

Penilaian aktivitas fisik dan kemampuan fungsional pasien pasca operasi rekonstruksi ligamentum krusiatum anterior akibat cedera olahraga serta faktor-faktor yang mempengaruhinya = Physical activity level and functional ability of post anterior cruciate ligament reconstruction surgery due to sports injury and their related factors

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## Abstrak

[**ABSTRAK**]

Latar belakang : Cedera ligamentum krusiatum anterior merupakan salah satu cedera olahraga yang sering terjadi. Penanganan dengan operasi rekonstruksi diharapkan dapat membantu pasien untuk kembali melakukan aktivitas fisik seperti semula. Tujuan: Mengetahui aktivitas fisik dan kemampuan fungsional pasien 12-24 bulan pasca operasi rekonstruksi ligamentum krusiatum anterior akibat cedera olahraga, serta faktor-faktor yang mempengaruhinya. Metode: Dikumpulkan 11 subyek dari daftar rumah sakit tempat praktek dokter spesialis bedah ortopedi anggota IHKS dan IOSSMA. Data demografik dan kondisi fungsional subyektif lutut dikumpulkan menggunakan kuesioner IKDC, data aktivitas fisik menggunakan kuesioner aktivitas fisik Tegner, dan data kondisi fungsional obyektif lutut menggunakan tes lompat satu kaki. Hasil: Sebagian besar subyek memiliki indeks massa tubuh di atas normal dan kebiasaan merokok. Seluruh cedera ligamentum krusiatum anterior yang dialami terjadi akibat suatu mekanisme cedera non-kontak dengan biomekanisme yang khas, yaitu: permukaan plantar kaki menempel di lantai dan berada di posisi menjauhi pusat massa tubuh, sendi lutut berada dalam keadaan hampir ekstensi dan valgus, serta batang tubuh bergeser ke lateral. Namun, sebagian besar subyek tidak menjalani program rehabilitasi sebelum operasi rekonstruksi. Hampir seluruh subyek memiliki tingkat aktivitas fisik lebih rendah dibandingkan dengan tingkat aktivitas fisiknya sebelum cedera, dan alasan utamanya adalah karena adanya rasa takut untuk kembali ke aktivitas fisiknya seperti semula. Sebagian besar subyek memiliki kondisi fungsional sendi lutut yang buruk, baik secara subyektif maupun obyektif, dan didapatkan kecenderungan adanya hubungan antara hal tersebut dengan beberapa faktor, yaitu jarak waktu antara terjadinya cedera dengan dilakukannya operasi rekonstruksi, serta pemberian program rehabilitasi sebelum maupun sesudah operasi rekonstruksi. Kesimpulan: Pasien 12-24 bulan pasca operasi rekonstruksi ligamentum krusiatum anterior akibat cedera olahraga memiliki tingkat aktivitas fisik dan kemampuan fungsional yang rendah. Dan terdapat kecenderungan bahwa hal tersebut dipengaruhi oleh jarak waktu antara terjadinya cedera dengan dilakukannya operasi rekonstruksi, serta pemberian program rehabilitasi sebelum dan sesudah operasi rekonstruksi yang dijalani.

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**ABSTRACT**

Background: Anterior cruciate ligament (ACL) injury is one of the common sports injuries and one of the management strategy is by doing reconstruction surgery. It is hoped that the patient can get back to previous physical activity level after the surgery. Objective: To know the physical activity level and functional ability of patients 12-24 months post anterior cruciate ligament reconstruction surgery due to sports injury and their related factors. Methods: Eleven subjects were selected from hospitals where orthopedic surgeons of IHKS

and IOSSMA having their practice. The followings data were collected: demographic and subjective functional knee evaluation using IKDC questionnaire, physical activity level using Tegner activity scale, and objective functional knee evaluation using single leg hop test. Results: Most of the subjects had high body mass index and smoking habit. All the anterior cruciate ligament injuries happened due to a non-contact mechanism with a classic biomechanics: plantar surface of the foot planted on the ground and positioned away from the center of mass of the body, valgus and almost fully extended knee, and lateral trunk motion. Unfortunately, most of the subjects did not have pre-surgical rehabilitation program. Almost all the subjects had a lower physical activity level compare to the one before injury, and the main reason was afraid to do their previous physical activity. Most of the subjects also had bad subjective and objective functional knee condition, and there was a possibility that it was affected by the time interval duration between the injury and reconstruction surgery, and the rehabilitation program given pre- and post-reconstruction surgery.

Conclusion: The patients 12-24 months post ACL reconstruction surgery due to sports injury had low physical activity level and functional ability. There was a propensity that this condition was affected by the time interval duration between the injury and reconstruction surgery, and the rehabilitation program given pre- and post-ACL reconstruction surgery., Background: Anterior cruciate ligament (ACL) injury is one of the common

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