Huge not only medical but also social significance of fractures of the proximal femur is associated with a progressive increase in the elderly population: 20% in the last 10 years in most developed countries of the world. In patients over 65 years of age fractures of the proximal femur account for 38% of all fractures and 24% in the total group of hip fractures, of which vierteln fractures account for 35-40% and 5-10 paveral%. Surgery, which is shown in more than 80% of cases, is in an open or closed reposition of bone fragments and their fixation by various designs. But sometimes it is difficult to determine the time and volume of surgical treatment (use of a proximal femoral stem, DHS plate, or prosthesis).

Primary hip replacement has been developed due to the large number of unsatisfactory results of primary osteosynthesis. Positive results within 3-5 years after surgery reach 89-95%. However, there remains a degree of failure in the form of infection and instability of endoprosthesis components that require revision surgery. The number of early postoperative complications such as deep venous thrombosis and pulmonary embolism, disorders of bowel and bladder remains high and is in 45-70% of cases. Pulmonary embolism, which ends in death in patients after arthroplasty is noted in 2.4% of cases.

Interesting in scientific and practical terms, consider the analysis of the effectiveness of treatment results of ceratostigma femur fractures using a locked intramedullary stem and total hip joint in order to determine the optimal tactics of surgical treatment of this severe category of patients.

Materials and methods

The material of the research was the analysis of medical records, radiographs, and clinical examination 100 patients with cerebellopontine fractures of the femur who underwent operative
treatment on the basis of the traumatological Department of the Poltava regional hospital and the state institution "Institute of traumatology and orthopedics" in the period 2006-2015.

All patients were divided into two groups, depending on the operating procedure. The first (control) group consisted of 50 patients with cerebellopontine fractures of the femur who underwent total hip arthroplasty. The second (experimental) group consisted of 50 patients with cerebellopontine fractures of the femur, which was carried out mainly minimally invasive osteosynthesis using a locked intramedullary osteosynthesis used blocked PFNA or gamma rod. The execution of the block rod were carried out according to their own reproposing that filed the patent of Ukraine for useful model.

**Results and discussion**

Determined that patients in the control group, where he performed a total hip arthroplasty most often intraoperative blood loss was 400 to 800 ml (56 %), and 36 % – more Blood loss 800 ml. to 400 ml in this group of patients was only 8 %. Cases with minimal blood loss (200 ml) were observed. These data are statistically significant (p ≤ 0.01). Patients of the experimental group, where were carried out mainly minimalnaya surgery with fixation of bone fragments blocked the rod statistically significantly (p ≤ 0,01) prevailed patients with minimal blood loss to 200 ml (72 %).

Analyzing the duration of surgery was determined that patients in the control group statistically (p ≤ 0,01) prevailed, compared with cases with a minimum duration of surgical intervention (up to 1 hour), the cases from 1 to 2 hours – 62 % and more than 2 hours for 36 %. In contrast to the control group patients experimental group where the surgery was carried out mainly minimally invasive, statistically significantly (p ≤ 0.01) were prevalent cases with a minimum duration of surgery – 66 %.
All of the above of course could not affect the occurrence of postoperative complications and the results of surgery of patients with cerebellopontine fractures of the femur.

It is possible to note a significant decrease in comparison with control group postoperative complications in patients who underwent primarily minimally invasive surgery with the use of intramedullary locked rods. So suppurative complications and mortality was only 2 %, in comparison with patients of control group – 8 and 10 %, respectively. Performing total hip arthroplasty with fragmentation of ceratostigma fractures with damage to the small and large skewers at persons primarily aged people with low muscle tone has caused the emergence of spontaneous postoperative zvav of the femoral head, which in turn was required in 4 % of cases of repeated surgery. All this has allowed to reduce to 4% the number of negative results of surgical treatment in patients of the experimental group, unlike patients of the control group, where the number of negative results was 22% of the total number of patients in the control group.

Conclusions:

1. Conducted comprehensive research identified a statistically significant ($p \leq 0.01$) reduction of blood loss and duration of operative intervention in patients who underwent osteomyelitis blocked intramedullary rods.

2. Mainly minimalnaya surgery in patients in whom the fixation of fragments of ceratostigma fractures was performed using intramedullary locked rods is possible to reduce, in comparison with the group where patients underwent total hip arthroplasty, 4 times the number of postoperative septic complications and 5 times the fatality and 5.5 times to reduce the number of negative results of surgery.
3. Performing total hip arthroplasty in patients with cerebellopontine fractures of the femur should be performed according to certain absolute condition, which include an accompanying 4-stage coxarthrosis in injured.

4. Locked intramedullary fixation can be recommended as the main method of surgical treatment of patients with cerebellopontine fractures of the femur.