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Conflict of interest

The authors declare that they have no conflicts of interest

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OUR EXPERIENCE IN TREATING PATELLAR DISLOCATION USING A MINIMALLY INVASIVE METHOD

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Abstract

This article summarizes a little experience in the treatment of patellar dislocations by the arthroscopic method. In total, from 2018 to 2021, we performed 450 arthroscopic operations on the knee joint, of which the stabilization of the patella in case of dislocation was 7. Thus: in the case of primary traumatic dislocation, we performed 4 operations, with the usual - 3. e carrying out arthroscopy, which allows you to restore the biomechanical axis with the elimination of patellar dislocation simultaneously or sequentially at the stage of treatment, allows you to get positive results.

Пателлярлы дислокацияны аз инвазиялық әдістермен емдеудегі тәжірибеміз

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Андатпа

Бұл мақалада пателлярлық дислокацияны артроскопиялық әдіспен емдеудің аз тәжірибесі жинақталған. Барлығы 2018 жылдан 2021 жылға дейін біз тізе буынына 450 артроскопиялық операция жасадық, оның ішінде дислокация жағдайында пателла тұрақтылығы 7 құрайды. Осылайша: бастапқы травматикалық дислокация кезінде біз 4 операция жасадық, әдеттегідей - 3. Пателланың дислокациясын минималді инвазиялық әдіспен жою үшін, артроскопия әдісін жүргізу арқылы емдеу, оң нәтиже алуға мүмкіндік береді деп санаймыз.

Наш опыт лечения вывиха надколенника малоинвазивным методом

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Аннотация

В настоящей статье обобщен небольшой опыт лечения вывихов надколенника артроскопическим методом. Всего с 2018 по 2021 год нами на коленном суставе выполнено 450 артроскопических операций, из них стабилизация надколенника при вывихе составляла 7. Таким образом: при первичном травматическом вывихе нами выполнено 4 операции, при привычном - 3. Мы считаем оправданными устранение вывиха надколенника малоинвазивным методом т.е проведением артроскопии, что позволяет восстановить биомеханическую ось с устранением вывиха надколенника одновременно или последовательно на этапе лечения позволяет получить положительные результаты.

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Конфликт интересов

Авторы заявляют об отсутствии конфликта интересов

Ключевые слова

надколенник, вывих, артроскопия, медиализация

Relevance

In the structure of traumatological diseases, patellar dislocations account for 0.3-0.7% of all dislocations [1]. The most common cause of patellar dislocation is trauma (falling to the knee, hitting a straightened leg in the knee area), less common dislocations occur. Patellar dislocations occur as a result of indirect trauma in patients, predominantly young from 16 to 40 years old (81%), more often in women (70%) with anatomical structural features of the femoral-patellar joint, and are accompanied by damage to the medial supporting ligament and articular surfaces of the medial patellar facet and the lateral femoral condyle, with the possibility of the formation of free bone-cartilaginous intra-articular bodies, leading to pain syndrome, dysfunction of the knee joint, instability of the patella. The modern classification distinguishes between acute dislocation or primary traumatic, repeated dislocation or recurrence of acute, habitual dislocation or chronic instability of the patella. According to the degree of displacement of the patella, subluxation and dislocation are distinguished, and according to localization - external, internal and torsion. The factors predisposing patellar dislocation are: valgus deformity of the knee joints, dysplasia of the lateral condyle of the thigh, anatomical shape of the patella (type 3-5 according to Viberg), lateroposition of the tibial tuberosity, hypotrophy of the quadriceps muscle. Diagnosis of patellar dislocation consists of the following data: anamnesis, diagnostic puncture, radiography of the knee joint in frontal and lateral projections and radiography of both patellofemoral joints, MRI (signs of transchondral fracture and chondropathy of the lateral condyle of the thigh and patella), diagnostic arthroscopy (typical picture). Conservative treatment of patients with acute traumatic external dislocations of the patella, according to the literature, allows obtaining positive results only in 30-36% of patients, while in the rest of patients this method of treatment entails the development of chronic subluxation and habitual dislocation of the patella. An effective method of treating patients with patellar dislocations is its arthroscopically controlled stabilization [2-10].

Materials and methods

In total, from 2018 to 2021, we performed 450 arthroscopic operations on the knee joint, of which 7 (3.9%) of the patella were stabilized in case of dislocation. Thus: in the case of primary traumatic dislocation, we performed 4 operations, with the usual - 3. In the postoperative period, the limb was temporarily immobilized with a posterior plaster cast for up to 7 days, then a brace was worn for 6 weeks with flexion limited to 90 °, physical activity and sports were limited to 3 months. The complex of treatment includes anesthetic and anti-inflammatory therapy, a course of chondroprotectors (local and intra-articular), a medical gymnast, physiotherapy, massage.

Surgery progress: timeout: after the patient has been verified, the operating field is marked, the composition of the operating team is according to the approved plan. Operation: under aseptic conditions, under a tourniquet in the middle third of the left thigh, from two punctures on the sides of the patella's own ligament, two ports were installed into the cavity of the left knee joint.

The joint is flushed. With the help of 30 optics, a revision of the knee joint was performed. Under load, the patella moves freely onto the lateral surface of the knee joint. Vaporization of the knee joint

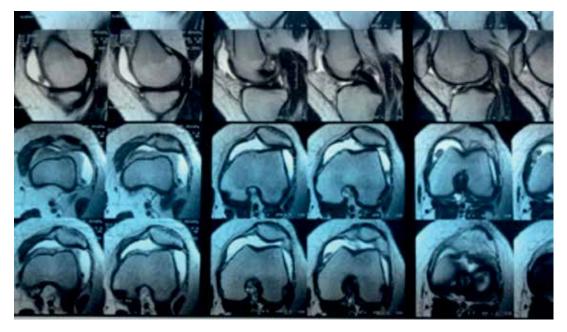


Figure 1.
Description is provided in the text

Figure 2.
Description is provided in the text



was performed. From an additional 2.5 cm incision along the anterior - inner surface of the upper third of the leg, the tendon m was isolated. Gr. With the help of an open extractor, an autograft with a length of about 18.0 cm was taken. A ligament of \emptyset 6.0

mm was formed. On the upper-inner edge of the patella, along the lateral surface, a 2.0 cm long, 0.5 cm deep and wide groove is formed. In the upper and lower corners of the groove in the frontal plane, 2 lavsan loops are drawn transosseally through the patella. The tendon autograft is laid in the groove and fixed with loops. Further, in the inner supracondylar zone, a Ø6.0 canal and a depth of 7.0 cm was formed. The autograft was carried out under the fascia of the thigh from the patella and inserted into the formed canal. Fixed with Interference Screw 7x25 mm. Movement in the knee joint was fully restored. The symptoms of patellar instability were eliminated. Postoperative wounds were sutured in layers. Iodine, aseptic dressings. Immobilization of the limb with a posterior plaster splint. Counting material and tools.

Conclusion

Thus, we believe that the elimination of the patellar dislocation by a minimally invasive method is justified, i.e. by performing arthroscopy, which allows to restore the biomechanical axis with the elimination of the patellar dislocation simultaneously or sequentially at the stage of treatment, which allows to obtain positive results.

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