



Editorial
<https://doi.org/10.17816/2311-2905-1765>



Is early fixation of the fracture promising?

Editorial Comment on the Article by Belenkiy I.G. et al.
“Strategies of Osteosynthesis: Problems and Perspectives”

<https://doi.org/10.17816/2311-2905-1693>

Vladimir V. Khominets

Kirov Military Medical Academy, St. Petersburg, Russia

The commentary discusses the advantages and disadvantages of the model proposed by the authors of the article for performing osteosynthesis for urgent indications within 24 hours after the patient's admission to the hospital, and also focuses on the need for comprehensive assessment of treatment outcomes and financial costs of the healthcare system. The determination of indications for emergency osteosynthesis and the identification of patients groups depending on the pattern and localization of the fracture are also important issues in justifying the shortening of the time before surgery. It is necessary to justify the priority localization of fractures for urgent fixation based on the analysis of the authors' own experience and literature data. Changes in the system of emergency trauma care will require a revision of the standards of staffing and financing in the system of compulsory medical insurance. Therefore, the commentary emphasizes the expediency of a preliminary assessment of the new model effectiveness in some medical institutions by comparing it with the traditional system.

Keywords: osteosynthesis, urgent trauma care, healthcare organization.

Редакционная статья
<https://doi.org/10.17816/2311-2905-1765>



К вопросу о перспективности экстренного выполнения остеосинтеза

Редакционный комментарий к статье И.Г. Беленького с соавторами
«Стратегия выполнения остеосинтеза: проблемы и перспективы»

<https://doi.org/10.17816/2311-2905-1693>

В.В. Хоминец

ФГБВОУ ВПО «Военно-медицинская академия им. С.М. Кирова» МО РФ, г. Санкт-Петербург, Россия

В комментарии обсуждаются преимущества и недостатки предложенной авторами статьи модели выполнения остеосинтеза по неотложным показаниям в течение 24 ч. после поступления пациента в стационар, а также акцентируется внимание на необходимости комплексной оценки исходов лечения и финансовых затрат системы здравоохранения. Определение показаний к неотложному остеосинтезу и выделение групп пациентов в зависимости от характера и локализации перелома также являются важными вопросами при обосновании сокращения сроков операции. Необходимо обосновать приоритетные локализации переломов для неотложной фиксации на основании анализа собственного опыта авторов статьи и данных литературы. Изменение системы оказания экстренной травматологической помощи потребует пересмотра нормативов кадрового обеспечения и финансирования в системе обязательного медицинского страхования. В комментарии подчеркивается целесообразность предварительной оценки эффективности новой модели в некоторых лечебных учреждениях путем сравнения с традиционной действующей системой.

Ключевые слова: остеосинтез, неотложная травматологическая помощь, организация здравоохранения.

Improving the organization of medical care for patients with bone fractures is an essential task of our specialty, and the health and working capacity of individuals with injuries depend on this solution. The economic component of the problem and the increase in the incidence of multi-

ple and multisystem injuries, open fractures, and soft tissue injuries determined the need to search for ways to shorten the preoperative period. Improving the methods of assessing the condition of the patients, osteosynthesis technologies, and postoperative rehabilitation determines the

possibility of solving this problem at the modern level without negative consequences on the quality of interventions and treatment results.

The work under discussion focused on determining the advantages and disadvantages of osteosynthesis for urgent indications within 24 h after admission to the hospital. The authors describe the structure of the patient population according to the location of fractures in a medical institution, which is a first-level trauma center, and evaluate the duration of inpatient treatment depending on the timing of osteosynthesis.

The large-scale task set to determine the advantages and disadvantages of existing strategies for performing osteosynthesis is solved only partially and mainly by the analysis of international publications. The absence of re-osteosynthesis cases and early infectious complications during hospitalization of patients who underwent osteosynthesis in the first 24 h characterizes positively the chosen approach of emergency osteosynthesis, but does not take into account the treatment results, frequency of unsatisfactory outcomes, and complications. Determining the advantages and disadvantages of the strategies under consideration implies conducting a comprehensive assessment of treatment outcomes and the financial costs of the healthcare system. The apparent reduction in the hospitalization stay of patients with osteosynthesis upon admission is not necessarily accompanied by a decrease in financial costs, as it requires expenses associated with the involvement of qualified personnel at night, postponing elective surgeries scheduled

for the next day, or use of additional equipment in the operating room. The measures necessary for the organization of emergency osteosynthesis require an economic justification. In addition, it may not be possible to allocate an additional operating room for emergency osteosynthesis in hospitals designed more than 30 years ago, which complicates the extrapolation of successful international experience under conditions in Russia.

The determination of indications for emergency osteosynthesis and the selection of patients depending on the nature and location of the fracture are important issues in justifying the reduction of surgery time. A more detailed analysis of our experience and literature on the study of complications and outcomes of osteosynthesis of various segments of the musculoskeletal system, performed at different times after injury, would justify the choice of priority fracture locations for emergency fixation. Moreover, it is necessary to determine the degree of subspecialization and education requirements of surgeons providing emergency and urgent trauma care, including those at night, and to evaluate the feasibility of the centralization of emergency trauma care and in-depth specialization of employees involved.

Since the organization of the emergency trauma care system will require a revision of the staffing and financing standards in the compulsory medical insurance system, it is advisable to evaluate first its efficiency, including the economic one, on the model of a medical institution by comparison with the traditional current system.

Authors' information

✉ *Vladimir V. Khominets* — Dr. Sci. (Med.), Professor
Address: 6, St. Petersburg, Akademika Lebedeva str., 194044 Russia
<https://orcid.org/0000-0001-9391-3316>
e-mail: vkhominets@yandex.ru