

ABSTRACT

Background: Anterior Cruciate Ligament (ACL) injury is the most common knee ligament injury. The existence of an ACL injury affects functional status. Management of ACL injury with operative therapy ie ACL reconstruction with arthroscopy or non operative therapy ie medical rehabilitation depends on knee condition and patient needs. This study was conducted to determine how much the effect of ACL injury management mentioned on the functional status of the patients.

Methods: Descriptive case control analytical study was conducted on 32 patients with ACL injury in the period of 2015-2017 at RS Panti Rapih and RS JIH. The subjects were divided into 2 groups: 16 subjects undergone operative therapy and 16 subjects undergone non operative therapy. Functional status measurements were performed before therapy and 3 months after therapy with Knee Injury and Osteoarthritis Outcome Score (KOOS) questionnaire.

Result: The analysis with paired t test in the operative group obtained P value 0.002 and in the non operative group obtained P value 0,000. Analysis with independent t test showed that the average of functional status 3 months after treatment was $80,50 \pm 16,62$ in operative therapy and $76,75 \pm 13,48$ in non operative therapy with P value 0,489.

Conclusion: Operative and nonoperative therapy performed consistently in ACL injury patients provides significantly improved functional status than before therapy. There were no significant differences on functional status between operative and non operative therapy at 3 months follow up.

Keywords: ACL injury, ACL reconstruction, arthroscopy, medical rehabilitation, functional status.

INTISARI

Latar Belakang: Cedera *Anterior Cruciate Ligament (ACL)* merupakan cedera ligamen lutut yang paling sering terjadi. Adanya cedera ACL akan berpengaruh pada status fungsional. Penatalaksanaan cedera ACL dengan terapi operatif yaitu rekonstruksi ACL dengan *arthroscopy* atau terapi non operatif yaitu rehabilitasi medik tergantung kondisi lutut dan kebutuhan pasien. Penelitian ini dilakukan untuk mengetahui seberapa besar pengaruh tatalaksana cedera ACL tersebut terhadap status fungsional pasien.

Metode: Penelitian analitik deskriptif *case control* dilakukan terhadap 32 pasien cedera ACL periode 2015-2017 di RS Panti Rapih dan RS JIH. Subyek penelitian dibagi menjadi 2 kelompok yaitu 16 subyek dengan terapi operatif dan 16 subyek dengan terapi non operatif. Pengukuran status fungsional dilakukan sebelum terapi dan 3 bulan setelah terapi dengan kuesioner *Knee Injury and Osteoarthritis Outcome Score (KOOS)*.

Hasil: Analisis dengan *paired t test* pada kelompok operatif didapatkan nilai P 0,002 dan pada kelompok non operatif didapatkan nilai P 0,000. Analisis dengan *independent t test* didapatkan hasil rerata status fungsional 3 bulan setelah terapi yaitu $80,50 \pm 16,62$ pada terapi operatif dan $76,75 \pm 13,48$ pada terapi non operatif dengan nilai P 0,489.

Kesimpulan: Terapi operatif dan non operatif yang dilakukan secara konsisten pada pasien cedera ACL memberikan peningkatan status fungsional yang bermakna dibandingkan sebelum dilakukan terapi. Namun, tidak terdapat perbedaan yang bermakna pada status fungsional antara terapi operatif dan non operatif pada 3 bulan tindak lanjut.

Kata kunci: cedera ACL, rekonstruksi ACL, *arthroscopy*, rehabilitasi medik, status fungsional.