### Abstract
This study was conducted to determine the impact of different menstrual cycle phases on postural stability of adolescent females. 30 adolescent females participated in the current study, their age ranged from 17 to 20 (19±0.93) yrs, their BMI ranged from 18 to 25 (22.9±2.07) kg/m²; all of them were nulliparous and have regular menstrual cycle. Each female performed balance test two times one at the follicular phase and the other at the luteal phase of the menstrual cycle. The results showed a statistically highly significant decrease in stability indices during menstruation at first five days of follicular phase compared to luteal phase with p value < 0.0001, where the mean value of overall stability index at follicular phase was (2.3±0.6) and at the luteal phase was (1.58±0.38), the mean value of anterior/posterior stability index at follicular phase was (1.81±0.57) and at the luteal phase was (1.21±0.35), and the mean value of medial/lateral stability index at follicular phase was (1.57±0.47) and at luteal phase was (1.16±0.32). Accordingly it could be concluded that postural balance is affected during follicular phase compared to luteal phase which may explain the increased liability to injury during this phase.

### Key words
1. Menstrual cycle phases
2. Postural stability
3. Follicular phase
4. Luteal phase
5. Stability indices

### Classification number

| Arabic Title Page | تأثير المراحل المختلفة للدورة الشهرية على الأتزان لدى الفتيات في سن المراهقة. |
| Library register number | 3897-3898. |
This study was designed to assess the effect of aerobic exercise on postnatal depression. Thirty primigravidae females selected randomly from Kasr Aini university Hospital, they suffered from moderate postnatal depression, their ages ranged from 20 to 35 years (27.2±1.65). They were assigned randomly into two groups equal in number. Group (A), participated in a program of aerobic exercise, with diet therapy, massage while, Group (B) received diet therapy, massage. The treatment program continued for 8 weeks (3 sessions of exercise per week). Edinburgh postnatal depression scale before and after the treatment program for all patients of the two groups. The results of this study revealed a statistical significant decrease in postnatal depression in both groups (A & B) after treatment, but the improvement was more in group (A) than group (B). Accordingly, it could be concluded that aerobic exercise was beneficial for women complaining of postnatal depression.
This study was conducted to determine which is more effective high intensity interval training or aerobic exercise in management of obese women with Polycystic Ovarian Syndrome (PCOS). Forty five obese patients with BMI>30kg/m², waist/hip ratio>0.8, and luteinizing hormone/follicular stimulating hormone (LH/FSH) ratio>1.5 participated in this study. They were randomly assigned into 3 equal groups. Group (A) received low caloric diet (1200 cal); group (B) received high intensity interval training and low caloric diet, and group (C) received moderate aerobic exercise and low caloric diet. The exercise program was performed 3 times/week for 12 weeks. Evaluation was done through assessing BMI, waist/hip ratio, LH, FSH, LH/FSH ratio and self administered PCOS questionnaire (quality of life) before and after 12 weeks of the treatment course. Results revealed that the diet group showed a highly significant decrease in BMI (P=0.0003), LH (P=0.0001), FSH (P=0.0003) and a significant decrease in waist/hip ratio (P=0.003) and LH/FSH ratio (P=0.02). It also showed a highly significant increase in quality of life score (P=0.0001). Also, High intensity interval training group and aerobic exercise group showed a highly significant decrease (P=0.0001) in BMI, waist/hip ratio, LH, FSH, as well as in LH/FSH ratio (P=0.001) and (P=0.01) respectively. Both groups showed a highly significant increase (P=0.0001) in quality of life score after treatment. Compared to aerobic exercise group, high intensity interval training group showed a highly significant decrease in BMI (P=0.0001), and LH (P=0.0001), and a significant decrease in the waist/hip ratio (P=0.01), FSH (P=0.01), LH/FSH ratio (P=0.04), as well as a highly significant increase (P=0.0001) in quality of life score after treatment. It can be conducted that high interval training is more effective than continuous aerobic exercise in management of obese women with PCOS.

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Tأثير التدريبات المتقطعة ذات الشدة العالية مقابل التدريبات الجسديّة على الهرمونات الجنسية في علاج متلازمة تكيسات المبيض لدى السيدات البدينات.
This study was conducted to determine the effect of tupler technique on post natal diastasis recti. Sixty women complained from diastasis recti (diagnosed by gynecologist/physician) from physical therapy department in El-Zarka Hospital in Damietta shared in this study. Their ages ranged from 25 to 35 years old and their diastasis recti were more than 2.5 cm after normal vaginal delivery. They were divided into two groups equal in number, group (A) consisted of 30 women who did not perform any exercises. While group (B) consisted of 30 women who performed tupler technique for 18 weeks. Diastasis recti was evaluated by digital caliper for both groups before and after 18 weeks. The obtained results showed that there was highly decrease in BMI, waist/hip ratio and diastasis recti in both groups (A&B) after 18 weeks. But, group B showed more decrease than group A after treatment. It could be concluded that tupler technique was very effective in reducing diastasis recti in post natal women.
**Efficacy of Inspiratory Muscle Training Versus Incentive Spirometer on Pulmonary Function In post-menopausal Asthma**

**Dept.:** Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.

**Supervisors:**
1. Hala Mohamed Hanafy
2. Hesham Mohamed Amin
3. Hany Farid Eid morsy,

**Degree:** Master.

**Year:** 2014.

**Abstract:**

**Purpose:** This study was conducted to detect and compare the effectiveness of inspiratory muscle trainer and incentive spirometer on pulmonary function in post-menopausal asthma. Thirty women complained from post-menopausal asthma, ages ranged from 50-60 years, they were selected from New Kasr Aini Teaching Hospital. They were divided randomly into two groups equal in number, each group contained 15 patients. Patients in group (A): managed with inspiratory muscle trainer in addition to traditional chest physical therapy intervention (Deep breath, cough training) while patients in group (B): received traditional chest physical therapy intervention and incentive spirometer. Patients in both groups were assessed before as well as after 6 weeks of treatment to measure lung functions using electronic spirometer. Results: The analysis of the results of the current study showed that pulmonary functions in postmenopausal women significantly improved in inspiratory muscle trainer than incentive spirometer as it was indicated by improvements in FVC, FEV1, FEV1/FVC and MVV in group (A) than in group (B).

**Conclusion:** It could be concluded that inspiratory muscle training improve ventilatory function by improving ventilatory muscle strength and endurance pattern and reduced symptoms in patients with asthma by increasing FVC and overall lung volume.

**Key words**

1. Inspiratory Muscle Trainer
2. Pulmonary Function Tests
3. Incentive Spirometer
4. Post-menopausal asthma
5. Asthma

**Classification number:**

**Arabic Title Page:** مقارنة تأثير جهاز تدريب عضلات الشهيق بجهاز الحافز التنفسي على الوظيفة الرئوية في حالات الربو الشعبي بعد انقطاع الطمث.

**Library register number:** 3991-3992.
**Title**: Effect of laser acupuncture on fatty liver in obese postmenopausal women

**Dept.**: Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.

**Supervisors**
1. Hanan El Sayed El Mekawy
2. Hassan Omar Ghareeb
3. Abeer Mohamed Eldeeb

**Abstract**: This study was conducted to determine the effect of laser acupuncture on fatty liver in obese postmenopausal women. Thirty obese postmenopausal women aged 50-60 years were participated in the current study. They were randomly distributed into two equal groups: Control group engaged in exercise program on treadmill, 3 times/week for 3 months and study group engaged in the same exercise program and received sessions of laser acupuncture, 3 times/week for 3 months. Liver size was assessed by ultrasonography and blood samples were analyzed to measure levels of cholesterol, triglycerides, High Density Lipoprotein (HDL), Low Density Lipoprotein (LDL), Risk Ratio I (RRI), Risk Ratio II (RRII) and Estradiol (E) before starting and after the end of the treatment program. Results showed highly significant decrease (p=0.0001) in Body Mass Index, cholesterol, triglycerides, LDL, RRI, RRII and liver size, as well as highly significant increase in estradiol (p=0.0001) and a significant increase (p=0.006) in HDL in the both groups after treatment. Also, results showed a significant decrease in body weight (p=0.03), cholesterol (p=0.04), triglyceride (p=0.04), LDL (p=0.04), RRI (p=0.03), RRII (p=0.03) and liver size (p=0.03), while there was a significant increase in HDL (p=0.03) and estradiol (p=0.02), of the study group when compared with the control group after treatment thus it could be concluded that laser acupuncture reduces liver size and improve lipid profile and estrogen level in obese post-menopausal women.

**Key words**
1. Laser acupuncture
2. fatty liver
3. Menopause
4. Estrogen
5. lipid profile.

**Classifications number**

| Arabic Title Page | تأثير الليزر على نقاط الوخز بالأبر على الكبد الدهني لدى السيدات البدينات بعد انقطاع الطمث. |
| Library register number | 3889-3890. |
This study was conducted to determine the response of milk production to aerobic exercise in women suffering from low milk production during lactation. This study was carried out on forty healthy primiparous mothers, aged from 20 to 35 years old, and their body mass index (BMI) was 25-30 Kg/m². They were randomly distributed into two equal groups: Control group received advices about the right way of lactation, mother's nutrition and fluid intake, as well as breast massage; and study group received the same advices and engaged in a program of moderate aerobic exercise at 60 to 70 % of the maximum heart rate for 45 minutes, 3 days/week, for 8 weeks. Evaluation of all mothers were done pre and post treatment course through assessing milk content (fat, protein and lactose), the serum prolactin level, weight of the baby and the degree of improvement in the flow of milk. The results revealed that the control group showed a statistically no significant difference (p>0.05) in the fat, protein and lactose contents of milk, the serum prolactin level and degree of improvement in the flow of milk post treatment, while weight of the baby showed a statistically highly significant increase (p=0.0001). While the study group showed a statistically highly significant increase (P=0.0001) in the fat, protein and lactose contents of milk, the serum prolactin level and the degree of improvement in the flow of milk, as well as, weight of the baby (P=0.004) post treatment. Therefore, it can be concluded that moderate intensity aerobic exercise can be used effectively to improve both the milk quantity and quality, which leads to normal weight gain of the newly born babies.

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<th>Author</th>
<th>Randa Gomaa Mohamed</th>
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<td>Title</td>
<td>Response of milk production to aerobic exercise in scanty lactating ladies</td>
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<tr>
<td>Dept.</td>
<td>Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.</td>
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</table>
| Supervisors                 | 1. Adly Aly Heidar Sabbour  
2. Laila Ahmed Rashed  
3. Abeer Mohamed ElDeeb |
| Degree                      | Master. |
| Year                        | 2014. |
| Abstract                    | This study was conducted to determine the response of milk production to aerobic exercise in women suffering from low milk production during lactation. This study was carried out on forty healthy primiparous mothers, aged from 20 to 35 years old, and their body mass index (BMI) was 25-30 Kg/m². They were randomly distributed into two equal groups: Control group received advices about the right way of lactation, mother's nutrition and fluid intake, as well as breast massage; and study group received the same advices and engaged in a program of moderate aerobic exercise at 60 to 70 % of the maximum heart rate for 45 minutes, 3 days/week, for 8 weeks. Evaluation of all mothers were done pre and post treatment course through assessing milk content (fat, protein and lactose), the serum prolactin level, weight of the baby and the degree of improvement in the flow of milk. The results revealed that the control group showed a statistically no significant difference (p>0.05) in the fat, protein and lactose contents of milk, the serum prolactin level and degree of improvement in the flow of milk post treatment, while weight of the baby showed a statistically highly significant increase (p=0.0001). While the study group showed a statistically highly significant increase (P=0.0001) in the fat, protein and lactose contents of milk, the serum prolactin level and the degree of improvement in the flow of milk, as well as, weight of the baby (P=0.004) post treatment. Therefore, it can be concluded that moderate intensity aerobic exercise can be used effectively to improve both the milk quantity and quality, which leads to normal weight gain of the newly born babies. |
| Key words                   | 1. Aerobic exercise  
2. milk content  
3. lactation  
4. prolactin  
5. scanty |
| Classification number       | |
| Arabic Title Page           | تأثير العلاج بالتمرينات الهوائيه على إدرار اللبن في السيدات اللائي تعانين من نقص في إفراز اللبن أثناء الرضاعة الطبيعية. |
| Library register number     | 3970-3971. |
This study was conducted to examine the effect of myofascial release on carpal tunnel syndrome (CTS) during pregnancy. Thirty pregnant women had CTS, their age ranged from 25-35 years, were selected from the Obstetric Out-patient Clinic, El-Sahel Teaching Hospital. All pregnant women were assigned randomly into two groups equal in number, Group (A) control group: worn natural wrist splint while sleeping for four weeks. And group (B) study group: received myofascial release in addition to natural wrist splint for 4 weeks. Evaluations of all pregnant women in both groups (A&B) were done before starting and after the end of the study (4 weeks), through Phalen's test, median nerve distal motor latency (DML) and Boston carpal tunnel questionnaire to assess CTS symptoms and hand function. The results of this study showed that statistically significant decrease (P< 0.001) in numbness & tingling sensation severity in group (A) as well as group (B). A statistically significant decrease (P< 0.001) in median nerve DML, pain intensity and weakness & difficulty in grasping severity in group (B), while group (A) showed statistically non-significant decrease (P> 0.05) in median nerve DML, pain intensity and weakness & difficulty in grasping severity. Comparison between both groups (A&B) before starting the study reveals statistically non-significant difference between them. While after the end of the study, there was statistically significance decrease (P< 0.001) in median nerve DML, pain intensity and weakness & difficulty in grasping severity, which in favor to group (B). Accordingly, it could be concluded that myofascial release is considered safe, non-invasive and simple method for decreasing pain intensity, numbness & tingling sensation severity and improve the hand function in CTS during pregnancy.

Key words
1. Carpal tunnel syndrome
2. Myofascial release
3. Boston carpal tunnel questionnaire
4. Median nerve distal motor latency
5. Pregnancy.
This study was conducted to determine the effect of stretching exercises on pre-eclampsia. This study was done on a sample of sixty mild pre-eclamptic women selected from the Outpatient Department of Obstetrics at Manshyt Elbakr Hospital. Their ages were ranged from 25-35 years old, their gestational age was more than 20 weeks and less than 25 weeks and their body mass index (BMI) were not exceeding 35 Kg/m². They were randomly divided into two groups equal in numbers. Group (A) (Control group) and Group (B) (Stretching group). Both groups (A&B) were having the same antihypertensive drug (Methyldopa) and Group (B) only was enrolled in stretching exercise program 3 times per week for 6 weeks. Blood pressure and Proteinuria were evaluated for both groups (A&B) before and after treatment (6 weeks). Results of this study found that there was a statistically significant decrease (P< 0.0001) in systolic blood pressure, diastolic blood pressure and proteinuria in both groups (A&B) after 6 weeks of treatment. But there was a statistically significant difference (P<0.0001) between both groups (A&B) post treatment in systolic blood pressure, diastolic blood pressure and proteinuria which in favor a more decrease in group (B). It can be concluded that stretching exercise in addition to antihypertensive drugs are effective in treating pre-eclampsia. So stretching exercise beside medical therapy should go hand in hand in management of pre-eclamptic patients.

**Key words**

1. Pre-eclampsia
2. Stretching exercise
3. Blood pressure
4. Proteinuria
This study was conducted to determine the effect of stretching exercise in treating primary vaginismus. Forty volunteer married females suffering from primary vaginismus participated in this study. They were selected from Kasr El Einy University Hospital; their ages ranged from 25-35 years. They were randomly distributed into two equal groups: group (A) (Control group) was treated by EMG biofeedback with vaginal electrode, twice/week for three weeks, while, group (B) (Study group) was treated by EMG biofeedback with vaginal electrode and stretching exercise for the same duration. Assessment for each female in both groups (A&B) was done through assessment of pelvic floor muscle tone using peritron (9300) device, assessment of pain intensity using numerical rating scale (NRS) and sexual function using the female sexual function index (FSFI) questionnaire before and after the treatment (3 weeks). Results revealed a statistically highly significant decrease (P<0.001) in the post treatment experienced pain, pelvic floor muscle spasm, and a statistically highly significant increase (P<0.001) in the sexual function in both groups (A&B). However, group (B) showed more improvement in experienced pain, pelvic floor muscle spasm, and sexual function than group (A) after the end of the treatment program. Accordingly, it could be concluded that combined therapy of stretching exercise and EMG biofeedback was more effective, successful and better in treating primary vaginismus than EMG biofeedback alone.

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<td>: لتأثير تمرينات الاستطالة لعضلات الحوض في علاج حالات التشنج المهبلي الأولي</td>
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### Abstract

**Background:** Fetal malpresentation was referred to fetal presenting part other than vertix and include breech, transverse, face, brow, and sinciput. Malpresentations might be identified late in pregnancy or might not be discovered until the initial assessment during labour. **Purpose:** To determine the effect of exercises on fetal malpresentation. **Subjects and Methods:** Thirty pregnant women were diagnosed with abnormal fetal presentation their age ranged between 25-35 years. All patients were evaluated through last month before treatment by ultrasound. Mode of delivery determined the effect of exercises in correcting the presentation of the fetus. Each women received postural exercises for last month, used gravity in some position (breech exercises meant knee to chest) three times a day for three sessions per week till delivery occurrence . **Results:** After treatment, all the outcome measurements had shown significant improvement of exercises on fetus with breech presentation or shoulder presentation as P value was (0.01) and (0.03) respectively. **Conclusion:** exercises have a positive additional effect on fetus malpresentation .where from the 30 females participated in the study, there were 20 female with cesarean section with a percentage of 66.67%, 8 females with normal delivery with a percentage of 26.66%, and 2 females with normal delivery with uterine contraction with a percentage of 6.67 %.

### Key words

1. Fetal malpresentation
2. breech presentation
3. ultrasound
4. shoulder presentation

### Library register number

3883-3884.