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ANALYSIS OF RISK FACTORS, MATERNAL AND FETAL OUTCOME OF SPONTANEOUS PRETERM PREMATURE RUPTURE OF MEMBRANES: A CROSS SECTIONAL STUDY

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Objectives: To determine incidence, risk factors, maternal and fetal outcome of PPROM occurring in patients attending a tertiary hospital in North Eastern India.
Materials: Out of 15,969 deliveries between July 2010 to December 2011, 358 pregnant patients with spontaneous preterm premature rupture of membranes from 28–0 to 36–6weeks gestation were reviewed. After excluding patients with uterine anomalies, intrauterine deaths and congenital anomalies 293 patients were included and evaluated in this study.
Methods: This descriptive cross-sectional study was carried out in the department of Obstetrics and Gynecology, Regional Institute of Medical Sciences, Imphal, Manipur, India.
Results: The incidence of PPROM was 2.2%. Out of two hundred and ninety three patients 86% were singleton pregnancies, 12.9% were twins and 1.02% were triplets. 48.4% had previous history of termination of pregnancy, 42.3% were multiparous, 28.6% history of previous PPROM and 16.3% had urinary tract infection. The mean gestational age at the onset of membrane rupture was 34.1 weeks and the latency from the membrane rupture to delivery interval ranged from 0–72 days with a mean of 48.4 hours. There were seven stillbirths (2.38%) and three neonatal deaths (1.02%) resulting in perinatal deaths of 4.4% and perinatal mortality rate of 0.44 per 1000 births due to PPROM. Maternal morbidity was minimal with postpartum haemorrhage in eleven patients (4.1%), abruptio placentae in seven patients (2.3%) and sepsis in three patients (1.02%). Sixty six patients (22.5%) underwent lower segment caesarean section for which malpresentations were the major cause.
Conclusions: Performing swab culture was not consistent with the management protocol of Department of Obstetrics and Gynecology in our hospital as antibiotics were randomly administered to almost all patients of PPROM. Management protocol should be improved in regard to vaginal swab culture and use of specific antibiotics. Despite remarkable advances in perinatal care, preterm premature rupture of membranes continues to cause perinatal morbidity and mortality. Strategies should be developed for its prevention.

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EFFECT OF AROMATHERAPY MASSAGE ON PSYCHOLOGICAL SYMPTOMS OF IRANIAN POSTMENOPAUSAL WOMEN: A RANDOMIZED CLINICAL TRIAL STUDY

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Objectives: The purpose of study was to determine the effect of aromatherapy massage on psychological symptoms during menopause.
Materials: A randomized clinical trial was conducted at menopausal clinic, in 2011. The study population comprised 90 women that were assigned to an aromatherapy massage, massage therapy and control group.
Methods: Each subject in the aromatherapy massage group received 30-min aromatherapy treatment sessions; twice a week for four weeks with aroma oil and subjects in massage therapy group received the same treatment with plane oil, while no treatment was provided to subjects in the control group. The outcome measures in this study were psychological symptoms, as obtained through the psychological sub scale of Menopause Rating Scale.
Results: A statistically significant difference was found between the participants' pre-application and post-application psychological score in intervention's groups ($p < 0.001$), whereas the score in the control group did not differ significantly. When the aromatherapy massage and the massage therapy groups were compared, the participants' psychological paired differences score of the aromatherapy massage group were found to be significantly higher than the massage therapy group ($p < 0.001$).
Conclusions: The results have demonstrated that both aromatherapy massage and massage therapy were effective in reducing psychological symptoms during menopause. In addition, this study also demonstrated that the effect of aromatherapy massage was higher than massage therapy.

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EFFECT OF PELVIC TILT BY USING BIRTH BALL ON ACTIVE PHASE OF PHYSIOLOGIC LABOR: A RANDOMIZED CONTROL TRIAL STUDY

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Objectives: One of the noninvasive methods of Physiologic Labor Management is pelvic tilt, which could be easier by using birth ball. Since it is safe method but there is not enough evidence for it. Objective: To evaluate the effectiveness of rocking and movement of pelvic (pelvic tilt) by using birth ball on Physiologic labor pain.
Materials: 60 healthy volunteer 18–35 years old primiparas after signing informed consent were involved. The tools which was used had three main parts of personal characterizes, check list of labor control chart regarding to national protocol and Visual Analog Scale (VAS) of pain score.
Methods: In this randomized control trial study, which had done in one of the large public hospital in west of Tehran (Year 2009–2010), samples randomly divided into two groups: 1) Pelvic tilt by using Birth ball, 2) Control group, whom received routine care of Physiologic labor/ delivery during active phase. Description and inferential statistical test were used. All ethical points were considered.
Results: Equality of two groups according to age, educational level, having job, planned pregnancy and duration of pregnancy in two groups were checked and there were no significant differences between them. Pain score during active phase in the birth ball group after 30, 60, 90 and 120 minutes, were significantly less than control group ($P \leq 0.001$).
Conclusions: Although pelvic tilt by using birth ball had no significant effect on duration of active phase, duration of uterine contractions, or the interval between contractions, but using this complementary treatment significantly reduce the intensity of pain during the active phase of labor after half an hour, an hour and 2 hour intervention. It is recommended to study the effects of combining of this method, with other complementary and comparing results.
Acknowledgment: This study had been received grants from the research department of Tehran University of Medical Sciences (TUMS) and approved by research Ethics committee of TUMS (2009–2010)

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EFFICACY AND SAFETY OF LONG-TERM DIENOGEST THERAPY FOR ENDOMETRIOSIS

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Objectives: Dienogest is a fourth-generation progestin that uniquely combines the pharmacological advantages of 19-norprogestins and progesterone derivatives. Preclinical studies have characterized the pronounced effect of dienogest on the endometrium without androgen or glucocorticoid effects. Since it

was marketed in Japan for the first time in the world in January 2008, we have many cases used dienogest for endometriosis. Our experience with long-term dienogest (more than 12 months; maximum 36 months) therapy for endometriosis is reported to elucidate its efficacy and safety.

Materials: The subjects were 21 patients diagnosed with endometriosis (13 patients) and uterine adenomyosis (8 patients) at the Department of Obstetrics and Gynecology of Kanazawa Medical University Hospital between April 2008 and September 2011.

Methods: They were treated with oral dienogest 2 mg/day for more than 12 months. The efficacy and side effects of dienogest therapy were investigated.

Results: The therapeutic efficacy of dienogest per case was as follows: alleviation of pelvic pain, 21/21; size reduction of adenomyosis, 3/8; and size reduction of ovarian endometrioma, 9/10. Side effects were: irregular bleeding, 19/21; headache, 5/21; hot flush, 3/21; depressive, 2/21; and general malaise, 2/21. Irregular bleeding also occurred after around 1 month in the group given dienogest alone, but the bleeding decreased or disappeared after several months. In regard to safety, no abnormal changes were observed in the results of major blood biochemical tests or blood coagulation tests. Serum estradiol fluctuated within the range 43.1.0–61.2 pg/mL. With respect to bone density, no definite decrease was observed in contrast to the GnRH agonists therapy.

Conclusions: Pain was relieved in all patients treated with dienogest. It was effective at the rate of 90.5% in shrinking endometrial cysts. These results indicate the efficacy of the dienogest therapy for the endometriosis. The most major side effect of dienogest was irregular bleeding, but it could be decreased and controlled by giving dienogest after a GnRH agonist, or by continuing with long-term therapy. Biochemical and coagulation tests showed no abnormalities even with long-term administration. Although further studies of the efficacy and safety of long-term dienogest therapy are required, dienogest is one of good medicines for the treatment of endometriosis.

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CIRCUMFERENTIAL ABDOMINAL-PELVIC PRESSURE: A PRELIMINARY TRIAL OF AN INEXPENSIVE PNEUMATIC "ANTI – SHOCK" GARMENT

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Objectives: Postpartum hemorrhage (PPH) remains the world's leading cause of maternal death. It persists both for facility and non-facility births, especially in low resource settings. Manual aortic compression is used as a temporary maneuver, but continued compression is difficult. Circumferential abdominal-pelvic pressure (CAPP) using pneumatic or non-pneumatic "anti-shock" garments (PASG or NASG) significantly decreases distal aortic blood flow, and NASGs improve maternal outcomes. Our objective was to design a low tech, affordable and acceptable PASG that can be made on-the-spot from bicycle tubes and sheets or locally tailored. Cost per device including the tubes and pump was less than US $40.

Materials: A three phase preliminary trial was started in August 2011 with 58 Nepalese nurses and auxiliary nurse midwives (ANMs). Most participants work in outlying Health Posts. A review of standard PPH treatment was given followed by a short didactic and practical course on CAPP. Each participant was given one PASG.

Methods: At the four month follow-up session participants applied the device to a healthy partner, with a third participant serving as assistant. Change in aortic flow was measured just below the superior mesenteric artery using an ultrasound to document effective placement. A survey instrument was administered at each session to elicit opinions and suggestions.

Results: As of December 2011, two sessions are completed. At the four month session the PASG reduced the mean distal aortic blood flow by 28% (95% CI 21% to 33%, P < 0.001). All 51 remaining participants believed they were capable of making and cleaning the device, and that it would be helpful for treatment of PPH. Fifty believed they could successfully apply it but one participant was not certain she could apply it without help. Nine participants in remote facilities used the device clinically. One patient required transport to a hospital and another requested removal of the device due to discomfort. All nine patients had good outcomes.

Conclusions: This PASG is an inexpensive and acceptable method for decreasing pelvic blood flow for use in resource-limited settings. Preliminary data suggest it is likely to be at least as effective as NASG. Funded by a grant from the Bill and Melinda Gates Foundation through the Grand Challenges Exploration Initiative. MicroMaxx® ultrasounds were provided by SonoSite Inc.

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COMPARATIVE STUDY OF ORAL VS VAGINAL MISOPROSTOL FOR INDUCTION OF LABOUR

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Objectives: To compare the safety and efficacy of oral vs vaginal misoprostol in equivalent doses (50mcg) for induction of labour.

Materials: A total of 128 term pregnancies with indication for induction of labour were included inthis study.

Methods: A total of 128 term pregnancies with indication for induction of labour were allocated to two groups to receive 50mcg misoprostol orally or vaginally, every 4hr until adequate contractions were achieved or a maximum of 200mcg dose.

Results: Induction to delivery interval was significantly shorter in the vaginal group compared with oral group (14.6h vs 22.5h.p < 0.01). There was no significant difference between the groups with respect to mode of delivery, neonatal outcome and maternal side-effects. However, the incidence of abnormal contractility pattern was more common in the vaginal group (10/68, 14.6%) as compared with the oral group 94/60, 6.6%) (p = 0.146).

Conclusions: Misoprostol (50 mcg) is effective in inducing labour whether it is given orally or vaginally. The vaginal route appears to more effective, however increased incidence of abnormal uterine contractions, tilts the scale in favour of oral route.

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MODE OF DELIVERY FOR TERM BREECH PRESENTATION: NEONATAL OUTCOME AT OROTTA NATIONAL REFERRAL MATERNITY HOSPITAL FROM 2008 TO 2010

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Objectives: To determine and compare short-term neonatal outcomes for both vaginal and cesarean section for a term breech deliveries.

Materials: Design Retrospective cohort study. Setting Orotta National Maternity Referral Hospital, Asmara, Eritrea (East Africa). Population Infants (n = 560) born at term in breech presentation in Orotta National Maternity Referral Hospital between 2008 and 2010. Multiple pregnancies, antenatal death, congenital malformations were excluded.

Methods: Data was collected from the birth register of Orotta National Maternity Referral Hospital and Orotta Neonatal Intensive Care Unit (NICU). Statistical comparisons between the mode of delivery and short-term neonatal outcomeswere performed using chi-square test and statistical significance was set at P-value <0.05.
Main outcome measures: Apgar score <7 at 5-min, birth trauma, admission to intensive care unit, intrapartum and first-week neonatal death.

Results: Out of 560 patients 212 (37.9%) were delivered by cesarean section and 348(62.1%) were delivered vaginally. Planned vaginal delivery (VD) for the fetus in breech presentation increased