

The clinic is pretty typical and severe form of the disease. The diagnosis is based on anamnesis, clinical examination, orthopedic, X-ray, CT and MRI. Depending on the clinical data, 3 forms of JE are determined: acute, chronic and acute form of the background chronic evolution. R-study must be carried out in two projections: anteroposterior and lateral after Lowenstein - to perform radiometric survey of Klein line.

The aim is to obtain treatment of epiphysiodesis: I stage is skeletal traction which ends up with surgery.

Conclusions: mandatory consultation at ortoped-pediatric doctor if there are disorders in children walking, pain in the limbs. Benefit of the treatment is directly proportional to the time when the disease was diagnosed. Support of the affected limb is excluded up to 6 months from diagnosis.

Keywords: juvenile slipped epiphyses, hormonal disorders, Line Klein

OSTHESYNTHESIS OF LESIONS IN TUBULAR BONES GROWTH ZONES AT CHILDREN



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Introduction: Growth zone lesion areas of tubular bones at children are fairly common, their consequences are blocking of bone growing area and limb deformation. According to contemporary data - growth areas lesions represent 5% - 17% of the total number of children fractures. The appearance of late growth, limb deformation are the signals of lesion in the growing area.

Discussions: The purpose of this paper is to improve treatment results of children with affected growth areas, based on complex examination, using contemporary methods.

Clinical data is based on analysis of treatment results of these injuries in our section. Over the last three years in our section were treated 239 children with lesion in growth area, which constitutes 11% of the total number of children with fractures. Of which 190 were during acute trauma and 49 with secondary damage. 91% were children with grade II after Solter Harris and more rarely - 9% grade I after Solter-Harris. Main method used in lesion diagnosis is the clinical radiological method. Computed tomography is indicated only for diagnosis concretization and the affected area appreciation. 190 cases were undergoing the treatment in the acute period, the orthopedic reduction was performed, by discharging of the affected area by skeletal traction and plaster immobilization. Indications for surgical treatment were the outdated lesions, inefficiency of orthopedic reduction. Surgical treatment methods - transosseous osteosynthesis, orthopedic and surgical reduction with pins fixation. The consequences treatment was surgical, using osteotomy methods for deformity correction, affected limb lengthening by the Ilizarov method. Treatment results assesment was based on the following indices : anatomical condition, functional during the trauma, deformities and limb shortness were appreciated during later period. Treatment results have been good and satisfactory 95.6% (228 cases). In 4.4% (11 cases) the results were unsatisfactory and required repeated surgical corrections.

Conclusions:

1. The maintenance method is the stated method for children with growth zone lesions in the acute period.
2. The surgical treatment has indications in outdated lesions during late addressing.
3. Lesions in growing area at children represent 11% of the total number of tubular bone fractures, serious lesions causing limb deformity.

Keywords: physial area, tubular bones, deformation

OSTEOSYNTHESIS IN EXTREMELY SEVERE TRAUMA IN CHILDREN



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Objective of study. To assess treatment tactics and technique in order to save the affected segment.

Material and methods. This concept included children with injuries after severe trauma, which caused fractures and injuries so complicated that at the first stage the amputation of the segment was recommended. In the past 25 years, experts in the field were directed to refuse primary amputation, but to perform emergency anti-shock treatment and to carry the patient to the Institute of Mother and Child. The lot of clinical experience included 15 injured children aged between 4 and 18 years old. Only one girl suffered an extremely severe trauma of the upper limb, the rest of them (14) had fractures of the lower limbs, and 3 of them were found to have simultaneously fractures of the upper limbs. All patients had open fractures, III B degree of one or more segments, comminuted fractures, crushed soft tissues (even fingers in some children), very dirty major wounds. In 10 children the trauma occurred as a result of road accident (hit by car, wheel crossing over the lower limb

or limbs), in 4 children there was trauma as a result of a massive concrete construction fall over the lower limb. In a girl the disaster followed after inattention while working with an electric meat grinder; the right hand with fingers II-III-IV-V was stuck in the grinding space and broken in the "drum" with all finger and hand tendons. This was the only case where it was not possible to restore the affected segment. The rest of injured patients were subjected to primary surgical wound treatment with removal of non-viable tissue and washout with hydrogen peroxide, furacilin, aminocaproic acid, adaptation of fragments, fixation with pins or external devices, wound suturing or open wound treatment under the dressing. The follow-up treatment was lengthy; when indicated, the following measures were performed - staged necrectomy, skin plasty and bone reconstruction. No amputation was performed in any case.

Conclusion. Regardless of the extent of injury of the child's affected segment, specialists in the field should make maximum effort to save the segment and avoid amputation.

Keywords: extremely serious trauma, segment preservation.

OSTEOSYNTHESIS PECULIARITIES IN THE TREATMENT OF POST-TRAUMATIC PSEUDOARTHROSIS IN CHILDREN



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Objective of study. To appreciate peculiarities of osteosynthesis in pseudoarthrosis in children in order to improve treatment outcomes.

Material and methods. For over 45 years we have treated 161 patients with pseudoarthrosis in various segments after the initial treatment of the fracture in other health-care settings. Children with pseudoarthrosis of clavicle, diaphyseal pseudoarthrosis of humerus, forearm, femur and leg, primarily underwent poor surgical treatment with fixation of fragments with plates and screws, or intramedullary osteosynthesis without proper immobilization. In the clinic pseudoarthrosis treatment was performed by the Ilizarov method concurrently with the removal of deformities and inflammatory processes without intervening in the region of pseudoarthrosis, except pseudoarthrosis of clavicle, where grafting was used. In intraarticular fractures pseudoarthrosis developed after orthopedic treatment with plaster cast splint for immobilisation of the segment. In the clinic these patients underwent operations of restoration or reconstruction depending on the duration after fracture.

Results. In all patients with post-traumatic diaphyseal pseudoarthrosis, the Ilizarov method allowed to obtain good results (consolidation of fragments, removal of deformities, resolution of the inflammatory process, function restoration). In patients with pseudoarthrosis after intraarticular fractures lasting over 2 years after trauma, reconstruction operations allowed to get satisfactory results.

Discussions. Post-traumatic pseudoarthrosis requires surgical treatment to be resolved. There is an opinion that pseudoarthrosis of the capitulum of the humerus may not require surgery. This hypothesis is erroneous because valgus deformity of the elbow in these cases causes chronic trauma of the ulnar nerve, regardless of age (child, teen, adult). The resolution of pseudoarthrosis relies on the operation of correction and prevention.

Conclusion. Post-traumatic pseudoarthrosis prevails in children after intra-articular fractures (71.16%) and diaphyseal fractures (28.84%), its causes being orthopedic treatment of intra-articular fractures and surgical treatment with massive fixators in diaphyseal fractures. "Fracture" of metal construction at the fracture level is an absolute sign of pseudoarthrosis. To prevent pseudoarthrosis in intra-articular fractures, it is urgently needed to perform an open reposition through some mild methods and maneuvers, fine osteosynthesis and immobilization until consolidation is achieved.

Keywords: post-traumatic pseudoarthrosis, treatment, prophylaxis.

OSTEOSYNTHESIS COMPLICATIONS AND FAILURES IN CHILDREN WITH CLOSED LOCOMOTOR MONOFRACTURE



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Introduction. There is not any surgical method of treatment without failures and complications. The main cause of their increase is placement of massive metal fixators in the child, which are similar to those used in adults.

Material and methods. The failure of surgical technique was recorded in 12 children, including one with the fracture of the clavicle fixed with screwed plate and pins—with pin fracture and migration of the distal end forward into mediastinum. The