## Traumatic knee dislocation "about"

## Travmatik diz çıkıkları

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Dear Editor.

I would like to share my opinions on the article "Traumatic knee dislocation" [1]. First of all, I would like to thank the authors for contributions to the science of a subject that is of great concern to physicians interested in the musculoskeletal system and whose treatment and rehabilitation is very difficult. I will try to contribute to such an important issue as a physical medicine and rehabilitation physician.

Traumatic knee dislocation is an extremely rare injury, with a prevalence of less than 0.2% of all orthopedic injuries. However, because it is frequently accompanied by meniscus, ligament, bone and soft tissue injuries, it is a difficult pathology to treat for orthopedics, physical medicine and rehabilitation physicians [2, 3]. Apart from this, knee dislocation can be accompanied by various vascular and neurological injuries, and if timely diagnosis and treatment is not performed, it may lead to consequences such as limb loss [4]. Today, there is still no consensus on the best treatment strategy for the optimal surgical treatment of traumatic knee dislocations [4, 5]. Bektas et al. [1] point out in their article the importance of early and appropriate patient-based intervention by experienced orthopedic surgeons and high awareness of neurovascular injuries.

Post-operative rehabilitation is as important as the surgical treatment of traumatic knee dislocations in terms of preventing morbidity in patients. Treatment of traumatic knee dislocations is surgically difficult and there is no standard treatment protocol, and the situation is similar in the field of rehabilitation. It can generally occur with poor functional results in these patients. In such injuries, combined instability is observed in many planes of the knee [6]. Owens et al. [7] stated that the treatment

results of patients who did not receive a modern rehabilitation program following early surgery were unsuccessful. Postoperative protection for multiple ligament injuries is important for healing of surgically repaired or reconstructed tissues, but major injuries and complex surgeries can develop stiffness and loss of motion in the knee joint [8, 9]. Postoperative protection is as important for the recovery of the surgical field as it is for the improvement of functional status in rehabilitation. In a review, Mook et al. [10] found that late knee reconstruction of severe multiligament knee injuries may provide similar outcomes for stability compared to acute surgery. But, it was concluded that early initiation of mobility in patients is better than immobilization.

Rehabilitation of multiple ligament injuries is different from isolated ligament injuries. In such injuries, a more protective rehabilitation program is planned. Surgical treatment is generally essential in the presence of multiple ligament injuries, especially traumatic knee dislocations. Arthrofibrosis is the most common complication of these surgeries. Early rehabilitation is of great importance in preventing complications. After multiple ligament injury surgery, partial load should be given for 6-8 weeks. Return to sports should not occur before 1 year [11]. Therefore, a comprehensive rehabilitation program should be organized after knee dislocation surgery, including strengthening exercises, range of motion exercises, mobilization exercises, walking and balance exercises.

As a result, the rehabilitation program is as important as the success of the surgical treatment in terms of successful functional results in traumatic knee dislocations. Surgery and postoperative rehabilitation program are two integral elements for successful results in such injuries.

## References

- Bektaş M, Güngör HR, Gem K. Travmatik diz çıkıkları.
  Pam Tıp Derg 2024;17:173-184. https://dx.doi. org/10.31362/patd.1265253
- Mermerkaya MU, Polat M, Tanrıöver A, Tandoğan R, Kayaalp A. Dizin travmatik çıkıkları. TOTBİD Dergisi 2019;18:71-88. https://doi.org/10.14292/totbid. dergisi.2019.09
- Hegyes MS, Richardson MW, Miller MD. Knee dislocation. Complications of nonoperative and operative management. Clin Sports Med 2000;19:519-543. https://dx.doi.org/10.1016/s0278-5919(05)70222-2
- Ma W, Yang Y, Ha X. Two-stage ligament reconstruction with remnant preservation as treatment of knee dislocation. BMC Surg 2023;23:371. https:// doi.org/10.1186/s12893-023-02271-5
- Held M, Laubscher M, von Bormann R, Richter DL, Wascher DC, Schenck RC. Open approaches for cruciate ligament reconstruction in knee dislocations: a technical note and case series. SICOT J 2021;7:17. https://doi.org/10.1051/sicotj/2021016
- Kekatpure A, Kekatpure A, Deshpande S, Srivastava S, Saoji K. Multiligament knee injury with common peroneal nerve palsy in a long jump athlete with 4-year follow-up: a case report. J Orthop Case Rep 2023;13:121-125. https://doi.org/10.13107/jocr.2023. v13.i07.3778
- Owens BD, Neault M, Benson E, Busconi BD. Primary repair of knee dislocations: results in 25 patients (28 knees) at a mean follow-up of four years. J Orthop Trauma 2007;21:92-96. https://doi.org/10.1097/ BOT.0b013e3180321318
- Ergan M, Başkurt Z, Çetin C, Atay T. Diz çoklu bağ yaralanmasında cerrahi sonrası rehabilitasyon programının sonuçları: olgu sunumu. Spor Hekimliği Dergisi 2019;54:202-206. https://doi.org/10.5152/ tjsm.2019.133
- Hubert MG, Stannard JP. Surgical treatment of acute and chronic anterior and posterior cruciate ligament and medial-side injuries of the knee. Sports Med Arthrosc Rev 2011;19:104-109. https://doi.org/10.1097/ JSA.0b013e3182191874
- Mook WR, Miller MD, Diduch DR, Hertel J, Boachie Adjei Y, Hart JM. Multiple-ligament knee injuries: a systematic review of the timing of operative intervention and postoperative rehabilitation. J Bone Joint Surg Am 2009;91:2946-2957. https://doi.org/10.2106/ JBJS.H.01328
- Tandoğan NR, Gönç HU, Polat P, Tanrıöver A. Çoklu bağ yaralanmalarında ön çapraz bağa yaklaşım.
   TOTBİD Dergisi 2020;19:586-593. https://doi. org/10.14292/totbid.dergisi.2020.72