شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

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التوثيق الالكتروني والميكروفيلم

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EFFECT OF HYPERBARIC OXYGEN THERAPY ON CROUCH GAIT

By

MOHAMMED AMEEN AL NATOUR

B.Sc. of Physical Therapy

Faculty of Applied Medical Sciences, Department of Physical Therapy

AL Zahra University- Gaza- Palestine

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Cairo University

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Supervisors

Prof. Dr. AMIRA MOHAMMED Al TOHAMY
Professor in Department of Growth and Development
Disorder in Children and its Surgery,
Faculty of Physical Therapy,
Cairo University

Prof. Dr. LAMIAA MOHAMMED MOHSEN
Professor in Department of Pediatrics,
Faculty of Medicine,
Cairo University

Dr. MANAL SALAH El DIN ABD El WAHAB
Lecturer in Department of Growth and Development
Disorder in Children and its Surgery,
Faculty of physical therapy,
Cairo University

بسم الله الرحمن الرحيم

"قالوا سبحانك لا علم لنا إلا ما
علمتنا أنك أنت العليم الحكيم"

صدق الله العظيم
سورة البقرة الآية (32)

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Dedication

TO MY BELOVED

PARENTS,

MY SINCERE BROTHERS

AND FRIENDS

Effect of Hyperbaric Oxygen Therapy on Crouch gait / Mohammed Ameen AL Natour; supervisors: Prof. Dr. AMIRA MOHAMMED Al TOHAMY, Faculty of Physical Therapy. Prof. Dr. LAMIAA MOHAMMED MOHSEN, Faculty of Medicine. Dr. MANAL SALAH El DIN ABD El WAHAB, Faculty of Physical Therapy, Cairo University, Master Thesis.

Abstract

Back ground: The purpose of this study was to examine the effect of hyperbaric oxygen therapy on crouch gait. Thirty spastic diplegic children were assigned randomly into two groups (study and control). Subjects in the study group (n = 15) received traditional physical therapy program (stretching, strengthening, balance and gait training exercises) only, whereas subjects in the control group (n = 15) received the same traditional physical therapy program in addition to hyperbaric oxygen therapy. Gait parameters including hips, knees and ankles joints excursion during initial contact phase, step length (meters), gait velocity (meter/second) and cadence (steps/minutes) were measured before, one month and after three months of treatment program by 3D motion analysis. **Results:** There was a statistically significant improvement in both groups regarding all the measured variables and a statistically significant difference among both groups in favor to the study group. **Conclusion**: Physical therapy program in addition to hyperbaric oxygen therapy are effective in improving crouch gait in spastic diplegic children.

Key words: Cerebral Palsy, Crouch gait, 3-d Motion analysis, Hyperbaric Oxygen Therapy.

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