Physical Therapy Department for Obstetrics and Gynaecology and Its Surgery

Master Degree
1999

Author: Ghada Mohammed Refaat.
Title: Efficacy of TENS on ventilatory function after abdominal gynaecological operations.
Dept.: Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.
Supervisors:
1. Fahima Metwally Okeel.
3. Ayman El-Sayed Salem.
Degree: Master.
Year: 1999.

Abstract:
This study was conducted to determine effectiveness of TENS on ventilatory function (VC, FVC and MVV) in post abdominal gynaecological operations. In this study thirty female patients who underwent gynaecological abdominal operations with average age between 40-50 years old, assigned randomly into three equal groups (1,2 and 3) treated by TENS, I.S. or both TENS + I.S. each patient was evaluated four times by using spirometer to measure VC, FVC and MVV. The results of the study reveals that either in TENS group, I.S. group or TENS + I.S. group the ventilatory function (VC, FVC and MVV) tended to make a significant decrease after 24 hours postoperative, while, showing highly significant increase (P < 0.01) between 24 hours post operation and first and second days of treatment for all groups. Comparison between the three groups shows non significant difference (P > 0.05) in VC, FVC and MVV at 24 hours postoperative and after the end of the treatment session either in the first or the second day of treatment. So, we can concluded that the three methods TENS, I. S., and TEN + I.S. application are equally effective on ventilatory functions (VC, FVC, and MVV) after abdominal gynaecological operations and are greatly effective in preventing PPC.

Key words:
1. TENS.
2. ventilatory function.
3. abdominal gynecological operations.
4. gynecological operations.

Arabic Title Page: كفاءة التنبيه العصبى الكهربائى عبر الجلد على الوظيفة التنفسية بعد عمليات البطن لامراض النساء.

Library register number: 704-705.
This study was conducted to determine the hemodynamic effect of exercises on normal pregnant women in the second versus third trimester of pregnancy. In this study one hundred volunteer pregnant women between 12-39 weeks of gestation and their age ranged from 20-35 years old assigned into two equal groups: Group (A) and Group (B). Each woman in both groups performed maximal and submaximal exercise testing on the electronic bicycle ergometer connected to the morgan cart. Evaluation was done before and after maximal and submaximal exercise testing: Heart rate (H.R.), stroke volume (S.V.), cardiac output (C.O.P.), mean arterial pressure (M.A.P.) and systemic vascular resistance (S.V.R.). The result of the study reveals that in both groups H.R., S.V., C.O.P. and M.A.P. were statistically highly significantly increased while, S.V.R was statistically highly significantly decreased from before to after maximal and submaximal exercise testing. Comparison between both groups shows highly significant increase in H.R., S.V., M.A.P. and C.O.P. in group (B) than in group (A), at before, after submaximal and maximal exercise testing. While S.V.R. show non-significant differences at before exercise testing, with a significant decrease in group (B) than in group (A) after maximal exercise and highly significant decrease after submaximal exercise. So, we can conclude that physical training of the pregnant mother has no harmful effect on the mother because the response of exercise has no significant difference along this period and it lies in the safe borderlines for the mother.

1. Maternal hemodynamic.
2. Bicycle exercise.
4. Third trimester.
5. Pregnancy.

This study was conducted to determine the hemodynamic effect of exercises on normal pregnant women in the second versus third trimester of pregnancy. In this study one hundred volunteer pregnant women between 12-39 weeks of gestation and their age ranged from 20-35 years old assigned into two equal groups: Group (A) and Group (B). Each woman in both groups performed maximal and submaximal exercise testing on the electronic bicycle ergometer connected to the morgan cart. Evaluation was done before and after maximal and submaximal exercise testing: Heart rate (H.R.), stroke volume (S.V.), cardiac output (C.O.P.), mean arterial pressure (M.A.P.) and systemic vascular resistance (S.V.R.). The result of the study reveals that in both groups H.R., S.V., C.O.P. and M.A.P. were statistically highly significantly increased while, S.V.R was statistically highly significantly decreased from before to after maximal and submaximal exercise testing. Comparison between both groups shows highly significant increase in H.R., S.V., M.A.P. and C.O.P. in group (B) than in group (A), at before, after submaximal and maximal exercise testing. While S.V.R. show non-significant differences at before exercise testing, with a significant decrease in group (B) than in group (A) after maximal exercise and highly significant decrease after submaximal exercise. So, we can conclude that physical training of the pregnant mother has no harmful effect on the mother because the response of exercise has no significant difference along this period and it lies in the safe borderlines for the mother.

1. Maternal hemodynamic.
2. Bicycle exercise.
4. Third trimester.
5. Pregnancy.