

CAT- Jamie Bonner- Block 12, May 17th, 2017

Cervical Artery Dissection in Patients \geq 60 years: Often painless, few mechanical triggers.

Neurology. 2017 Mar 3. pii: 10.1212/WNL.0000000000003788. doi: 10.1212/WNL.0000000000003788. [Epub ahead of print] Traenka C, Dougoud D, Simonetti BG, Metso TM, Debette S, Pezzini A, Kloss M, Grond-Ginsbach C, Majersik JJ, Worrall BB, Leys D, Baumgartner R, Caso V, Bejot Y, Compter A, Reiner P, Thijs V, Southland AM, Bersano A, Brandt T, Gensicke H, Touze E, Martin JJ, Chabriat H, Tatlisumak T, Lyrer P, Arnold M, Engelter ST, CASISP-Plus Study Group

Question: In a cohort study the frequency and type of characteristics (presenting symptoms, risk factors and outcome) of patients diagnosed with cervical artery dissection were analyzed based on age, less than or equal and greater to 60 years old. The goal was to compare and contrast symptoms and outcomes to determine if age plays a role in presenting symptoms.

Background: Symptoms of cervical artery dissection include headache, unilateral neurological deficits, brain stem or cerebellar ischemic symptoms such as vertigo, vomiting, or nystagmus, even neck pain or migraine. This etiology is often related to trauma but often times the trauma is so indiscrete it often can't be remembered or is not severe enough to stick out as a traumatic event. So this study set out to see if age played a role in presenting symptoms, or lack thereof.

Methods: Data from 3 large cohorts of patients diagnosed with cervical artery dissection were dichotomized into two groups, age \geq 60 and $<$ 60 years. Clinical characteristics, risk factors, vascular features, and 3-month outcome between groups were compared. First the authors performed a combined analysis of pooled individual patient data then a secondary analysis was done within each cohort and across cohorts. Crude and adjusted odds ratios were calculated.

Results: 2,391 patients were identified with the diagnosis of cervical artery dissection, 177 of which were \geq 60 years old. In this age group cervical pain (adjusted OR 0.47 [0.33-0.66]), headache (adjusted OR 0.58 [0.42-0.79]), mechanical trigger events (adjusted OR 0.53 [0.36-0.77]) and migraine (adjusted OR 0.58 [0.39-0.85]) were less frequent than in the cohort of younger patients. As suspected hypercholesterolemia (adjusted OR 1.52 [1.1-2.10]) and hypertension (adjusted OR 3.08 [2.25-4.22]) were more frequent in older patients. The older age group had less favorable outcomes shown by a modified Rankin Scale score 0-2.

Bottom line: In patients over the age of 60 pain and mechanical trigger for cervical artery dissection were more often missing in the at risk age group over 60. Think about cervical artery dissection in patients over 60 even if they lack some of the usual signs and symptoms such as mechanical trigger, migraine or neck pain but has over symptoms that are concerning, keep Cervical Artery Dissection in your differential diagnosis.
