

## Department of Biomechanics

Master Degree  
1998

Author	:	Nagui Sobhi Nassif.
Title	:	Isokinatic training of foot invertors and evertors after lateral ankle sprain.
Dept.	:	Department of Biomechanics.
Supervisors	1.	Mohamed Fouad Ibrahim Khalil.
	2.	Mohamed Mohamed Ibrahim Hanafy.
Degree	:	Master.
Year	:	1998.
Abstract	:	
<p>The purpose of this study is to establish an isokinatic exercise program to promote motor recovery after moderate lateral ankle sprain. Thirty subjects divided into 2 equal groups with unilateral lateral ankle sprain with the age from 18 to 21 years, each patient was evaluated pretest and 4 weeks post test on an isokinetic dynamometer at angular velocity of 90% second. Group I was the eccentric training group and group II was the concentric training group. Three sessions per week for 4 weeks were given for each patient . The results showed a significant difference in the peak torque , work and power of patients in group I higher than the results of patients in group II , which concluded the superiority of eccentric isokinetic contraction over the concentric isokinetic contraction.</p>		
Key words	1.	Isokinatic training.
	2.	foot invertors.
	3.	Evertors.
	4.	lateral ankle sprain.
Arabic Title Page	:	تأثير تطبيق التمرينات الایزوكینتیکیة لعضلات مفصل الكاحل بعد تمزق اربطة مفصل الكاحل الخارجية.
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DEPARTMENT OF BIOMECHANICS  
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Author	:	Samiha Mohamed Ibrahim.
Title	:	Influence of using walking aid on some gait parameters of patients with osteoarthritic hip.
Dept.	:	Department of Biomechanics.
Supervisors	1.	Mohamed Fouad Ibrahim Khalil.
	2.	Ahmed Abd El-Aziz Ahmed.
Degree	:	Master.
Year	:	1998.
Abstract	:	
<p>The purpose of this study was to investigate the effect of changing the side of the walking aid on the temporal and spatial parameters of the patient's gait as well as the oxygen consumption. The study included 20 male patients with unilateral osteoarthritis of the hip joint and 20 male volunteers. The results of this study indicated that , the measured gait parameters were significantly lower in patients group than values obtained from normal subjects, while, oxygen consumption was significantly heigher in patients group . The results also demonstrated that , the use of a walking stick or crutch contralaterally is effective in increasing walking velocity. however, using either aid ipsilaterally was characterized by a lower level of oxygen consumption.</p>		
Key words	1.	walking aid.
	2.	gait parameters.
	3.	osteoarthritic hip.
Arabic Title Page	:	تأثير استخدام العصي الساندة اثناء السير على مقومات حركة المشى فى المرضى المصابين بالتهاب مفصلى فى احد مفاصل الفخذ.
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