Significance of neurointervention in patients of the neuroresuscitation department

Kholliev S.S.

Bukhara Branch Of Republican Scientific Center For Emergency Medical Care

ABSTRACT

This article discusses the importance of neurointerventional methods in patients treated in the neurocritical care unit . This year, the total number of strokes in the region is 800. A total of 115 of these patients underwent neurointerventional techniques. 75 patients with ischemic strokes had undifferentiated types of strokes, and diagnostic angiography of the carotid arteries was performed mainly as a diagnostic method.

Keywords: neurointerventional , stroke, angiography.

The field of neurointerventions is rapidly changing as more diseases are treated with less invasive methods. New treatments are possible with new devices, but smaller and less radiopaque devices also create additional challenges when it comes to ease of placement and treatment evaluation. We offer a wide range of integrated technologies for various neurointerventions. Now you can work with confidence with comprehensive imaging technologies and neurointerventional options, the result of intensive research involving healthcare leaders and pioneers in interventional therapies. The invention relates to the navigation of an interventional device. The technical result is to increase the accuracy of navigation of the interventional device inside the tubular structure of the object. The system contains: an x-ray image capture device; processing unit; interface; the x-ray image capture device captures 2-dimensional x ray image data in one projection geometry of the region of interest of the tubular structure; the processing unit is configured to detect the interventional device on the 2D x-ray image; determines the 2-dimensional position of the interventional device on the 2-dimensional x-ray image; superimposes one 2D X-ray image with a previously acquired 3D ROI dataset; converts the determined 2-dimensional position of the interventional device to a position in the 3-dimensional dataset; allocates local 3-dimensional parameters in the position of the interventional device; generates navigation information for a specific 3-dimensional position of the interventional device and selected local 3-dimensional parameters; the interface provides navigational information to the user.

Material and method of research: given that the main role in the diagnosis of strokes is occupied by diagnostic angiography of cerebral vessels performed in most patients, the number of patients examined, information about the anticoagulant treatment of these patients and, of course, the MSCT apparatus.

Analysis and result: Examinations carried out on 75 patients showed that 80%, i.e., in 60 patients, stroke was detected in the early stages and the necessary treatment was carried out.

Conclusion. Studies show that neurointerventions in the early stages of stroke and post-stroke rehabilitation, early detection of the disease and severe consequences of the disease in the patient can be prevented.

Literature

1. 1.Ауторегуляция мозгового кровообращения как ори1. ентир для управления параметрами искусственной вентиляции легких в остром периоде тяжелой черепно-мозговой травмы / Е.А. Козлова, А.В. Ошоров, В.Л. Анзимиров [и др.] // Вопросы нейрохирургии. — 2005. — № 1. — С.24—29.
2. Влияние вентиляции легких, контролируемой по объему и по давлению, на результаты лечения больных с геморрагическим инсультом / А.И. Грицан, А.А. Газенкампф, Н.Ю. Довбыш, А.В. Данилович // Вестник анестезиологии и реаниматологии. — 2012. — № 3. — С.26—31.
3. Дифференцированный подход к применению гипервентиляции в остром периоде тяжелой черепно-мозговой травмы в зависимости от состояния мозгового кровотока / А.В. Ошоров, Е.А. Козлова, А.К. Молдоташова [и др.] // Вопросы нейрохирургии. — 2004. — № 2. — С.26—31.
4. Khayotovich, K. D., & Ikromovich, T. I. (2022). SPECIFICITY OF RESUSCITATION MEASURES IN PATIENTS WITH ISCHEMIC HEART DISEASE AND ARRHYTHMIA. World scientific research journal, 10(1), 150-155.
5. Хайитов, Д. Х., & Болтаев, Э. Б. (2022). ПОСТРЕАНИМАЦИОН КАСАЛЛИК НАТИЖАСИДА КЕЛИБ ЧИКАДИГАН АСОРАТЛАРНИ БАРТАРАФ ЭТИШДА ЗАМОНАВИЙ ИНТЕНСИВ ТЕРАПИЯ. КЛИНИК АМАЛИЕТДА УЧРАГАН ХОЛАТ. Academic research in modern science, 1(9), 172-178.
6. Khayotovich, K.D., & Bekmurodugli, B.E. (2022). Case in clinical practice: Modern intensive care in the treatment of post-resuscitation complications caused by cardiac arrhythmias. ACADEMICIA: An International Multidisciplinary Research Journal.
7. Кассиль, В. Л. Искусственная и вспомогательная вентиляция легких / В. Л. Кассиль, М. А. Выжигина, Г. С. Лескин. М. : Медицина, 2004. - 480 с.
8. 9, 208-212. 20. Эшонов, О. Ш., & Болтаев, Э. Б. (2020). СПОСОБ ЭКСТРЕННОГО ОПРЕДЕЛЕНИЯ СТЕПЕНИ ТЯЖЕСТИ ЭНДОТОКСИКОЗА ПРИ НЕОТЛОЖНИХ СОСТОЯНИЯХ. Новый день в медицине, (1), 462-464.
9. Influence of a long-term, high-dose volume therapy with 6% hydroxyethyl starch 130/0.4 or crystalloid solution on hemodynamics, rheology and hemostasis in patients with acute ischemic stroke. Results of a randomized, placebo-controlled, doubleblind study / R. Woessner, M.T. Grauer, H.J. Dieterich [et al.] // Pathophysiology.
10. Ураков, Ш. Т., & Ризаева, М. Ж. (2019). КЛИНИЧЕСКИЙ СЛУЧАЙ ПАЦИЕНТА С СИНДРОМОМ МАРФАНА. Новый день в медицине, (4), 439- 440.
11. Lang. E.W., Lagopoulos J., Griffith J. et al. Cerebral vasomotor reactivity testing in head injury: the link between pressure and flow. J Neurol Neurosurg Psy-chiatr 2003
12. Oliveira-Abreu, M.30. Management of mechanical ventilation in brain injury: hyperventilation and positive end-expiratory pressure / M. Oliveira-Abreu, L.M. de Almeida // Rev. Bras. Ter. Intensiva. — 2009. — Vol. 21, № 1. — P.72—79.
13. Piechnik S.K., Yang X., Czosnyka M. et al. The continuous assessment of cerebrovascular reactivity: a validation of the method in healthy volunteers. Anesth Analg 1999; 89: 944-949. 26. Czosnyka M., Picard J.D. Monitoring and interpretation of intracranial pressure. J Neurol Neurosurg Psy-chiatr 2004; 75: 813-821.