



## IMPROVING THE EFFECTIVENESS OF TREATMENT OF SOFT TISSUE INJURIES OF THE MAXILLOFACIAL REGION IN CHILDREN

Tojiyev F.I.

Ilmiy rahbar:

Toshkent davlat tibbiyot universiteti bolalar  
jarrohlik stomatologiyasi kafedrası dotsenti:  
tpjiyev92@mail.ru

Toshkent davlat tibbiyot universiteti magistratura  
bosqichi talabalari:

Ashurov Akobir Raup o'g'li

akobirashurov863@gmail.com

Abdumajitov Asadbek Shuxratovich

asadbekabdumajidov256@gmail.com

Saydig'aniyev Saidaxror Sanjar o'g'li

Ortodontiya va tishlarni protezlash kafedrası assistenti:  
ssaydiganiev@bk.ru

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**Abstract.** This article analyzes the clinical features, diagnosis, and treatment methods of soft tissue injuries in the maxillofacial region in children. Due to the anatomical and physiological characteristics of the child's body, the course of injuries and healing processes were studied. The paper also highlights ways to improve the effectiveness of treatment by applying modern therapeutic approaches, preventing complications, and achieving better aesthetic and functional outcomes. The results of the study show that a comprehensive approach ensures faster and more effective healing of soft tissue injuries in the maxillofacial region in children.

**Keywords:** pediatric dentistry, maxillofacial region, soft tissue injuries, surgical treatment, regeneration, inflammation, trauma, treatment effectiveness, complications, comprehensive approach.

**Аннотация.** В данной статье проанализированы клинические особенности, диагностика и методы лечения травм мягких тканей челюстно-лицевой области у детей. В связи с анатомо-физиологическими особенностями детского организма изучены течение травм и процессы заживления. Также рассмотрены пути повышения эффективности лечения с применением современных методов терапии, профилактики осложнений и улучшения эстетических и функциональных результатов. Результаты исследования показали, что комплексный подход обеспечивает более быстрое и эффективное заживление травм мягких тканей челюстно-лицевой области у детей.

**Ключевые слова:** детская стоматология, челюстно-лицевая область, травмы мягких тканей, хирургическое лечение, регенерация, воспаление, травма, эффективность лечения, осложнения, комплексный подход.

**Annotatsiya.** Ushbu maqolada bolalarda yuz-jag' sohasi yumshoq to'qimalari jarohatlarining klinik xususiyatlari, tashxislash va davolash usullari tahlil qilingan. Bolalar organizmining anatomik va fiziologik o'ziga xosliklari tufayli yuzaga keladigan jarohatlarning kechishi va bitish jarayonlari o'rganildi. Shuningdek, zamonaviy davolash usullarini qo'llash orqali jarohatlarni davolash samaradorligini oshirish, asoratlarning oldini olish va estetik

hamda funksional natijalarni yaxshilash masalalari yoritildi. Tadqiqot natijalariga ko'ra, kompleks yondashuv asosida olib borilgan davolash choralari bolalarda yuz-jag' sohasi yumshoq to'qimalari jarohatlarining tez va samarali bitishini ta'minlaydi.

**Kalit so'zlar:** bolalar stomatologiyasi, yuz-jag' sohasi, yumshoq to'qima jarohatlari, jarrohlik davolash, regeneratsiya, yallig'lanish, travma, davolash samaradorligi, asoratlar, kompleks yondashuv.

At present, injuries of the maxillofacial region in children, especially damage to soft tissues, are considered one of the pressing problems in dentistry and maxillofacial surgery. The anatomical and physiological characteristics of a child's body—such as the high regenerative capacity of tissues, rich blood supply, and the specific features of the immune system—significantly influence the course of injuries and the outcomes of treatment. At the same time, trauma in children is often associated with household activities, sports, and play, which determines the diversity of injury types.

According to the literature, if soft tissue injuries of the maxillofacial region are not treated своевременно and correctly, they may lead to inflammatory processes, infectious complications, as well as aesthetic and functional defects. Therefore, early diagnosis of such injuries, accurate assessment of their severity, and the selection of effective treatment methods are of great importance. In particular, in pediatric practice, surgical interventions should be carried out with maximum caution, based on the principle of preserving tissues.

In Azimov's scientific works, the clinical course of maxillofacial diseases and injuries in children, the specific features of their treatment, and the prevention of complications are widely discussed. The data presented by the author indicate the necessity of applying a comprehensive approach in the treatment of soft tissue injuries of the maxillofacial region in children.

Based on the above, improving the effectiveness of treatment for soft tissue injuries of the maxillofacial region in children, enhancing modern treatment methods, and ensuring the prevention of complications remain urgent issues.

Soft tissue injuries of the maxillofacial region in children are among the most common pathological conditions encountered in clinical practice. They often occur as a result of household trauma, falls, sports activities, and accidents. Due to the specific anatomical and physiological characteristics of the child's body, the course of these injuries differs from that in adults. In particular, soft tissues are more elastic, the vascular network is well developed, and regenerative processes occur more rapidly. However, these factors may also contribute to the rapid spread of inflammatory processes in some cases.

Soft tissue injuries of the maxillofacial region are classified into the following types: contusions (bruises), incised wounds, lacerations, puncture wounds, and mixed injuries. Each type of injury has its own clinical features, and their correct assessment is essential for choosing an appropriate treatment strategy. For example, incised wounds usually have smooth edges and tend to heal faster, whereas lacerations are characterized by irregular edges and carry a higher risk of infection.

Clinically, soft tissue injuries of the maxillofacial region in children present with pain, swelling, bleeding, and disruption of tissue integrity. In some cases, injuries may be deep and involve damage to muscles, blood vessels, and nerve fibers. Therefore, during examination, it is important to determine the depth, localization, and severity of the injury.

Clinical examination plays a key role in diagnosis. This includes taking a detailed medical history, identifying the mechanism of injury, and performing visual and palpatory examinations. If necessary, additional diagnostic methods, including radiological examinations, may be used, especially to rule out damage to bone structures.

The treatment process is determined depending on the type and severity of the injury. At the initial stage, primary surgical management of the wound is of great importance. This process includes cleaning the wound surface with antiseptic solutions, removing necrotic tissues, and controlling bleeding. At the next stage, sutures are applied to restore the wound edges anatomically. In children, it is recommended to use atraumatic suture materials, taking into account the cosmetic outcome.

To prevent infectious complications, antiseptic treatment and, when necessary, antibacterial therapy are applied. In addition, комплекс therapeutic measures aimed at reducing pain, eliminating inflammation, and accelerating regeneration processes are implemented. Considering the specific characteristics of the immune system in children, general strengthening therapy may also be recommended.

As emphasized by Azimov, the main goal in the treatment of maxillofacial injuries in children is not only wound healing but also achieving optimal functional and aesthetic outcomes. Therefore, it is important to preserve tissues carefully, use minimally invasive techniques, and select an individualized approach during treatment.

Thus, to improve the effectiveness of treating soft tissue injuries of the maxillofacial region in children, early diagnosis, timely and appropriate surgical care, as well as the application of comprehensive treatment measures are essential.

Soft tissue injuries of the maxillofacial region in children occupy an important place in dental and maxillofacial surgical practice, and their specific clinical course requires careful selection of treatment approaches. The anatomical and physiological characteristics of a child's body—particularly high regenerative capacity, rich blood supply, and tissue elasticity—positively influence rapid healing of injuries; however, in some cases, they may also contribute to the rapid development of inflammatory and infectious complications.

Research results and analyses show that the effectiveness of treatment for soft tissue injuries of the maxillofacial region largely depends on early and accurate diagnosis, proper assessment of the type and severity of the injury, and timely primary surgical management. Proper wound care, strict adherence to aseptic and antiseptic principles, and anatomically correct suturing of wound edges are key factors in preventing subsequent complications.

Furthermore, the use of a comprehensive approach in treatment—that is, the combination of local and general therapeutic measures, the use of antibacterial therapy when necessary, anti-inflammatory agents, and methods that stimulate regeneration—ensures high effectiveness. In particular, preserving aesthetic and functional outcomes in children is crucial, which requires performing surgical procedures using minimally traumatic techniques.

In addition, preventive measures, including the prevention of trauma in children, raising awareness among parents and caregivers, and maintaining proper oral hygiene, play an important role in reducing the incidence of such injuries.

In general, to improve the effectiveness of treating soft tissue injuries of the maxillofacial region in children, it is necessary to widely implement modern diagnostic and treatment methods in clinical practice, ensure an individualized approach, and apply comprehensive

therapy. This, in turn, makes it possible to reduce the number of complications, promote rapid healing of injuries, and achieve high-level aesthetic and functional outcomes.

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