Could atrial fibrillation males really rest easy with a CHA2DS2-VASc score of 0?

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Introduction: Atrial fibrillation (AF) significantly increases the risk of ischemic stroke depending on various risk factors. The CHA2DS2-VASc score is used widely to improve stratification of AF-related stroke to identify for whom anticoagulation could be safely withheld. As upstream therapy, the management of lifestyle for AF and related stroke prevention has been ongoing for past decades.

Methods: A 56-year-old male was taken to our hospital because of acute ischemic stroke. Without intracranial vascular malformation and angiostenosis, two small emboli were successfully taken out from the left middle cerebral artery by mechanical thrombectomy. During the hospitalisation, no apparent abnormalities were found in various laboratory tests, echocardiogram or the coronary computed tomography angiography.

Result: However, asymptomatic paroxysmal AF was first diagnosed and was presumed to be responsible for his stroke. Noticeable, he was always in good fitness benefiting from the formed good habits of no smoking and drinking. With a CHA2DS2-VASc score of 0, he had no history of any known diseases or risk factors associated with AF and related stroke. Instead of lacking exercise, he persisted in playing table tennis faithfully 3–4 times a week and 2–3 hours each time over the past 30 years, and, in fact, has won several amateur table tennis championships.

Conclusion: In view of the possible pathophysiological mechanisms resulting from the long-term vigorous endurance exercise, it may be a potential risk factor for developing AF and even for subsequent stroke. Not merely should strengthen the screening for AF in specific individuals as sports enthusiasts, but the necessity of oral anticoagulant for those with a CHA2DS2-VASc score of 0 might deserve the further investigation.