy and patency of the vertebral and basilar arteries were demonstrated on doppler ultrasound. We have seen an increase in cervical artery dissections, in relation to recent chiropractic manipulations, affecting young patients with no other risk factors for cerebrovascular disease or concurrent history of trauma. As in our case, cervical dissection might be life-threatening, especially in the posterior circulation, raising the question if preventive measures and information about the dangers of chiropraxy should be targeted to the general population, as this practice becomes more common in our country.