IMPROVING EARLY DIAGNOSIS AND REHABILITATION OF COGNITIVE AND PSYCHOEMOTIONAL DISORDERS AFTER ISCHEMIC STROKE

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Abstract: China is already the world's largest country with stroke. According to data released by the Ministry of Civil Affairs in early 2018, the number of people aged 60 and over nationwide exceeded 240 million in 2017, accounting for 17.3% of the total population. Among them, there are more than 40.6 million disabled and demented elderly, and both the elderly and the disabled and demented population are showing an accelerated growth trend.

Keywords: cognitive training, computer-assisted, rehabilitation, stroke

Relevance of the work

With the deepening of the aging process in our country, the incidence of cardiovascular and cerebrovascular diseases related to it is also rising rapidly, especially the incidence of stroke is accelerating. China is already the world's largest country with stroke. According to data released by the Ministry of Civil Affairs in early 2018, the number of people aged 60 and over nationwide exceeded 240 million in 2017, accounting for 17.3% of the total population. Among them, there are more than 40.6 million disabled and demented elderly, and both the elderly and the disabled and demented population are showing an accelerated growth trend. The number of elderly people in China is a huge number, which is equivalent to the total population of several foreign countries. Accompanying the growth of the aging population is the incidence of stroke in China. Stroke has become the first cause of death in our country. The 2017 China Stroke Prevention and Treatment Report pointed out that in 2016, the comprehensive standardized prevalence rate estimates that the number of people over 40 years old in my country who are currently suffering from and have suffered from stroke reached 12.42 million. To put it in perspective, one person in China has a stroke every 12 s, and one person dies of a stroke every 21 s, and three out of every four-stroke patients have different levels of disability. Our country uses stroke every year. Medical expenses are as high as 40 billion yuan. In addition, strokes in China are on the cusp, showing serious problems such as younger age, recurrence, frequently occurring diseases, and common diseases. According to epidemiological studies, the first 3 months after the onset of stroke is the "golden period" to reduce the disability rate. Early effective and scientific rehabilitation treatment and nursing intervention can help patients rebuild the brain function circuit and improve the he sequelae of stroke patients (Licskai et

al., 2016). Poststroke cognitive impairment has varying levels of visual spatial function, orientation, attention, and memory impairment, and their occurrence will be delayed the recovery of other body functions of stroke patients affects the prognosis and recovery process. Modern medicine believes that its onset is related to cerebral ischemia and hypoxia in varying levels of cerebral nerves and tissues caused by abnormal hemorheology in stroke (Sriram et al., 2017). At present, modern medicine focuses on drug intervention combined with rehabilitation intervention, aiming to improve the cognitive function of patients because of actively controlling the primary disease (Biryukova et al., 2016). The butylphthalide soft capsule used in this article has the functions of protecting nerve tissue, improving blood flow and microcirculation in ischemic brain area, anticerebral ischemia, improving the antioxidant enzyme activity of nerve cells, and reducing the area of cerebral ischemic infarction (Rodrigues et al., 2018).

Materials and methods

Age is the most important factor affecting the occurrence of cognitive dysfunction. With age, the incidence of cognitive dysfunction is rising rapidly. Studies have found that the early cognitive deterioration of patients over 70 years of age after stroke is 2.5 times that of patients under 70 years of age.

Past medical history is related to cognitive dysfunction after stroke. Some scholars have confirmed through meta-analysis that hypertension, diabetes, and coronary heart disease are risk factors for cognitive impairment in ischemic stroke (Lam et al., 2015).

Investigations have shown that the number of strokes and associated hyperlipidemia are related to the occurrence of ischemic stroke cognition, and the recurrence of stroke and associated hyperlipidemia are risk factors for the occurrence of ischemic stroke cognitive impairment.

Rehabilitation training method

The two groups of patients received routine rehabilitation training from the third day of admission, including: passive muscle massage and joint movement, active training of the affected limb, turning exercises from the healthy side to the affected side, sitting balance training, and standing balance training. ADL training content include moving body, putting on and taking off clothes, grooming, eating, toileting, going up and down stairs, and so on.

Cognitive function training

Cognitive function training check twice a day, 60 min/each time, and 3 weeks in total. The content includes (1) orientation training asks the patient about the date, time, location and location, direction of the day, and let them distinguish between their left and right limbs, the position of the objects in the hospital, and the distance of objects in the surrounding environment. (2) Attention training trains the patient's attention through simple games such as darts and fishing games. (3) Calculation training exercises the patient's calculation ability through card games. (4)

Memory training includes listening to story narration, looking at pictures and remembering numbers, memorizing numbers, reciting lyrics and verses, recalling and telling a few objects and people that I have just seen. (5) Language training: through repeated listening, reading, retelling stories and information, asking questions and discussing topics of interest to patients, so as to train their verbal expression and logical thinking skills (Gamito et al., 2017). (6) Training the ability to solve problems: arrange things related to daily life and let the patient complete it independently, such as eating after washing, putting on clothes and socks and sitting on a chair.

Statistical methods

The SPSS 19.7 statistical software was used for data processing. The test scores of the stroke patients compared by t-test.

Results

The learning process is used to illustrate the structure and process of learning. It is great application significant for understanding and teaching process. He proposed a far-reaching information processing learning model. Generally, the information from some parts is registered, and the rest quickly passed. This registered information belongs to the short-term memory, which can last for 20–30 s (van Dijk et al., 2005). If you want to keep the information, you have to adopt a strategy of retelling. However, retelling can only help preserve information for coding, and cannot increase the capacity of short-term memory. When information changes from short-term memory to long-term memory, the information undergoes a critical transformation, that is, it has to go through the coding process. The so-called coding is not to collect relevant information together. When information needs to use, it needs to retrieve and extracted. The extracted information can be returned to short-term memory. Further consideration of the suitability of the information may result in further searching for information or a reaction. In addition to the information flow, the learning information- processing mode shown in Figure 2 also contains expectations and execution control. Expectations refer to the goals that students expect to achieve, that is, the motivation for learning. It is precisely because students have certain expectations for learning that the feedback given by the teacher will have a strengthening effect. In other words, feedback is effective because it affirms students' expectations. Execution control is the cognitive strategy in learning classification. The execution control process determines which information is registered from sensory registration into short-term memory, how to encode, and what extraction strategy to use. This shows that expectations and execution control play an extremely important role in the information processing process (Colombo et al., 2019). The reason why Gagne did not connect these two with other structures in the learning model is mainly because the two may affect all stages of the information processing process, and the relationship among them is not clear at present.

Conclusion

Cognitive function is one of the important indicators of the functional prognosis of poststroke patients. Early identification of related risk factors and protective factors affecting cognitive dysfunction in stroke, targeted nursing intervention strategies and rehabilitation functional exercise prescriptions are to prevent cognitive function after stroke an important measure of obstacles. Therefore, clinical practice should incorporate the concept of nursing-led multidisciplinary collaboration, with a series of risk factors affecting post- stroke cognitive dysfunction as the entry point, and targeted, multimodal, multichannel early nursing intervention as the key point. Based on the establishment of the intervention quality evaluation index system, construct a set of scientific, effective and appropriate poststroke cognitive dysfunction rehabilitation exercise models or best clinical practice guidelines. The rate of patient returned to hospital and medical expenses reduce the burden of care for family caregivers. Rehabilitation training and targeted care can guide patients to maintain a good mental state, ensure nutrition, and reduce or avoid complications such as aspiration pneumonia. Therefore, for patients with cognitive impairment in stroke, while carrying out clinical cognitive rehabilitation therapy, active nursing cooperation is of great significance for early stroke patients to restore function, reduce complications and improve quality of life.

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