Physical Therapy Department for Musculoskeletal Disorder and Its Surgery

Master Degree
2005

Author	**:**	**Akram Fathy Abd EI Hamid.**
Title	**:**	**Kinematics analysis of the knee joint during stance phase in patients with Torn anterior circulate ligament.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Ahmad Hussan Hussine.**
Degree	**:**	**Master.**
Year	**:**	**2005.**
Abstract	**:**	

The purpose of this study was to clarify the important role of the anterior circulate ligament in the stability of the knee during the stance phase and the changes in the displacement of the tibia on the femur in the three dimensions that associated with tom anterior circulate ligament. Thirty patients with complete tear of the anterior circulate ligament participated in the study. The examined variables were knee flexion at heel strike, mid stance, and toe-off, abduction of knee during stance phase, and rotation of tibia on the femur during stance phase. Every patient was examined six tinles, three times for the affected knee and three times for the unaffected knee, the mean of the three trials of each limb was calculated. It was found that there were statistically significant differences in knee flexion at mid stance and toe-off, knee abduction during the stance phase, and rotation of the tibia on the femur during stance phase between the two groups. But statistically non-significant difference was found between both groups in the knee flexion at heel strike. It was concluded that, the anterior circulate ligament has a very important role in the stability of the knee during walking and the symptoms of instability associated with its tear mainly resulting from the prolonged internal rotation of tibia on the femur and delay in knee joint abduction.

Key words	**1.**	**Kinematics analysis.**
	2.	**knee joint.**
	3.	**Torn anterior circulate ligament.**
Arabic Title Page	**:**	**التحليل الوصفي لمفصل الركبة خلال المشي لمرضى القطع الكلي للرباط الصليبي الامامي.**
Library register number	**:**	**1213-1214.**

Author	**:**	**Enas Abdul Hamid Mohamed.**
Title	**:**	**The Role of Electrical Stimulation in Rehabilitation of Hand Flexor Tendon Reconstruction.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
Supervisors	**1.**	**Nadia Abdel Azeem Fayaz.**
Degree	**:**	**Master.**
Year	**:**	**2005.**
Abstract	**:**	

The purpose of this study was to determine the effect of electrical stimulation as the part from the post operative rehabilitative program of hand flexor tendon reconstruction. The subjects of this study consisted of twenty patients with ruptured hand flexor tendon aging between 20 to 45 years old. This sample was divided randomly into two equal groups each of 10 patients. Group (A) received a post operative rehabilitative program consisted of traditional therapeutic exercises in addition to electrical stimulation, while group (8) received the same program of traditional therapeutic exercises without electrical stimulation. The study subject were evaluated through measuring the total ROM of hand flexion and the power of hand flexors muscles through measuring the grip strength. The results of the study clarified a significant difference between group (A) and group (8) indicating the importance of electrical stimulation as an effective part of the post-operative rehabilitation program of such cases.

Key words	**1.**	**Electrical Stimulation.**
	2.	**Rehabilitation.**
	3.	**Hand Flexor Tendon Reconstruction.**
Arabic Title Page	**:**	**دور التنبيه الكهربي في التأهيل بعد الجراحات اعادة بناء الاوتار القابضة لليد.**
Library register number	**:**	**1211-1212.**

PHYSICAL THERAPY
LIBRARY
THESES 2005