THE EFFECT OF ANTERIOR KNEE KINESOLOGY TAPING ON SINGLE LEG HOP TEST(SHLT) PERFORMANCE WITH ANTERIOR CRUCIATE LIGAMENT(ACL) RECONSTRUCTION UPON RETURNING TO SPORTS

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INTRODUCTION:

Kinesiology tape (KT) is an elastic tape developed by Kenzo Kase in 1973. The tape application provides a pulling force on the skin and creates space by lifting the fascia and soft tissues. Applying KT increases knee joint stability and strength among athletes who underwent ACL reconstruction.

- The Single-legged hop test has predictive value of knee function in individuals after ACL reconstruction. (1)

The aim of this study is to see the effect of kinesiotaping on SLHT performance of patients with ACL reconstruction upon full return to sports.

MATERIALS & METHODS:

Eleven male patients (mean age:27.7years; range 22-37years) who underwent ACL reconstruction using Hamstring tendon autograft at Hospital Raja Perempuan Zainab II were recruited. All surgeries were performed by the same surgeon. They had to perform two sets of SLHT for distance. The first set without KT application and the following set with KT application. Differences in distance of SLHT were measured and analyzed.

RESULTS:

Post KT application measurement of SLHT had mean measurement of 134.18cm while pre-KT application SLHT had mean measurement of 119.53cm.

DISCUSSIONS:

KT application significantly enhances the performance of SLHT in patients after ACL reconstruction upon returning to sports. These findings are like other published studies (2) and reflects the benefit of KT on knee joint stability and quadriceps strength.

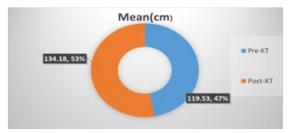


Figure 1: Mean Measurement



Figure 2: KT application

CONCLUSION:

KT use in post ACL rehab increases SLHT distances, improves balance, and helps patients achieve better return to sports levels.

REFERENCES:

- 1. Kase K, Wallis J, Kase T. Clinical therapeutic applications of the Kinesio Taping Method. 2 ed. Tokyo: Ken Ikai; 2003. p. 19-39
- Lemos TV1, Pereira KC2, Protássio CC2, Lucas LB1, Matheus JP3. The effect of Kinesio Taping on handgrip strength. J Phys Ther Sci. 2015 Mar;27(3):567-70