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Letter To Editor *Volume 6 Issue 2*

Intracranial Artery Dissection in Young: Are we on the Right Path?

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Dear Editor,

Almost 40% of strokes in young patients are considered cryptogenic, and because we cannot determine the exact stroke etiology, the best stroke management cannot be provided to all. Therefore, we should make every effort to identify the etiology of stroke to provide appropriate treatment. Intracranial arterial dissection is probably a stroke pathology that is not uncommon in young people and often missed (cervicocerebral dissections were noted in nearly 20% of ischemic strokes in young people) [1].

In young patients, approximately 25% of intracranial stenosis is attributable to intracranial dissection (IAD), particularly in the Asian population, among whom 78% of cervicocerebral dissections were intracranial [2].

IAD patients have poorer outcomes compared to extracranial cervical artery dissections. IAD, if missed, may have a catastrophic consequence in the first presentation itself or on recurrence (symptomatic recurrence in 33%, which may be early or late) [3].

Interestingly, being a dynamic process, in 18.3 percent of cases, the dissection may completely normalize in the next couple of weeks. So proper radiological evaluation with a high degree of suspicion is required during the initial presentation; otherwise, the important stroke etiology will remain unknown.

All young patients with new-onset moderate-to-severe headaches with or without focal deficits, with or without a history of precipitating factors (like trauma), should undergo brain imaging. Now, the classic findings of IAD-intramural hematoma, intimal flap, double lumen (important in differentiation from atherosclerotic diseases), and crescent sign-are best determined with MRA brain with contrast and vessel wall imaging. MRI scores over CT scans in diagnosing small strokes, ruling out other differentials of headache, determining the exact extent and severity of the dissection, and detailing a dissecting aneurysm and accumulated thrombi inside it. IAD in adults is three times more common in posterior circulation compared to anterior circulation, in which case a CT angiogram may miss the pathology because of bony artifacts [4].

We need to make sure we are not missing dissections in other portions of the intracranial or extracranial vasculature as well (the index trauma may precipitate). If unwarned, the susceptible person may suffer again in the background of undiagnosed collagen vascular disease or acquired reasons like repeated straining or sporting activity, thereby precipitating the causal trauma.

Thus, early identification of IAD is important for: 1. Therapeutic purpose: for example, a timely stent placement may promote neointima formation and prevent rebleeding in the acute stage. 2. Reduce future morbidity or mortality by preventing recurrent attacks.

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