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Clinical results after arthroscopic meniscectomy in sportsmen

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Sporcularda artroskopik menisektomi sonrası klinik sonuçlar

Diz cerrahisinde menisküs lezyonlarının tedavisinde ana prensip dizin yumuşak doku yapılarının stabilizasyonuyla ilgili olan menisküsün periferik kenarının korunmasıdır. Mümkün olabildiği kadar fazla fonksiyonel menisküs dokusunu koruyan menisektomi seçilmesi gereken metoddur. 4 senelik bir period için artroskopik menisektomi yapılmış, Lysholm tarafından tarif edilen diz skor skalasının fonksiyonel aktivite derecelemesi postoperatif durumu analiz etmede uygulandı. Sonuçlar %75 mükemmel, % 12 iyi, % 9 orta, % 4 kötü idi.

Anahtar kelimeler: *Sporcu, artroskopik menisektomi*

The treatment of meniscal lesions has always been problem of crucial importance in the knee surgery. Now a main principle in the knee surgery; is perserving of the peripheral rim of the meniscus, included in stabilising soft tissue structures of the knee. The meniscectomy, which preserves as much functional meniscus tissue as possible is a method of choice. Within a period of four (1-4) years arthroscopic meniscectomy were performed. The functional activity scale used aspects of the knee scoring scale described by Lysholm was applied for analysing the postoperative status. The results obtained were 75 % excellent, 12 % good, 9 % fair and 4 % poor.

Key words: *Sportsmen, arthroscopic meniscectomy*

The treatment of meniscal lesions has always been a problem of crucial importance in the knee surgery. Over the past 20 years considerable modifications have been made in the operative approach to this type of knee joint pathology. During this period the functional significance of knee menisci in stability, force transmission and shock absorption has been proved. Now a main principle in the knee surgery is the preserving of the peripheral rim of the meniscus, included in the stabilising soft tissue structures of the knee. Therefore we regard that question of total or partial meniscectomy is unnecessary. The meniscectomy, which preserves as much functional meniscus tissue as possible is a method of choice. Such a type of conventional meniscectomy we introduced in 1970. We called it total "physiological" meniscectomy for the reason that the stability and the free cinematics of the joint were preserved.

With the introduction of advanced arthroscopic techniques, procedures such as conventional meniscectomies have been replaced by arthroscopic meniscectomy. Its advantages over open meniscectomy include a more rapid recovery, fewer complications, and more favorable long term results.

The main problem at present in the treatment of meniscal lesions in sportsmen is achieving a rapid rehabilitation and return to trainings and competitions as soon as possible. In this sense the arthroscopic meniscectomy gives the most satisfying results. Five hundred fifthy six arthroscopic procedures of the knee joint were carried out in the Clinic of Sport Traumatology and Orthopaedics, Sofia during the period from February 1987 to Decmber 1990. Three hundred ninety one (70 %) were meniscectomies. One hundred thirty eight operated on patients with meniscal tears were professional athletes, predominantly football players-57 (41, 3%). There were 26 women and 112 men at the average age of 26,8 (18-34). In the group of professional athletes, out of all 138 meniscectomies, 117 were medial, 16 were lateral and 5 of them were combinated with extraarticular reconstructions in patients with anterolateral rotatory instability. The postoperative results in the 5 patients mentioned as well as in patients with knee instability and only arthroscopic meniscectomy perfomed, are not included in the present report.

According to the type of lesions, in medial menisci predominated longitudinal and bucket handle ruptures, while in lateral predominated longitudinal, flap tears, and transverse ruptures. We would like to outline the correlation between some sport disciplines and the type of ruptures. For example in 4 out of 5 operated on weightlifters a longitudinal rupture of medial meniscus in the posterior horn was observed. The mechanism of injury was described as standing up with weights from a low squat by all of them.

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Within a period of four (1- 4) years 133 professional athletes with arthroscopic meniscectomy were followed up. The functional activity scale used aspects of the knee scoring scale described by Lysholm was applied for analysing the postoperative status. The results obtained were 98 (75 %) excellent, 18 (12 %) good, 12 (9 %) fair and 5 (4 %) poor. Most of the fair and poor results were observed in athletes who had been competitively active for a long period of time and with concomitant knee injuries-chondromalacia, synovitis, gonarthrosis. The patients who returned to training and competition activities followed a definite programme. The goal of this programme is the recovering of the muscle strength affected by the preoperative inactivity and reflectory hypotropny. It covers the following stages:

1.Therapeutic-training exercises-after the 11-15th postoperative day.

2. Introductory trainings-from the 20-25th postoperative day.

3. Active participation in the training course and sport events-from the 30-35th postoperative day.

The profesional athletes returned to sport 32 days after the arthroscopic meniscectomy at average. This term is approximatly twice shorter compared to the conventional meniscectomy.

Finally we would like to discuss the problem of the premature return to participation in trainings of the athletes after arthroscopic meniscectomy. We consider the first 10-125 postoperative days as a very important period for the adaptation of the operated knee. The early resuming trainings and competitions often results in postoperative synovitis, evolution of capsule-ligamentous knee injuries and slow recovering of quadriceps/hamstring strength.

According to our clinical experience the period of 30-35 days is optimal to return to full sport activity of athletes undergone arthroscopic meniscectomy. Every hastening is a serious threat to the further curring of the operated knee.

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