

The frequency rate of cardioembolic etiology in North American and Iranian stroke patients: A pilot double-center study

Ghandehari, K.^a, Shuaib, A.^b, Ardalani, G.F.^a

^a Department of Neurology, Faculty of Medicine, **Mashhad University of Medical Sciences**, Ahmadabad Street, **Mashhad**, Iran

^b Department of Neurology, Faculty of Medicine and Dentistry, **University of Alberta**, Edmonton, AB, Canada

[View references \(16\)](#)

Abstract

Background: Cardioembolism is among the most important causes of ischemic stroke around the world. A pilot double-center study evaluated the subtypes of cardioembolic mechanisms in stroke patients in two different racial subtypes. Methods: This prospective clinical study was conducted on 100 stroke patients in Mackenzie Hospital in Canada and 100 stroke patients who were age and sex matched in Ghaem Hospital in Mashhad, Iran in 2007. All of the Canadian patients were of white North American race and all of the Iranian ones of white Persian race. The diagnosis of ischemic stroke was made by stroke neurologists. Assessment of the cardioembolic mechanisms was made based on the standard method. The frequency of ischemic heart disease, congestive heart failure and atrial fibrillation was detected in the two studied groups. Results: 92 males and 108 females with ischemic stroke were studied. The influence of race on the frequency rate of ischemic heart disease, congestive heart failure and atrial fibrillation was not significant. However, rheumatic mitral valve disease was significantly more frequent among the Iranian group. The effect of race on the frequency rate of other cardioembolic mechanisms was not significant in each gender separately. However, atrial fibrillation was significantly more frequent in Canadian females. Conclusions: There was no significant difference in the frequency rate of cardioembolic mechanisms between North American and Persian stroke patients except for rheumatic mitral valve disease. ©Iranian Red Crescent Society.

Reaxys Database Information

Author keywords

Canada; Cardioembolism; Iran; Race; Stroke

Indexed Keywords

EMTREE medical terms: aged; article; Canada; Caucasian; cerebrovascular accident; clinical assessment; clinical study; congestive heart failure; controlled study; disease classification; embolism; female; heart atrium fibrillation; heart embolism; human; incidence; Iran; ischemic heart disease; major clinical study; male; mitral valve disease; North America; pilot study; prospective study; race difference; rheumatic heart disease; sex difference; stroke patient

ISSN: 1061-4390 **Source Type:** Journal **Original language:** English

Document Type: Article