

Problem: Ischemic Stroke in the young adults is a real public health problem because of its impact on cognitive and socio-economic prognosis.

Aim of study: To study risk factors, specific etiology of ischemic stroke in a young Tunisian population.

Materials and methods: This is a retrospective study included all patients aged 18–50 years admitted to our department of neurology between January 2015 and March 2020 with either an arterial ischemic stroke (IS) or transient ischemic attack (TIA). Clinical information was collected through a systematic review of medical records. Risk factors were registered and analyzed. A cardiac assessment was performed. All patients were investigated using a standard protocol tests. Additional investigations were carried out at the discretion of the treating physician. The cause of ischemic stroke was classified according to the TOAST criteria.

Results: We collated 200 patients with IS. The mean age was 41.37 years \pm 6.99. Smoking, high blood pressure, diabetes and dyslipidemia were each present in more than ¼ patients. A definite cause of stroke could be identified in 120 patients (60%). The cardio embolic causes were the most common among our patients (19% of the cases) followed by atherosclerosis of the large arteries. A large-artery atherosclerosis was detected in (11,5%). Small vessel disease was incriminated in 2%. Other determined etiologies were found in (27,5%) of patients. The etiology remained undetermined despite complete investigation in 17,5 %. Undetermined and incompletely investigated were retained in 14.5 % and more than one potential pathomechanisms were noted in 8%.

Conclusion: We demonstrated through this study the diversity of etiology in young stroke in a Tunisian population with high rates of traditional risk factors at an earlier age due to lifestyle change.