**Introduction**

An important feature of brain abscess is suffering young people of working age in most men. Mortality from this disease in recent years has decreased from 60% to 10%, but disability in these patients can reach 50%, and in about 30% of patients subsequently develop epileptic syndrome.

Analysis of the literature of domestic and foreign sources, which are devoted to the problem of treatment of abscesses of the brain indicates a high enough percentage of complications and functionally unsatisfactory results, justifying the need for further improvement of methods of surgical treatment of abscesses of the brain and the introduction of new methods of diagnosis and treatment that will improve the effectiveness of treatment such patients.

**Materials and Methods**

Among 242 patients with brain abscesses were 33 children and 209 adults. Among adult males were 143 (68.4%), women - 66 (31.6%). The age of patients ranged from 4 months to 74 years, an average of 36.5 ± 13.8 years. Abscesses of the brain were observed more frequently in patients is of working age - 79%. All patients were thorough examination. All patients underwent CT or MRI. During the surgery was performed in all patients fence abscess content for culture results (bacteriological seeding) and determining the sensitivity to antimicrobial agents. When choosing a treatment strategy in our investigation prevailed cases of surgical treatment in combination with antibacterial therapy. That is, 242 patients were operated 233 (96.6%) patients, and without surgery - only 9 (3.7%).

**Results**

The presence of brain abscess is an indication for hospital treatment in the neurosurgical department. In most cases, confirmed the presence of an abscess is an indication for urgent surgery. Of the 242 patients operated 233 and 9 patients were treated conservatively. In patients after the intervention in the early postoperative period, we have seen both positive and negative changes. To assess the effectiveness of treatment and the degree of disability in patients with abscesses of the brain used scale results Glasgow (Glasgow Outcome Scale, GOS). In general, discharge or transfer patients to the neurosurgical department of the following results: 77 (32%) - good recovery (5 score GOS); 90 (37%) - satisfactory result (score 4 GOS); 41 (17%) - lack of improvement profound disability, patient needs outside care (3 point GOS); 5 (2%) - an unsatisfactory result, rough neurological deficiency (2 points GOS); 29 (12%) cases were fatal (1 point GOS).
The impact of the state of consciousness of the patient on admission to hospital for neurosurgical treatment results show the following information. While maintaining a clear mind at the time of patient admission to hospital dominated good (38.7%) and satisfactory (38%) and deaths have been only 6.2% of patients. In the group where patients acted in violation of consciousness to 14-13 points at The Glasgow Coma Scale, GCS, treatment results were slightly worse than the previous, mortality has reached to 12.7%, and the results were good in 31.7%. In the group of patients who were hospitalized with violation of consciousness at the level of 12-10 points for Glasgow Coma Scale, the results were even worse than the previous because the mortality rate has reached to 15.7%, satisfactory results were obtained in 33.3% and good results were only 16.7% of cases. In the group of patients with consciousness at the hospital level was 9 or less points for Glasgow Coma Scale results were still much worse because mortality has already reached 50%, satisfactory results were obtained in 28.6% and good results were only 7.1% of cases. Preliminary results clearly show that the state of consciousness at admission as an indicator of the severity of the patient in the neurosurgical department significantly affect the results of treatment (p<0.05). In the group of patients who were operated on using stereotaxic technology fatalities were not, while in the group where patients were operated by conventional surgical techniques mortality was 11.1%.

Conclusions
A significant prognostic prediction criterion according to the study was the state of mind of the patient on admission to the neurosurgical hospital. The results of stereotaxic neuronavigation and techniques in the treatment of brain abscesses. Research proved that the best results are obtained when using neuronavigation technology compared to traditional surgery.