Thirty pregnant women at the late of the second and early of the third trimesters (26-32 weeks' gestation) with a mean value of (28.2±1.34 weeks' gestation), previously diagnosed with carpal tunnel syndrome (CTS) and their age ranged from 25-35 years with a mean value of (30.00±3.82 yrs) were selected from the Obstetrics Out Patient Department, Kasr El-Aini Hospital, Faculty of Medicine, Cairo University. This study was conducted at the EMG laboratory in the Faculty of Physical Therapy, Cairo University to investigate the changes in conduction velocity and sensory distal latency of the median nerve following LLLT (combined He-Ne and infrared laser) as well as, gliding exercises. The pregnant women received LLLT (830 nm, 9 joules, 100 msec, 10,000 Hz). The application of LLLT was done on 5 points; each point was irradiated for 120 seconds, three times per week, for five weeks (15 treatment sessions). Patients also, performed tendon and median nerve gliding exercises. During both types of gliding exercises, the patient maintained each position for seven seconds. She repeated each set of exercises three times per day throughout the study (five weeks). Pregnant women were assessed electrophysiologically via (SDL, MCV and SCV) of the median nerve and clinically via (VAS, Phalen's test and Tinel sign) before and after the treatment program. The results of the present study revealed that there were a significant (P<0.01) increase in MCV and SCV of the median nerve, highly significant (P<0.001) decrease in median nerve sensory distal latency and also there were significant (P<0.01) and a highly significant (P<0.004) decrease in the number of patients who had a positive Phalen's test and Tinel sign respectively at post-treatment as well as improvement of VAS compared to the pre-treatment results. So, it could be concluded that LLLT and exercises are effective physiotherapeutic modalities for treating carpal tunnel syndrome during pregnancy.
This study was conducted to determine the effect of low level laser therapy (LLLT) and aerobic exercises training in treating pain of chronic pelvic inflammatory disease (PID). Thirty regularly menstruating patients diagnosed as having chronic PID participated in this study. They were treated with LLLT and aerobic exercise training program which consisted of weight bearing exercises on treadmill followed by specific exercises for hip extensor and abductor muscles as well as posterior pelvic tilting exercise for 18 sessions, 3 sessions per week. All patients were evaluated before and after the end of the treatment using present pain intensity (PPi) scale as well as C-reactive protein (CRP) and pain relief (PR) scale which evaluated only after the end of the treatment. The results of this study showed a statistically highly significant decrease (P<0.001) in the intensity of PID pain perception and CRP after the end of the treatment program. Accordingly, it can be concluded that LLLT and aerobic exercises are effective physical therapy modality for treating chronic PID.

<table>
<thead>
<tr>
<th>Key words</th>
<th>1. PID.</th>
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<tr>
<td></td>
<td>2. Pain.</td>
</tr>
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<td></td>
<td>3. LLLT (low level laser therapy).</td>
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<td></td>
<td>4. Aerobic exercises.</td>
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<td></td>
<td>5. CRP (Creative protein).</td>
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<tr>
<th>Arabic Title Page</th>
<th>تأثير الليزر المنخفض الشدة والتمرينات الهوائية في علاج التهابات الحوض المزمنة</th>
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<tbody>
<tr>
<td>Library register number</td>
<td>1573-1574.</td>
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</tbody>
</table>
The purpose of this study was to determine the effect of low level laser therapy on wound healing and pain relief after episiotomy. Thirty women (primipara) having episiotomy were participated in this study, their age ranged from 20-35yrs. They were divided randomly into two groups equal in number groups (A&B), group A (study group) received 4 sessions of low level laser therapy on perineal incision (2 sessions per day for 2 days) with wavelength 670 nm, pulse width 450 microseconds, power 200 mW, pulse frequency 1000Hz and duration 1.5 min/cm², the 1st session was after 12 hrs of episiotomy and they received the prescribed dose of non steroidal anti-inflammatory drug. While group B (control group) received the same dose of non steroidal anti-inflammatory drug as group A. The outcome measures included: present pain intensity scale (PPi) immediately after episiotomy, after 12, 24, 36 & 48 hrs from episiotomy, pain relief scale (PR) after 12, 24, 36 & 48 hrs from episiotomy, and basal cell density (BCD) level, Proliferation marker Ki-67 and quality and arrangement of collagen after three weeks from episiotomy. The results of this study showed that there was no significant difference (P value >0.24) of present pain intensity scores immediately after episiotomy between the two groups, but there was a significant decrease (P value< 0.01) of present pain intensity scores after 12 hrs from episiotomy in group (A) in comparison to group (B) and a highly significant decrease (P value< 0.001) of present pain intensity scores after 24, 36 & 48 hrs from episiotomy in group (A) in comparison to group (B). Also there was a highly significant increase (P value< 0.001) of pain relief scores after 12, 24, 36, 48 hrs from episiotomy in group (A) in comparison to group (B). Also, the results of this study showed a highly significant increase (P value< 0.001) in basal cell density (BCD) level and in proliferation marker Ki-67 in group (A) in comparison to group (B), and the collagen was dense and parallel in group (A), while it was dense and non parallel in group (B) and this indicated better collagen arrangement. According to the results of this study, it was found that low level laser therapy is considered as one of the efficient alternative methods in accelerating wound healing and pain relief after episiotomy.

Key words
1. Low level laser therapy.
2. pain.
3. wound healing, episiotomy.
4. lasers.

Arabic Title Page: تأثير الليزر المنخفض الشدة على التئام الجرح وتخفيض الألم بعد الولادة بشق العجان.

Library register number: 1643-1644.
This study was conducted to examine the effect of ozone therapy on foetoplacental blood flow in hypertensive pregnant women. Thirty volunteer hypertensive pregnant women at 24 weeks’ gestation and their age ranged between 20 to 30 years old were participated in this study. They were selected from out patient clinic of the obstetrics and gynaecology department of Kasr EL-Aini University Hospital. Patients were assigned randomly into two groups (A & B) equal in number: Group (A) study group: consisted of fifteen women received ozone therapy, 3 sessions per week for 7 weeks and continued their antihypertensive drug (methyldopa), and Group (B) control group: consisted of fifteen women whom had been treated with the antihypertensive drug (methyldopa) only. Evaluations of all patients were done before starting the study and after 7 weeks through measuring maximum systolic and end diastolic velocities of the umbilical artery, systolic / diastolic (S/D) ratio, resistance index (RI), pulsatility index (PI) and the dose of the antihypertensive drug before and after the study. The results of this study showed a highly significant (P<0.001) decrease of maximum systolic velocity, (S/D) ratio, RI, PI and the dose of the antihypertensive drug while, there was a highly significant (P<0.001) increase of the end diastolic velocity in group (A). And in group (B), there was a non significant change of maximum systolic velocity and PI while, there was a significant (P<0.05) increase of the end diastolic velocity, a highly significant (P<0.001) increase in the dose of the antihypertensive drug, and a significant (P<0.05) decrease of S/D ratio as well as, RI. Comparison between both groups (A&B) before starting the study reveals that there was non significant difference between them. And at the end of the study, there was non significant difference between them in the maximum systolic velocity and the end diastolic velocity, while there was highly significant (p< 0.001) decrease in the S/D ratio, RI, PI and the antihypertensive drug dose in the study group. Accordingly, it could be concluded that ozone therapy has a positive effect in improving foetoplacental blood flow for the hypertensive pregnant women, as well as, it is a safe modality and has no harmful effects either on the mother or her foetus.
**Author** : Ghada Ibrahim Ahmed EL Refaye.

**Title** : Efficacy of Aerobic exercises in alleviating primary Dysmenorrhea.

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

**Supervisors**
1. Fahema Metwally Okeel.
2. laila Ahmed Rashed.
3. Hala Mohamed Hanafi Emara.

**Degree** : Master.

**Year** : 2007.

**Abstract**
This study was carried out in an attempt to determine the efficacy of aerobic exercises in alleviating primary dysmenorrhea. Fifty volunteer, single females with primary dysmenorrhea were selected randomly from the students of Faculty of Physical Therapy, Cairo University. Each subject participated in an aerobic exercise training program for 12 weeks, three times per week, for 36 sessions. PPi scale, PR scale and Plasma cortisol level was measured before and after the end of aerobic exercise training program. The results indicated that PR was highly significant increased as P<0.001 and PPi, P.C.L was highly significant decreased as P<0.001. This study concluded that aerobic exercise training program is an effective method for reducing dysmenorrheic pain.

**Key words**
1. primary dysmenorrhea.
2. aerobic exercises.

**Arabic Title Page**
لهجة التعبيرات الهوائية في تخفيف الألم المصاحبة لعسر الطمث الأولي.

**Library register number** : 1585-1586.
This study was conducted to determine the effect of therapeutic ultrasound in the treatment of post partum coccydynia. Thirty volunteers' multifarious post partum females with coccydynia. Treated by ultrasonic therapy for 18 sessions, one every other day. They were evaluated before and after the twelve sessions and after the eighteen sessions of treatment using present pain intensity (PPI) scale and plasma cortisol level. The results showed that PPI and plasma cortisol level was highly significant decreased as (P < 0.001). Study concluded that ultrasound therapy is an effective modality in alleviating post partum coccydynia.

**Key words**

1. Electrotherapy.
2. Ultrasonic therapy.
3. Coccydynia post partum.
4. Plasma cortisol level.

**Arabic Title Page**

تأثير الموجات فوق الصوتية في علاج الألم العصعصية بعد الولادة.

**Library register number**

1641-1642.
### Author
Marwa Abd El Rahman Mohamed.

### Title
Effect of Biofeedback Relaxation Training in Alleviating Premenstrual Disorders.

### Dept.
Physical Therapy Department for Obstetrics and Gynaecology and its Surgery.

### Supervisors
1. Salwa Mostafa El Badry.
2. Ibrahim Mahrous Kandil.

### Degree
Master.

### Year
2007.

### Abstract
This study was conducted to determine the effect of biofeedback relaxation training in alleviating premenstrual disorders. Thirty volunteers’ virgin females suffering from premenstrual tension, the participants of this study were selected from students of Faculty of Physical Therapy, Cairo University. Their age ranged from 18 to 22 years (20.53±1.27 yrs), and their body mass index was ≤ 28 kg/m². Each subject had been treated with relaxation training augmented by biofeedback twice/week for 6 weeks in addition to daily home routine, and assessment of premenstrual tension symptoms was done through assessment of HR, RR, muscle tension (measured by T.G MYO-feedback 420v) and data of daily symptoms report. The result showed a highly significant (P<0.001) decrease in HR, RR, TG MYO 420v data as well as some of symptoms of daily report including: anxiety, irritability, depression, nervous tension, mood swing, feeling out of control, poor coordination, insomnia, confusion, headache and crying compared to pre-treatment assessment. Accordingly, it could be concluded that the biofeedback relaxation training was found to be an effective, noninvasive, safe, cheap, easy to perform, simple and successful adjunct treatment method in reducing premenstrual syndrome.

### Key words
1. Premenstrual Tension.
2. Relaxation Training.

### Arabic Title Page
توبرَي الإستزخبء بىاسطت التغذَت الزجعُت علٍ تخفُف إظطزاببث هب لبل الذورة الشهزرة.

### Library register number
1589-1590.
This study was conducted to determine the changes of the planter foot pressures distribution for the normal pregnant women at their three trimesters. Eighteen normal pregnant women at their first trimester were selected from Outpatient Clinic of Antenatal Care at Kasr El-Aynee University Hospital. Evaluation of all subjects was done by RS Foot Scan International Plate System at their 1st, 2nd and 3rd trimesters of pregnancy for measuring the peak planter foot pressures distribution under the big toe, 1st & 5th metatarsal heads, the heel as well as the vertical ground reaction force (GRF). Results showed statistically highly significant increase (P<0.001) in the planter foot pressures under heel, 1st & 5th metatarsal heads, big toe as well as a statistically significant increase (P<0.005) in the 1st & 2nd peak of vertical GRF between 1st and either 2nd or 3rd trimesters as well as between 2nd and 3rd trimesters of pregnancy. But, there was a statistically non significant difference (P>0.05) in the 1st peak of vertical GRF between 1st & 3rd trimesters and in the 2nd peak of vertical GRF between 2nd & 3rd trimesters of pregnancy. So, it can be concluded that the increase in the planter foot pressures specially on heel and medial side of the foot giving a pronated foot position. Also, the increased vertical GRF may indicate that the pregnant women need more propulsion to move the increased weight and size of the pregnant uterus.

<table>
<thead>
<tr>
<th>Key words</th>
<th>1. Pregnancy.</th>
<th>2. Planter foot pressure.</th>
<th>3. Ground reaction force.</th>
<th>4. RS Foot scan plate system.</th>
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</table>

Arabic Title Page: توزيع الضغوط أسفل القدم في المراحل المختلفة في الحمل الطبيعي.

Library register number: 1661-1662.
This study was performed to examine the effect of biofeedback-assisted relaxation on preeclampsia. 35 women were participated in this study. They were divided randomly into two groups, (Group I) included 20 cases were treated with relaxation training in the form of autogenic training assisted by galvanic skin response biofeedback device and (Methyldopa) for 6 weeks (3 sessions per week) and (Group II) included 15 cases were treated with the (Methyldopa) only. Evaluations were done before and after the end of treatment period through measuring the SBP, DBP, HR, proteinuria and the daily doses of (Methyldopa). The results revealed that; in Group I the SBP, DBP, HR, proteinuria and the daily drug doses showed a statistically highly significant reduction (P<0.001) while, for Group II the SBP, DBP, HR and proteinuria showed a statistically significant reduction (P<0.05) whereas, the daily drug doses showed a statistically significant increase (P<0.01). So, it can be concluded that biofeedback-assisted relaxation can be used as an effective treatment for pre-eclampsia.

<table>
<thead>
<tr>
<th>Key words</th>
<th>Authors</th>
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<tbody>
<tr>
<td>1. Biofeedback</td>
<td>Amel Mohamed Yousef.</td>
</tr>
<tr>
<td>2. assisted relaxation.</td>
<td>Ekram Mohamed Mesbah.</td>
</tr>
<tr>
<td>4. blood pressure.</td>
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<tr>
<td>5. Proteinuria.</td>
<td></td>
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<td>6. Antihypertensive drug.</td>
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Arabic Title Page: تأثير الاسترخاء المساعد بالتغذية الراجعة الحيوية في حالات تسسم الحمل.

Library register number: 1575-1576.
This study was conducted to determine the effect of moderate intensity aerobic exercise on maternal blood glucose level and fetal birth weight in diabetic pregnant women. Forty pregnant women, who had type II diabetes, or GD and their gestational age were between 20 and 24 weeks, participated in this study. The study sample was divided into two groups equal in number (control and study groups). The control group was treated by diet alone. While, the study group received the same diet therapy and moderate intensity aerobic exercise. All cases evaluated through 3 hours oral glucose tolerance test at the start and the end of the study. Neonatal birth weight was measured immediately after delivery for both groups. The results of this study revealed that aerobic exercise in the form of walking on treadmill, at moderate intensity (60-75 % of maximum heart rate), for 45 minutes, 3 times/week, 1 hour after the main meal and insulin injection, from 20 weeks' gestation till delivery, in diabetic pregnant women, who had type II diabetes or gestational diabetes mellitus, together with diet therapy (1800-2000 kcal/day), decreased the plasma glucose level and hyperglycemia compared with diet alone. In the study group fasting blood glucose level reduced by 22.8 %, 1 hour BGL reduced by 14.3 %, 2 hours BGL reduced by 26.7 % and 3 hours BGL reduced by 29.7 % after treatment. The new born birth weight in the study group is less than those in the control group by 29.5 %, so, it could be concluded that aerobic exercise in conjunction with diet therapy had great effect in reducing rate of macrosomia in diabetic pregnant females.
This study was conducted to establish a sound relationship between spinal curvatures and the occurrence of female genital organs prolapse. Sixty women were participated in this study, thirty of them were suffering from second degree uterine prolapse and were serving as a study group while, the remaining thirty were normal and healthy and were serving as a control group. Their age ranged between thirty to forty five years old. All women were enrolled to be examined by lateral views of X-rays for the thoracic, lumbar and pelvic inlet angles. The results of this study showed a significant increase in the thoracic kyphosis and pelvic inlet angles whereas; the lumbar lordotic angle was significantly decreased for the study group compared to the control group. Accordingly, it can be concluded that significant changes in the spinal curvatures could be a predisposing factor in developing genital organs prolapse or play an effective role in its occurrence.

Key words
1. Genital prolapse.
2. Pelvic relaxation.