

뇌신경재활

발표일시 및 장소 : 10 월 18 일(금) 13:55-14:05 Room B(5F)

OP2-1-5

Are Long-term Functional Outcomes of Ischemic and Hemorrhagic Stroke Different by Sex?

Sang Moon Yun^{1*}, Min Kyun Sohn², Jongmin Lee³, Deog Yung Kim⁴, Sam-Gyu Lee⁵, Yong-il Shin⁶, Yang-Soo Lee⁷, Min Cheol Joo⁸, Gyung-Jae Oh⁹, Lee Young-Hoon⁸, Jun Hee Han¹⁰, Jeonghoon Ahn¹¹, Won Hyuk Chang¹, Sung Hyun Kang¹², Young Taek Kim¹³, Yun-Hee Kim^{1,14†}

Samsung Medical Center, Sungkyunkwan University School of Medicine, Department of Physical and Rehabilitation Medicine, Center for Prevention and Rehabilitation, Heart Vascular Stroke Institute¹, Chungnam National University School of Medicine, Department of Rehabilitation Medicine², Konkuk University School of Medicine, Department of Rehabilitation Medicine³, Yonsei University College of Medicine, Department and Research Institute of Rehabilitation Medicine⁴, Chonnam National University Medical School, Department of Physical and Rehabilitation Medicine⁵, Pusan National University School of Medicine, Pusan National University Yangsan Hospital, Department of Rehabilitation Medicine⁶, Kyungpook National University School of Medicine, Kyungpook National University Hospital, Department of Rehabilitation Medicine⁷, Wonkwang University, School of Medicine, Department of Preventive Medicine⁸, Wonkwang University School of Medicine, Department of Rehabilitation Medicine⁹, Hallym University, Department of Statistics¹⁰, Ewha Womans University, Department of Health Convergence¹¹, Korea Centers for Disease Control and Prevention, Division of Chronic Disease Prevention, Center for Disease¹², Korea Centers for Disease Control and Prevention, Division of Chronic Disease Control, Center for Disease Prevention¹³, SAIHST, Sungkyunkwan University, Department of Health Sciences and Technology, Department of Medical Device Management & Research, Department of Digital Health¹⁴

Background and Purpose

Although there have been a number of studies on sex differences in strokes worldwide, few studies have been conducted in Korea. The objective of this study was to investigate differences of functional recovery pattern between men and women and identify the factors associated with functional recovery pattern according to sex in ischemic and hemorrhagic stroke patients.

Methods

This study was an interim analysis of the Korean Stroke Cohort for Functioning and Rehabilitation (KOSCO) designed as 10 years long-term follow-up study of first-ever stroke patients. We analyzed 10,636 stroke patients to investigate differences in demographics and clinical features between male and female stroke patients. Longitudinal follow up data

as assessed by the Korean-Modified Barthel Index (K-MBI), Fugl-Meyer Assessment (FMA), Functional Ambulation Category (FAC), American Speech-Language-Hearing Association-National Outcomes Measurement System (ASHA-NOMS), Korean version of Frenchay Aphasia Screening Test (K-FAST) up to 24 months after stroke onset were analyzed to identify differences in recovery patterns and factors associated with functional recovery according to sex in ischemic and hemorrhagic stroke, respectively.

Results

Out of total 10,636 stroke patients (8,210 ischemic stroke and 2,426 hemorrhagic stroke), female patients showed significantly older age, lower education level, lower body mass index, higher co-morbidity, and higher initial NIHSS scores compared with male patients. After adjustments for these factors, up to 24 months after stroke onset, female ischemic stroke patients demonstrated poorer functional outcome in FAC, K-MMSE, K-FAST, and K-MBI at 24 months than male. In the other hand, for hemorrhagic stroke patients, multi-facet functional outcomes were poorer in female patients in ASHA-NOMS, K-MMSE, and K-FAST at 24 months than male.

Conclusions

These results revealed that there are sex-specific differences in multi-facet functional recoveries in both ischemic and hemorrhagic stroke patients. The results of this study could provide more specific information for establishing the stroke rehabilitation strategy according to sex.

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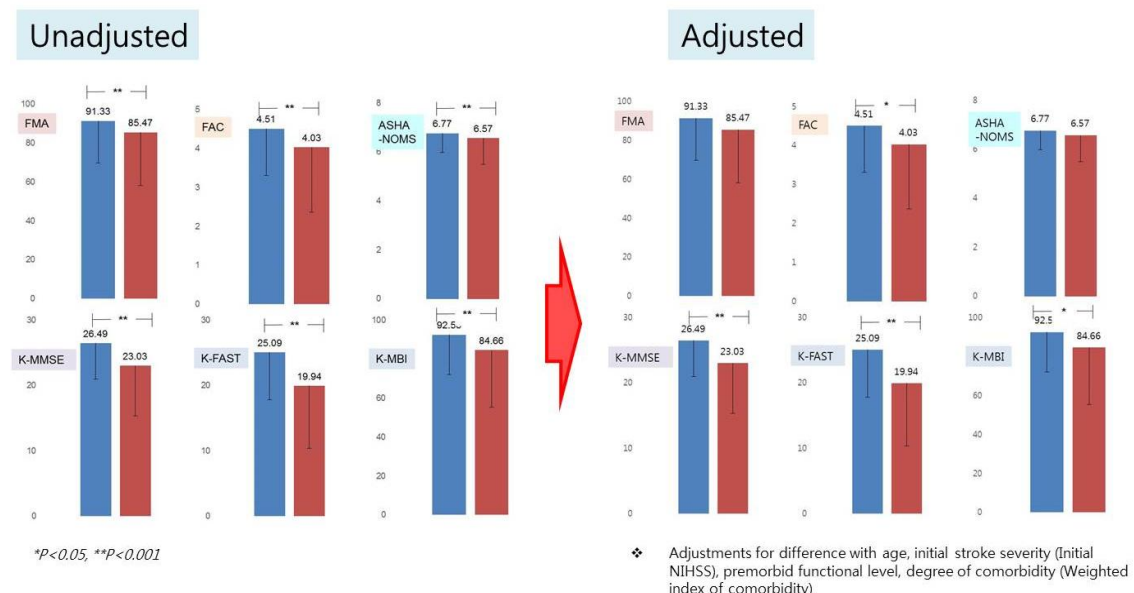


Figure 1. Sex Differences in Functional Impairment at 24 months after Ischemic Stroke

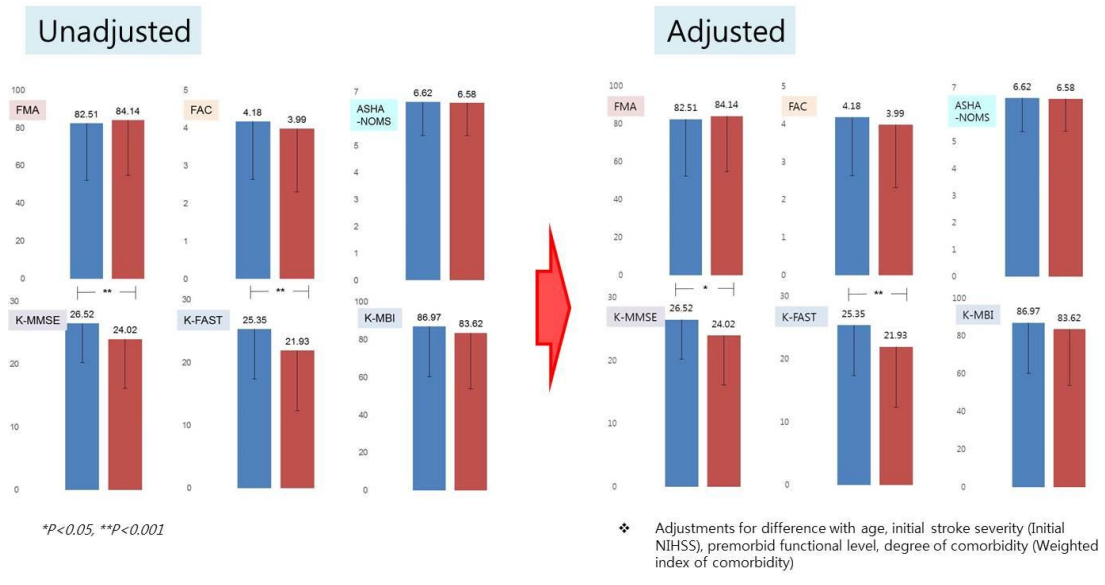


Figure 2. Sex Differences in Functional Impairment at 24 months after Hemorrhagic Stroke