



The Evidence Based
CHIROPRACTOR

A risk-benefit assessment strategy to exclude cervical artery dissection in spinal manual-therapy: a comprehensive review

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Cervical artery dissection (CAD) occurs when a tear in the internal carotid or vertebral artery results in an intradural hematoma or aneurysmal dilatation. The incidence of CAD is extremely low at less than 3/100,000 people per year; however, the possible correlation with manual therapy has not been well understood.

This new comprehensive review, published by the Annals of Internal Medicine, provides a thorough background on the pathophysiology of CAD. Additionally, they outline a step-by-step assessment strategy to help clinicians identify patients with a high risk of CAD.

The researchers involved in this study concurred with previous research which showed the risk of CAD is no higher for patients visiting a primary care physician than those who visit a chiropractor. As such, there is no established causation between cervical spine manipulation and an increased risk of CAD.

We believe the assessment strategy provided in this paper is a fantastic tool for all healthcare providers to better identify individuals who may be at risk of CAD and make the appropriate referrals as needed.

"The World Health Organization regards manual mobilization and/or spinal manipulative treatment conducted by chiropractors to be a safe and effective treatment with few, mild, transient AE's..."

"...several extensive cohort studies and meta-analyses have found no excess risk of CAD resulting in secondary ischemic stroke for chiropractic SMT compared to primary care follow-up."

"History taking, especially regarding the time of symptom onset, is the single most important factor for detecting subtle symptoms of CAD..."

Environmental Risks for CAD

recent acute infection
pulsating tinnitus
vitamin deficiency
low body mass index
low cholesterol
smoking

Inherited Risks for CAD

medical history of arterial anomalies
fibromuscular dysplasia
connective tissue disorders
history of cervical artery dissection

2 or more distinct symptoms should warrant referral for potential medical emergency

recent head, neck, or thoracic trauma
new ipsilateral peri-orbital, frontal, upper neck, sub-occipital neck pain
distinct, new and continued headache
partial Horner's syndrome
Retinal, cerebral, brainstem, or cerebellar ischemic symptoms