Physical Therapy Department for Musculoskeletal Disorder and Its Surgery

Doctoral Degree
2006

Author	**:**	**Hatem Hassan El-Sayed Rifai.**
Title	**:**	**Effect of proprioception training on functional instability of the ankle using a modified balance board.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
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Degree	**:**	**Doctoral.**
Year	**:**	**2006.**
Abstract	**:**	

Background, Functional instability has described as recurrent ankle sprains and as the subjective feeling of ankle giving way. Purposes, to investigate the effectiveness of providing visual and auditory feedback to the traditional wobble board in improving the proprioception and to correlate between the modified balance board with Biodex stability system in evaluation of proprioception in instable ankle. Materials and Methods, Forty males with unilateral functionally instable ankle were randomly assigned into two experimental groups. Both groups evaluated pre and post training with biodex stability system. Results, both groups revealed a highly significant difference between them, with lowering of stability index. Conclusion this study proved that the addition of biofeedback to the wobble board can increase the control of postural sway.

Key words	**1.**	**Sprain ankle.**
	2.	**Prorioception training.**
	3.	**Balance board training.**
	4.	**Biofeedback.**
Arabic Title Page	**:**	**تأثيرات تدريبات المستقبلات الحسية العميقة على الثبات الوظيفي للكاحل بالستخدام لوح الاتزان المعدل.**
Library register number	**:**	**1411-1412.**

Author	**:**	**Mohamed Mohamed Ibrahim.**
Title	**:**	**The role of proprioceptive training in treatment of rotator cuff impingement syndrome.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
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Year	**:**	**2006.**
Abstract	**:**	

The purpose of this study was to clarify the importance of proprioceptive rehabilitation program in management of rotator cuff . impingement syndrome. Thirty patients (25 males and 5 females) . suffering from rotator cuff impingement syndrome participated in this ' study and were randomly assigned into two groups. Group (A) received . just a traditional program (ultrasonic phonophoresis, strengthening and stretching exercises) and group (B) received a traditional program plus proprioceptive rehabilitation program. Each program took 4 weeks (3 sessions/ week). All patients were assessed before and after treatment. Shoulder proprioception was recorded by using angular reproduction test ' (AR) test. Shoulder pain was recorded by using visual analog sC21e I (VAS). Shoulder function was recorded by using American Shoulder and Elbow Surgeons (ASES) rating scale. The results of this study showed significant differences between both groups in shoulder function and proprioception. It was found that group (B) had higher functional Score and proprioceptive ability than group (A). No significant difference between both groups in shoulder pain.

Key words	**1.**	**Rotator cuff impingement syndrome.**
	2.	**Proprioceptive rehabilitation.**
	3.	**Shoulder proprioception.**
	4.	**Pain.**
	5.	**Function.**
Arabic Title Page	**:**	**دور تدريبات المستقبلات الحسية العميقة في علاج متلازمة انحشار العضلات المدورة لمفصل الكتف.**
Library register number	**:**	**1433-1434.**

Author	**:**	**Mowafak Fawzy Said Hussein.**
Title	**:**	**The importance of Q-angle measurement in the detection of lateral patellofemoral malalignment in obese females during weight bearing.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
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Year	**:**	**2006.**
Abstract	**:**	

Patellar malt racking is one of the most patellofemoral joint disorder. Q-angle is considered as one of the measurement tools that evaluate patellar malt racking. An increase of Q-angle is associated with patellar malt racking. The purpose of this study was to establish the relationship between the Q-angle and thigh girth measurements of obese females during weight bearing and to determine the possibility of using Q-angle as an early predictor of patellar malt racking when radiological examination shows normal findings. Fifty obese females selected according to BMI participated in the study. Ages range from 16-40 years. Q-angle was measured from weight bearing position using gait analysis system. CA and SA were measured by using Merchant technique with special stand. It was found that there was strong correlation between Q-angle values and thigh girth measurements. An increase of thigh girth was accompanied with increase of Q-angle value. On the other hand, it was found that the CA and SA were within the normal values. These findings suggest that Q-angle can be used as early predictor to diagnose and follow up patellar malt racking from weight bearing position in obese females when radiological findings are normal.

Key words	**1.**	**patellofemoral joint.**
	2.	**Malalignment.**
	3.	**Q-angle.**
	4.	**obese females.**
	5.	**gait analysis system.**
	6.	**weight bearing.**
Arabic Title Page	**:**	**أهمية زاوية العضلة رباعية الرؤوس فى إكتشاف عدم الإستقامة الوحشية لمفصل الرضفة مع أسفل عظمة الفخذ فى الإناث البدينات أثناء تحميل الثقل.**
Library register number	**:**	**1427-1428.**

Author	**:**	**Sahar Mahmoud Mahmoud Hassan.**
Title	**:**	**Three-dimensional trunk motion analysis in relation to categories of low back dysfunction.**
Dept.	**:**	**Physical Therapy Department for musculoskeletal disorder and its Surgery.**
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	2.	**Enas Fawzy Youssef.**
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Year	**:**	**2006.**
Abstract	**:**	

Purpose: This study was conducted to analyze specific features of three-dimensional analysis of trunk motions in relation to categories of mechanical low back dysfunction (MLBD) patients. Design: It consisted of two groups: control group was 25 healthy subjects (GA) and 60 patients with low back (GB). The participants were of both genders and their age ranged between 30-50 years old. The patients of (GB) were assigned to three equal categories: GB I; (central pain), GB II; (unilateral radiating pain), GB III; (bilateral radiating pain). The analysis conducted by Qualysis Medical AB System for both groups. The pain scores and disability scales were gathered to MLBD patients group. Results: The findings revealed significant differences between GA and GB categories in trunk flexion and lateral bending of GB I, while the differences between GA and GB of rotation movement were nonsignificant. There were no significant differences between MLBD categories in 3D trunk analysis and pain, while the functional activities revealed significant differences. The relation between pain scores and disability scales with trunk motions were ranged between weak and mild correlation. Conclusion: The 3D trunk motion can discriminate between normal and GB I patients. Otherwise, patients categories did not revealed obvious variation between each other. Recommendation: it is recommended to utilize other categories and scales to differentiate between LBD patients objectively.

Key words	**1.**	**Llow back dysfunction.**
	2.	**Three-dimensional analysis.**
	3.	**Categories.**
Arabic Title Page	**:**	**تحليل ثلاثى الأبعاد لحركة الجزع بالنسبة إلى فئات الخلل الوظيفى لأسفل الظهر.**
Library register number	**:**	**1387-1388.**