Etiologic Subtypes, Prevalence and Prognosis of Acute Ischemic Stroke in Female

M.H. Sorgun, E. Aslanbaba, Z. Özaydin Aksun, T. Allahverdi, O. Bulut, S. Erdoğan, T. Karaaslan, A. Nadirova, B. Olmez, C. Onder, T. Sahin, E. Yalap, Z. Yavuz, A.Y. Yilmaz, C. Togay Isikay

Ankara Univesity Medical School, Neurology, Ankara, Turkey.

Background and Aims:

The majority of strokes occur in women have poorer outcome including higher mortality from stroke than men. The aim of this study was to determine the etiologic subtypes, risk factors, prevalence and prognosis of acute ischemic stroke in female.

Methods:

We reviewed the charts of 957 patients who were admitted with acute ischemic stroke between the dates January 2011 and May 2017. The demographic data, NIHSS scores at admission and mRS in follow-up period were recorded. We determined etiologic stroke subtypes using the automated Causative Classification System (CCS).

Results:

A total of 432 (45.1%) patients with female (mean age 71.2±14.7 [21-100] years) and 525 (54.9%) patients with male (mean age 67.2±12.9 [25-103] years) were included in the study. Females were older than males (p<0.001). AF and CHF were more common in female (p<0.001). Otherwise, CAD was more common in male (p<0.001). There were 75 (17.4%) patients with large-artery atherosclerosis, 209 (48.4%) patients with cardioaortic embolism, 23 (5.3%) patients with small artery occlusion and 31 (7.2%) patients with other causes, according to the CCS. Ninety-four (21.8%) patients remained undetermined. Admission NIHSS and follow up mRS were higher in patients with female than others (p<0.05). On logistic regression analysis, AF and CAD were significantly associated with patients with female (p<0.05).

Conclusions:

Acute ischemic stroke in female was 45.1 % in our registry. AF was more common in female. It was concluded that female gender was not an independent factor for poor outcome.

Table. Epidemiologic and clinical characteristics of patients in female and male

	Female n=432	Male n=525	P
Age, year, *Mean±SD*	71.2±14.7	67.2±12.9	**0.001**
Medical history			
- Hypertension, *n(%)*	317(73.4)	361(68.8)	0.118
- Diabetes mellitus, *n(%)*	137(31.7)	168(32)	0.924
- Atrial fibrillation, *n(%)*	112(25.9)	55(10.5)	**<0.01**
- Hyperlipidemia, *n(%)*	88(20.4)	132(25.1)	0.081
- CAD, *n(%)*	80(18.5)	160(30.5)	**<0.01**
- CHF, *n(%)*	65(43)	43(8.2)	**0.001**
- Previous TIA history, *n(%)*	33(7.6)	48(9.1)	0.406
- Previous stroke history, *n(%)*	73(16.9)	112(21.3)	0.084
CRP, mg/l	25.01±40.68	27.52±50.14	0.170
Admission NIHSS, *Mean±SD (Min-Max)*	6.5±4.9 (0-26)	5.4±4.7 (0-26)	**<0.01**
Follow up mRS, *Mean±SD (Min-Max)*	2.5±2.3 (0-6)	2±2.2 (0-6)	**0.034**
Recurrent stroke, *n(%)*	37 (8.6)	56 (10.7)	0.271

SD; Standard Deviation, CAD; Coronary Artery Disease, CHF; Congestive heart failure, TIA; transient ischemic attack

References:

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