

Comparison of the prognosis of ischemic stroke patients in a period of one year before and after the establishment of the Acute Stroke Treatment Center (SCU) in Valiasr Hospital, Zanjan province

Mehdi Maghbooli* and Pedram Babaei
Zanjan University of Medical Sciences, Iran

Introduction: Currently, stroke is the third leading cause of disability and the second leading cause of death worldwide. According to reports in Iran, the incidence of first-time stroke is estimated at 43.12 per one hundred thousand people for all ages. Speed in the diagnosis and treatment of stroke patients is considered the most important factor in reducing the complications caused by the attack, therefore, the establishment of SCU consists of experienced personnel who specialize in the diagnosis and treatment of this category of patients, is of special importance. In this study, we decided to find out what effect the establishment of the SCU has had on the rate of disability and mortality of patients after entering the hospital.

Materials and methods: Sampling was done from one year before to one year after the date of establishment of the SCU unit (between the first of October 2016 and the end of September 2018) among eligible patients and in each group exactly 153 patients with diagnosis cerebral ischemic stroke were included (306 cases in total) and the data of their files were carefully examined. Descriptive statistics and analysis were then reported with SPSS software version 26.

Results: The investigations showed that although there was no statistically significant difference in any of the seven criteria we considered in terms of complications of ischemic stroke in admit during the period before and after the establishment of SCU, but the average scores of upper and lower limbs at the time of discharge before and after the establishment of the stroke acute care unit were statistically significant (p -value <0.05). Such a result did not apply to the comparison of the average NIHSS scores of the other investigated values or mortality rate. Of course, it should be noted that the above results are taken into account without considering the effect of rTPA and if the data are arranged according to the patients receiving and not receiving rTPA, the conclusions will be different and there will be a significant effect in improving the calculated score among most of the components of patients in the period after the establishment of SCU.

Discussion: This study generally showed that the NIHSS scores of the upper and lower limbs at the time of discharge before and after the establishment of the SCU were statically significant, but the components of mortality, language and speech, facial paralysis, sensory and vision impairment did not demonstrate such result (without considering the effect of rTPA).

Keywords: Prognosis, Ischemic stroke, Stroke Care Unit, CVA, SCU.