Resident Presentations

The Relationship of One Abnormal Glucose Tolerance Test Value on the Poor Maternal Outcomes

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Objective: *To evaluate poor maternal outcomes of pregnancy with one abnormal glucose tolerance test value.*
Design: *Retrospective cohort study*
Setting: *Department of Obstetrics and Gynaecology, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.*
Subject: *981 pregnant women from antenatal care unit during January 1998 to October 2002.*
Material and Method: *The data were divided into four groups. The pregnant women with normal 100 g oral glucose tolerance test (OGTT) value were the control group. The pregnant women who had one abnormal 100 g OGTT value at 1st, 2nd and 3rd hour were assigned to group 1,2 and 3, respectively.*
Results: *Of 327 pregnant women with one abnormal OGTT value 140, 111 and 76 women were in group 1, 2 and 3, respectively and 654 pregnant women were in the control group. Using multiple logistic analysis, poor maternal outcomes were significantly different in group 1 (adjusted relative risk of 3.08; 95% confidence interval; 1.93-4.90) following by group 3 and 2 (adjusted relative risk of 2.56; 95% confidence interval; 1.41-4.99 and 2.33; 95% confidence interval; 1.37-3.97) compared to control. Cesarean delivery for cephalopelvic disproportion (CPD) or non progress of labor (NPL) was significantly different in group 1 (23.6%, adjusted relative risk of 2.55; 95% confidence interval; 1.51-4.16). There was no significant difference in pre-eclampsia between the groups.*
Conclusion: *Pregnancy with one abnormal OGTT value at 1st, 2nd or 3rd hour increased poor maternal outcomes compared with the control.*

Keywords: *Glucose tolerance test, Maternal outcomes*

Accuracy of Nugent's Score and Each Amsel's Criteria in the Diagnosis of Bacterial Vaginosis

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Objective: *To determine the diagnostic accuracy of Nugent's score and each Amsel's criterion in the diagnosis of bacteria vaginosis (BV), considering Amsel's criteria as the gold standard.*
Design: *Cross-sectional, descriptive study.*
Setting: *Family planning clinic, Siriraj Hospital.*
Subjects: *A total of 217 women who attended Family Planning Clinic at Siriraj Hospital between August and December 2003.*
Material and Method: *Exclusion criteria included menstruating or having vaginal bleeding, pregnant, using any vaginal suppository drug, previously diagnosed of human immunodeficiency virus (HIV) infection, having visible vaginal or cervical mass suspected cancer, and within six weeks of post-abortion or postpartum. Diagnosis of BV were made by both Amsel's criteria and Nugent's score without knowledge from each technique. Diagnosis of BV by Nugent's score were compared with Amsel's criteria (gold standard).*
Results: *The mean age of the women was 34.8 $\pm$ 9.9 years. The most common symptoms were abnormal vaginal discharge and pelvic pain (36.4% each), and 38% reported no symptom. Considering Amsel's criteria as the gold standard, Nugent's score showed a sensitivity of 65.6% (95%CI 46.8%, 80.8%), specificity of 97.3% (95%CI 93.5%, 99.0%), positive predictive value (PPV) of 80.8% (95%CI 60.0%, 92.7%), negative predictive value (NPV) of 94.2% (95%CI 89.7%, 96.9%) and accuracy of 92.6% (95%CI 88.1%, 95.6%). Both vaginal pH and whiff test demonstrated 100% sensitivity. However vaginal pH showed lower specificity than whiff test (58.9% and 97.3% respectively).*
Conclusion: *Nugent's score might not be suitable to use as a screening test for diagnosis of BV due to its low sensitivity.*

Keywords: *Nugent's score, Amsel's criteria, Bacterial vaginosis*

Rubella Antibody in Normal Pregnant Women at Srinagarind Hospital

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Background: *Rubella infection in pregnant women can result in serious neonatal morbidity and mortality. Outbreak of rubella in Thailand in 1967, 1974 and 1978 then the Expanded Program on Immunization was launched in 1986. The MMR vaccine were giving to all graduated primary schoolgirls. The latest study in immunity to rubella in pregnant women at Srinagarind Hospital was conducted in 1989 and found that only 43.3% of postpartum mother had immunity to rubella.*
Objective: *To determine the Rubella immune status in normal pregnant women who visits the Antenatal Care Clinic (ANC) at Srinagarind Hospital Khon Kaen.*
Design: *Descriptive study.*
Setting: *At the ANC Clinic at Srinagarind Hospital.*
Material and Method: *During January 15, 2004 - May 17, 2004, 150 normal pregnant women (15-40 yr.) were included in the study. After complete history taking, sign in the inform consents, blood for testing pregnant women including CBC, rbc indices, Rh blood group, VDRL, HBs Ag, and Anti HIV. ELISA technique was used to detect maternal Rubella IgG antibody.*
Outcome measurements: *Rubella IgG antibody level.*
Result: *74.67% (112 cases) of the pregnant women had immunity to rubella, 7.33% (11 cases) were equivocal for determining immunity to rubella and 18% (27 cases) had no immunity to rubella.*
Conclusion: *The expense for screening rubella IgG titer (150 baht in HAI technique, 350 bath in ELISA technique) is more expensive than rubella vaccine (165 baht/case). Routine screening for rubella is costly therefore repeated active rubella immunization should be considered for all graduated secondary school girls rather than postpartum mother.*

Keywords: *Rubella igG antibody, ELISA, Pregnant women*

Effect of a Clinical Practice Guideline for Cesarean Section due to Cephalopelvic Disproportion on Physician Compliance

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Objectives: *To evaluate the effect of the clinical practice guideline (CPG) for cesarean section due to cephalopelvic disproportion on physician compliance, pregnancy outcomes and cesarean section rate, and to identify factors associated with physician non compliance.*
Material and Method: *All 455 medical records of women undergoing a cesarean section due to cephalopelvic disproportion from 1 January 2002 to 31 December 2003 were reviewed. Pregnant women were deliveried from 1 January 2002 to 31 December 2002 were used for comparison. The outcome measurements were physician compliance, pregnancy outcomes, cesarean section rates and identify factors associated with physician non-compliance.*
Results: *The compliance rate was 83%. Physician compliance in private practice was lower than non-private practice (76.6% VS 92.4%). Pregnancy outcomes were not different between the two periods. The cesarean section rates before and after implementation of the CPG were 8.42% and 8.48%, respectively. Private practice, poor Bishop score and estimated fetal weight e" 3500 g were significant predictors of physician non-compliance.*
Conclusion: *The compliance rate was high but the CPG cannot reduce the cesarean section rates due to with cephalopelvic disproportion in 1 year period without adverse outcomes.*

Keywords: *Cesarean section, Cephalopelvic disproportion, Physician compliance*

Role of Hpv Dna Testing in Management of Women with Atypical Squamous Cells of Undetermined Significance

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Objective: *To find the sensitivity, specificity, positive and negative predictive values of the high-risk group human papillomavirus (HPV) DNA testing as a triage tool to detect high-grade squamous intraepithelial lesions (HSILs i.e. CIN 2 or worse) in women with a cytological smear showing atypical squamous cells of undetermined significance (ASC-US).*
Design: *Diagnostic test.*
Material and Method: *All new cases that have ASC-US cytological smear results in King Chulalongkorn Memorial Hospital from January to November 2003, excluding known cases of HSILs and pregnancies, were enrolled. Cervical cell samplings were done by cervical cytobrush technique and tested for high-risk group HPV with the Hybrid Capture 2 test. All participants were examined under a colposcope. Then cervicographs were taken before colposcopic directed cervical biopsies were done.*
Results: *Of the 90 ASC-US cases enrolled, the pathological results were normal in 30.0%, squamous metaplasia in 16.7%, cervical intraepithelial neoplasia (CIN) 1 in 37.8%, CIN 2 in 1.1%, CIN 3 in 11.1%, and microinvasive cervical carcinoma in 3.3%. The prevalence of HSILs and the prevalence of high-risk HPV detection were 15.6% and 38.9% respectively. Using pathological results from cervical biopsy as the gold standard, the Hybrid Capture 2 has the sensitivity, specificity, positive and negative predictive value of 85.7%, 69.7%, 34.3%, and 96.4% respectively to detect HSILs.*
Conclusion: *High-risk group HPV detection can be used as an additional triage test to detect HSILs in women having ASC-US with high sensitivity and negative predictive value.*

Keywords: *ASC-US, CIN, HPV, Nucleic acid hybridization, Triage test*

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4 - Hour Urine Protein for the Diagnosis of Preeclampsia in Hypertensive Pregnant Women

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Object: *To determine the accuracy of 4- hour urine protein value to diagnose preeclampsia substituted the gold standard of 24- hour urine protein value in hypertensive pregnant women.*
Study design: *Diagnostic test.*
Subjects: *Fifty pregnant women suspected of pregnancy - induced hypertension hospitalized in the obstetric ward and labor room, Bangkok Metropolitan Administration Medical Collage and Vajira Hospital.*
Material and Method: *Urine samples were collected within 24 hours in 2 periods: the first 4 hours and the next 20 hours in separate containers. The urine protein concentration were measured in 4-hour and 20- hour urine samples, then 4-hour and 24-hour urine protein were calculated. ROC curve were constructed to find the cut off point of 4 - hour urine protein that were most accurate diagnose preeclampsia.*
Result: *Among 50 hypertensive pregnant women, 25 (50%) had gestational hypertension, 19 (38%) had mild pre-eclampsia and 6 (12%) had severe preeclampsia. The result of 4- hour urine protein that most accuracy to diagnose preeclampsia at 106 mg with 72% sensitivity, 100% specificity, PPV of 100%, NPV of 78.13% and accuracy of 86%*
Conclusion: *The 4 - hour urine protein at 106 mg is most accuracy value to diagnose preeclampsia; 72% sensitivity, 100% specificity, PPV of 100%, NPV of 78.13% and accuracy of 86%. This might be modified and used substitute the gold standard 24 - hour urine protein to diagnose preeclampsia.*

Keywords: *4 - hour urine protein, 24 - hour urine protein, Preeclampsia*

Effectiveness of Disposable Apron and Forearm Covers as Protective Barrier During Cesarean Section

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Objective: *To determine the prevalence of blood contamination on doctor's reusable cotton cloth gown covered with disposable apron and forearm covers during cesarean section including numbers of blood contamination, distribution, associated factors and doctor's satisfaction in using disposable apron and forearm covers.*
Design: *Cross-sectional descriptive study.*
Setting: *Operating room, Department of Obstetrics and Gynaecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University.*
Subjects: *100 cases of pregnant women delivered by cesarean section from June 2003. to January 2004*
Material and Method: *During cesarean section, the surgeons were asked to wear disposable apron and forearm covers after a routine reusable cotton cloth gown. After the operation, the reusable cotton cloth gowns were examined. The number of blood droplet (s) was checked by naked eyes and confirmed with magnifying glass. The surgeons were asked to answer the questionnaires about their feelings and satisfaction. Blood loss, time of operation and number of cesarean section were also recorded.*
Main outcome measures: *Blood droplet (s) detected by researcher.*
Results: *The prevalence of blood contamination was 50%. The mean numbers of blood droplets were 2-5 droplets (range 1-20 droplets). There were various distributions of blood contamination on reusable cotton cloth gown without unique pattern. The operation time in the blood contaminated gown was significant longer (60; 35-150 vs 50; 25-90 minutes, $p < 0.05$). However, number of cesarean section and estimated blood loss were not significantly different ($p > 0.05$). Fifteen percent of surgeons were not satisfied with disposable apron and forearm covers because of difficult to wear and not fit.*
Conclusion: *Disposable apron and forearm covers are ineffective as a protective barrier during cesarean section. Further studies about the design of disposable apron and forearm covers are required.*

Keywords: *Apron and forearm covers, Protective barrier, Cesarean section*

Prevalence and Risk Factors for Residual Disease in Subsequent Hysterectomy Following LEEP or Conization

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Objective: *The purposes of this study were to determine the prevalence of residual disease in subsequent hysterectomy following cold knife conization or LEEP and to evaluate predictive factors for residual disease.*
Design: *Descriptive study.*
Setting: *Department of Obstetrics and Gynecology, Faculty of Medicine, Siriraj Hospital.*
Subjects: *A total of 120 patients who underwent hysterectomy after either LEEP or cold knife conization.*
Material and Method: *Medical records of 120 women were reviewed to estimate the prevalence of residual disease. Residual disease was defined as cervical intraepithelial neoplasia or cancer in the hysterectomy specimens. The patient's characteristic and pathologic parameters were analyzed for the predictive factors for residual disease.*
Results: *Of the 120 patients, 46 cases has residual disease in their hysterectomy specimens that the prevalence was 38% (95% CI 29.5, 47.2). Only marginal status was predictive of residual disease in the hysterectomy specimens ($p = 0.002$). Age, conization pathologic findings, glandular involvement, endocervical marginal status, stromal invasion, and endocervical curettage results were not predictive of residual disease in the hystectomy specimens.*
Conclusion: *Almost 40% of hysterectomy post conization had residual disease and undiagnosed invasive cervical cancer was also noted. Careful examination for residual disease in hysterectomy specimen should be performed, especially among those with positive cone margin.*

Keywords: Residual disease, *Cervical cancer*

Survival Analysis in Advanced Epithelial Ovarian Carcinoma in Relation to Proliferative Index of MIB-1 Immunostaining

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Objective: *To evaluate the survival of women in advanced epithelial ovarian carcinoma in relation to MIB-1 immunostaining and to determine the association between MIB-1 and clinicopathological variables and to identifying an appropriate cut-point for MIB-1 immunostaining as a prognostic marker.*
Material and Methods: *We retrospectively reviewed the medical records of women diagnosed during 1987-1998 with advanced epithelial ovarian carcinoma. The paraffin-embedded tissue of recruited women were stained with MIB-1 immunostaining.*
Results: *The records of 105 women were included in this study. The median percentage staining of MIB-1 was 11.9% (range 0.3-100.0%). No association between MIB-1 and other prognostic factors was found. The 5-year survival among advanced epithelial ovarian carcinoma women was 25.7%, while that in high MIB-1 (≥ median) and low (< dian) MIB-1 were 15.1% (95% CI = 7.1-26.0) and 36.5% (95% CI = 23.8-49.4), respectively. Median survival times in the two groups were 1.8 years and 3.0 years, respectively (P < 0.008). Division of the MIB-1 staining percent into quartiles revealed that the risk of death was elevated in the second quartile, which ranged from ≥ 7.6 to < 11.9 percent (HR = 2.30, 95% CI = 1.21-4.39).*
Conclusion: *Advanced epithelial ovarian carcinoma women with high MIB-1 had significantly lower survival than those with low MIB-1. While MIB-1 immunostaining is a prognostic factor, it was not found to be the associated with histologic type, stage, residual tumor or chemotherapy response. In our setting about 8 percent MIB-1 should be a useful cut-point above which the prognosis is significantly poorer.*

Keywords: Epithelial ovarian carcinoma, *Proliferative index*

Effect of Estrogen-Progestin and Estrogen on Mammographic Density

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Objective: *To assess differences between placebo, estrogen and estrogen-progestin regimens on changes in mammographic density of postmenopausal women.*
Study design: *Historical cohort study.*
Setting: *Menopause clinic, Department of Obstetrics and Gynecology, Srinagarind Hospital, Khon Kaen University.*
Subjects: *Total of 105 postmenopausal women attending menopause clinic who received placebo, estrogen and estrogen-progestin regimens, 35 in each group.*
Intervention: *The subjects were divided into 3 groups. The first treated with placebo while the second and the third groups were treated with continuous estrogen-progestin and estrogen regimens respectively. Mammographic examinations were done before and after a 12-24 month-period of hormone replacement therapy. The changes of breast density between the two examinations in each group were compared.*
Main outcome measures: *Changing in mammographic density between the two examinations.*
Results: *An increase in mammographic density was found among women receiving hormone replacement therapy, 40% (14 of 35) in estrogen-progestin group and 20%*
(7 of 35) in estrogen group. No variation of density was observed in the placebo group. The mammographic density increase which occurred in women receiving hormone replacement therapy was statistically significant when compared with placebo group (estrogen-progestin 95%CI, 20.91 to 59.09, estrogen 95%CI, 3.89 to 36.11). When the different treatment types were compared, estrogen-progestin group tended to have higher prevalence of mammographic density changes than estrogen group but not statistically significant (95%CI, -3.81 to 43.81).
Conclusions: *Hormone replacement therapy was associated with increase in mammographic density. Estrogen-progestin regimen seems to effect the breast density more than estrogen regimen.*

Keywords: *Postmenopause, Mammographic breast density, Hormone replacement therapy*

Serum Calcium and Serum Magnesium in Normal and Preeclamptic Pregnancy

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Objective: *The aims of this study were to measure serum levels of calcium and magnesium in preeclamptic pregnancy and to compare with those in normal pregnancy.*
Design: *Descriptive cross-sectional study.*
Setting: *Department of Obstetrics and Gynecology,Faculty of Medicine,Chulalongkorn University, Bangkok, Thailand.*
Participants: *We collected venous serum samples from 40 preeclamptic pregnant women and 40 normal pregnant women. Samples were analyzed for calcium and magnesium using a colorimetric analyzer. Data were analyzed with student t test or c^2 test or Fisher exact tests when appropriate.*
Results: *The serum calcium concentration in preeclamptic pregnant women was significant lower than normal pregnant women (9.0 ± 0.4 vs 9.7 ± 0.7 mg/dL, $p < 0.0001$). Like serum calcium, serum magnesium concentration in preeclamptic women was significant lower than normal pregnant women (0.77 ± 0.08 vs 0.85 ± 0.09 mmol/L, $p = 0.001$).*
Conclusion: *This study showed that both serum calcium and serum magnesium in preeclamptic pregnant women were lower than in normal pregnant women.*

Keywords: *Serum, Calcium, Magnesium, Preeclampsia, Pregnancy*

Accuracy of Histological Sampling of the Endometrium in Women with Abnormal Uterine Bleeding - a Comparison between Fractional Curettage and the Pipelle Sampler

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Objective: *To evaluate the accuracy of the Pipelle endometrial sampler compared with fractional curettage in women with abnormal uterine bleeding.*
Design: *Descriptive cross-sectional study.*
Setting: *Department of Obstetrics and Gynaecology, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.*
Subjects: *146 patients with abnormal uterine bleeding from April 2003 to August 2003.*
Material and Method: *Patients with abnormal uterine bleeding scheduled for fractional curettage under paracervical block underwent endometrial biopsy with Pipelle endometrial sampler before fractional curettage. The pathological results from Pipelle endometrial sampler and fractional curettage were compared.*
Results: *Endometrial aspiration with Pipelle sampler was failed in 2 patients due to failure to pass Pipelle through cervix. Adequate tissues for histologic diagnosis were obtained in 131 patients (90.97%). Accuracy of Pipelle endometrial sampler was 75%(108/144). One case of endometrial cancer was identified by both methods. The Pipelle sampler failed to detect simple endometrial hyperplasia in 17 of 52 cases and one case in focal atypical simple hyperplasia.*
Conclusion: *Endometrial biopsy with Pipelle sampler had accuracy 75% compared with fractional curettage.*

Keywords: *Endometrial biopsy, Pipelle, Fractional curettage*

Depression Among Gynecologic Cancer Patients: Prevalence and Associated Factors

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Objective: *The purposes of this study were to determine the prevalence of depression and associated risk factors among women with gynecologic cancer.*
Design: *Descriptive study.*
Setting: *Gynecologic Oncology Unit, Department of Obstetrics and Gynecology, Faculty of Medicine, Siriraj Hospital*
Subjects: *A total of 149 women with gynecologic cancer during January to April 2004 were enrolled.*
Material and Method: *Women's demographic data were obtained by interview. All medical information were abstracted from the medical record. The health-related self-report (HRSR) questionnaire was used to determine the prevalence of depression. Certain characteristics regarding demographic and medical data were evaluated in order to find any correlation with depression.*
Results: *The diagnoses included 77 cases (51.7%) of ovarian cancer, 34 cases (22.8%) of cervical cancer, 20 cases (13.4%) of uterine cancer and 18 cases (12.1%) of gestational trophoblastic tumor. The mean age was 46.6 years. Depression was detected in 20 out of 149 patients, which yielded a prevalence of 13.4% (95% CI 7.9-18.9%). Low income (less than 5,000 baht per month), cervical cancer, radiation treatment regimen, and poor performance status were significantly increased risk of depression.*
Conclusion: *Depression is one of the most common psychological distresses experienced by cancer patients. The prevalence of depression among gynecologic cancer patients was as high as 13.4%. These patients should receive adequate medical attention and careful evaluation for depression, especially those with such associated risk factors.*

Keywords: *Depression, Gynecologic cancer, Risk factors*

Success Rate of Intrauterine Insemination (IUI) in Srinagarind Hospital

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Objective: *To assess the pregnancy and delivery rates of intrauterine insemination in Srinagarind hospital.*
Design: *A descriptive study.*
Setting: *Infertile clinic, Srinagarind hospital, Khon Kaen university, Khon Kaen, Thailand.*
Subject: *Total of 123 patients who underwent intrauterine inseminations at Srinagarind hospital between 1 January 1997 and 31 December 2003.*
Results: *Among 123 patients who underwent intrauterine inseminations at Srinagarind hospital during the study period, the mean age was 31.60 years. Most of the patients were government officers (70.61%) the rest were farmers (24.49%) and laborers (14.49%). Educational statuses of the studied patients were university level (41.44%), primary school level (23.87%) and secondary school level (18.02%). Most of semen samples being analyzed (51.5%) were abnormal. The abnormalities detected were oligospermia (35.82%), teratospermia (49.25%), and asthenospermia (11.49%). The rest of semen samples (48.5%) were normal. Swim up was the technique mostly used for semen preparations during the study period. This study demonstrated that intrauterine insemination had pregnancy rate of 8.13% per patient. Delivery rate per patient was 2.44%. The rest of pregnancies achieved by intrauterine insemination resulted in abortions (4.88%) and ectopic pregnancies (0.81%). There were no serious complications of intrauterine insemination detected in this study. The complications frequently occurred were pelvic pain (20%) and abnormal vaginal bleeding (9.23%)*
Conclusion: *This study demonstrated that intrauterine insemination performed in Srinagarind hospital had acceptable success rate but the delivery rate was rather low.*

Keywords: *Intrauterine insemination, Pregnancy rate, Delivery rate*

The Effect of Implanon® Implantation in the Symptomatic Treatment of Endometriosis

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Objective: *To evaluate the efficacy of Implanon , progestin administered by implants for symptomatic treatment in women with endometriosis.*
Design: *An open clinical study without a control group.*
Setting: *Family Planning Clinic and out patient department, King Chulalongkorn Memorial Hospital, Bangkok, Thailand.*
Participants: *A total number of 50 women with symptomatic endometriosis whose diagnosed and confirmed by laparoscopy or whose symptoms recurred after surgical treatment were attended the study. These subjects had Implanon implanted subcutaneously at medial aspect of left arm for 3 months. The intensification of pain was assessed with Visual Analog Scale (VAS) before, at 4 and 12 weeks after the Implanon insertion. Frequency of adverse effects was kept by the patients in 4 and 12 weeks of therapy. The women were asked to grade the degree of their satisfaction at the end of therapy.*
Results: *50 women recruited and all of them completed the study. Significant ($P < 0.05$) improvements in severity and menstrual symptoms were achieve. The mean $\pm$ SD dysmenorrheal Visual Analog Scale score were 7.08 $\pm$ 2.09 at baseline and 3.72 $\pm$ 2.04, 0.84 $\pm$ 1.67 at 4 week and 12 week of therapy, respectively. In the study period, regular menstruation, amenorrhea, spotting, and breakthrough bleeding were reported by 21(42%), 14(28%), 13(26%), and 2(4%) women. At final evaluation, 6(12%) women were very satisfied, 34 (68%) were satisfied, and 10(20%) were uncertain. All of partipants willing to continue retaining the implant until complete 3 years course or plan to conceive.*
Conclusion: *Implanon , a subdermal progestin implant is an effective hormonal option for treating symptomatic endometriosis. However women should be carefully counseled regarding menstrual changes. It has the potential for providing long-term therapy in a substantial number of sufferers and this would require further study and verification. Its role needs to be assessed in comparative trial.*

Keywords: *Endometriosis, Implanon® implant, Dysmenorrhea, None menstrual pain*

Response to Initial Treatment of Low and Intermediate Risk Gestational Trophoblastic Disease with Low Dose Methotrexate and Folinic Acid

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Objective: *To evaluate efficacy and toxicity of methotrexate and folinic acid as primary treatment of low and intermediate risk gestational trophoblastic disease.*
Material and Method: *Medical records review was performed in patients who received methotrexate and folinic acid as primary treatment of persistent GTD (score $\leq$ 7). Response was defined as had complete remission after received methotrexate and folinic acid. Response rate was estimated and factors associated with response were evaluated.*
Results: *Ninety four patients with persistent GTD were treated with intramuscular methotrexate and folinic. Sixty four patients (68%, 95% CI 58-78%) achieved complete remission. The reasons for second line chemotherapy are resistance to methotrexate except one case because of rising SGOT. Mucositis (6.4%) and hepatotoxicity (6.4%) are the most common toxicity of methotrexate in this study and none of these toxic effects was life threatening. Factors associated with response were initial serum hCG $\leq$ 10,000 and stage I disease.*
Conclusion: *Methotrexate with folinic acid is effective treatment for low and intermediate risk GTD with minimal severe toxicity.*

Keywords: *Gestational trophoblastic disease, Methotrexate*

Five-year Survival Rate of Common Epithelial Ovarian Cancer Patients Receiving Cisplatin or Carboplatin Plus Cyclophosphamide as Adjuvant Chemotherapy after Surgical Staging

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Objectives: *To determine the 5-year survival rate of ovarian cancer patients who received cisplatin or carboplatin plus cyclophosphamide as adjuvant chemotherapy after surgical staging. The response rate of the tumor and disease-free interval of these patients were also studied.*
Study design: *Retrospective descriptive study.*
Subjects: *Ovarian cancer patients who had undergone surgical staging and received cisplatin or carboplatin plus cyclophosphamide as adjuvant chemotherapy in Bangkok Metropolitan Medical College and Vajira hospital between January 1,1995 to December 31, 2004.*
Material and Method: *Total number of 105 ovarian cancer patients with common epithelial histologic cell types who received cisplatin or carboplatin plus cyclophosphamide as adjuvant chemotherapy after surgical staging were identified. The clinical and pathological data were collected from the patients' files. The responses rate, progression-free intervals, and 5-year survival were evaluated.*
Results: *From 105 patients, 87 patients were evaluable for response. Overall response was found in seventy-two patients (63.7%) with complete response in sixty-seven patients (59.3%). Stable or progressive disease were found in 3and 12patients (2.7% and10.6%) respectively. Nineteen patients had recurrence. Disease-free interval was 19.5 months. At the time of this study, thirty-one patients (29.5%) were dead. The overall 5-year survival was 60.95% (95%CI,37.43-84.47).*
Conclusion: *As adjuvant chemotherapy in ovarian cancer patients of all stage, cisplatin or carboplatin plus cyclophosphamide had modest efficacy.*

Keywords: *Survival rate, Cisplatin, Cyclophosphamide, Epithelial ovarian cancer*

Risk Factors for Spontaneous Preterm Birth

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Objective: *To evaluate the risk factors for spontaneous preterm birth in singleton pregnancy.*
Material and Method: *The case-control study of 900 women with singleton pregnancies. (450 women with preterm births and 450 women with term births) between January 1998 and December 2002 were recruited. Cases and controls were matched by date of birth. The medical records including socioeconomic status, medical history, and antenatal complications were compared. Associations with spontaneous preterm birth were evaluated by univariate and multivariate analysis with logistic regression.*
Results: *The average incidence of preterm birth was 10% of 32,073 deliveries. The factors that significantly associated with preterm birth from univariate analysis and adjustment for confounders by multivariate analysis included previous preterm birth (odds ratio = 5.2, 95%CI 2.1-12.6), underlying asthma (odds ratio = 4.0, 95%CI 1.1-14.5), short stature (odds ratio = 3.5, 95%CI 1.3-9.8) and antenatal hemorrhage (odds ratio = 2.1, 95%CI 1.1-4.1).*
Conclusions: *The risk factors for spontaneous preterm births in this study were previous preterm birth, underlying asthma, short stature and antenatal hemorrhage. So women with these factors need carefully antenatal care.*

Keywords: *Risk factor, Preterm birth*

Dysmenorrhea in Thai Adolescents: Prevalence, Impact and Knowledge of Treatment

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Objective: *To determine the prevalence of dysmenorrhea, impact on school attendance, academic performance, social activities and knowledge of treatment in Thai adolescents.*
Design: *Cross-sectional study.*
Setting: *Nakhorn Pathom Ratjabhat University, Nakorn Pathom, Thailand.*
Subjects: *A total of 789 women who were 1st and 2nd year students from Nakhorn Pathom Ratjabhat University in Nakorn Pathom, Thailand.*
Material and Method: *Subjects were asked to complete the 35 items anonymous questionnaire handed out by the researchers. The questionnaire included data regarding the social data, menstrual pattern, severity and duration of menstrual pain, impact of dysmenorrhea on school attendance, academic performance and social activities. The methods, knowledge of pain relief and medications used to treat dysmenorrhea were also asked.*
Results: *The prevalence of dysmenorrhea were 84.2%. The most common symptoms were stomach cramp (78.0%), backache (58.9%) and mood change (56.9%). Only 31 (4.7%) had severe dysmenorrhea. The factors associated with dysmenorrhea were age at menarche ($p<0.05$) and body mass index ($p<0.05$). More than 60% of dysmenorrheic women reported that their class concentration was affected, Paracetamol was the drug known to 98.8% of participants with dysmenorrhea that help to relief their dysmenorrhea.*
Conclusion: *Dysmenorrhea is a significant public health problem. It has an impact on academic activities. Most of the subjects know that Paracetamol is the drug that help to relief their symptoms.*

Keywords: *Prevalence, Dysmenorrhea, Thai adolescents*

Local Tubal Lidocaine for Pain Relief During and After Postpartum Tubal Sterilization

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Objective: *To study whether local tubal Lidocaine can relief pain during and after postpartum tubal sterilization.*
Study design: *Randomized controlled trial.*
Setting: *Department of Obstetrics and Gynecology, Khon Kaen Hospital.*
Subjects: *Postpartum women undergoing postpartum sterilization at Khon Kaen Hospital between February 1, 2004 and May 31, 2004 and met inclusion criteria of study.*
Material and Method: *Postpartum women were randomized by table random number into 2 groups to received local 2% Lidocaine or 0.9% normal saline 10 ml drop over the fallopian tube before tube manipulation and sterilization. A visual analogue scale (0-10) was used to assess the pain scores during tubal sterilization and postpartum period according to the setting times.*
Main outcome measures: *The pain score (0-10) during tubal sterilization and after operation.*
Results: *There were 40 postpartum women undergoing postpartum tubal sterilization and met inclusion criteria of this study. 20 postpartum women in each group to received Lidocaine or NSS. Their all demographic data of both group were no significant differences ($P > 0.05$), except uterine retroversion in Lidocaine group greater than NSS group. Pain score during tubal sterilization, and after the operation at 15 min, 30 min, and 1 hr. were significantly lower in Lidocaine group($P < 0.05$). Time of first analgesia requested was significantly longer and lower doses in Lidocaine group. None of side effect was found in this study*
Conclusion: *Direct application of Lidocaine effectively decrease pain in postpartum women undergoing postpartum tubal sterilization, during tubal sterilization operation and 1 hour postoperative period.*

Keywords: *Postpartum tubal sterilization, Local tubal Lidocaine admininstration, Pain score*

Sexuality and Sexual Activity in Pregnancy

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Objectives: *To evaluate women's sexual experiences throughout pregnancy and to describe their attitudes and information sources regarding sexual activity during pregnancy.*
Material and Method: *A cohort study was carried out in Songklanagarind Hospital during June 2003-May 2004. They were interviewed with a structured questionnaire for three time periods: the first, second and third trimester. Main outcome measures were frequency of vaginal intercourse, sexual desire, arousal sensibility, orgasm and sexual satisfaction. Comparisons were made between the trimesters of pregnancy.*
Results: *All main outcome measures significantly decreased throughout pregnancy ($P < 0.001$). Sexual position changed throughout trimesters of pregnancy significantly with decrease in the use of the "man on top" position. As the pregnancy progressed, the concerns of abortion or harm to fetus related to sexual activity reduced. Only 22% of women received information about sexual activity in pregnancy from their doctors, whereas 45% of women received it from the books.*
Conclusion: *Sexuality and sexual activity were reduced significantly throughout pregnancy. Giving information on this issue from doctors to pregnant women was still low. Educational and counseling program on sexual activity during pregnancy should be disseminated both to women and doctors.*

Keywords: *Sexuality, Sexual activity, Pregnancy*

Long Term Results of Anterior Colporrhaphy with Kelly Plication for the Treatment of Stress Urinary Incontinence

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Objectives: *To study the five years outcome of anterior colporrhaphy with Kelly plication for the treatment of stress urinary incontinence.*
Material and Method: *Fifty two patients who underwent anterior colporrhaphy with Kelly plication with or without posterior colpoperineorhapy for the treatment of stress urinary incontinence between January 1997- February 1998 in King Chulalongkorn Memorial hospital were included in the study. All patients were contacted by phone and forty seven patients (90.38%) responsed and willing to participate in this study. The patient's characteristics, operative data and outcome were reviewed. The questionnaires designed to assess the outcomes of the procedure and the incontinence symptoms were given at the appointment date. Pelvic examination was performed using the Baden halfway classification for genital prolapse grading. Cough test was performed during pelvic examination for the objective demonstrated of stress incontinence.*
Results: *The mean $\pm$ SD of aged was 46.68 $\pm$ 8.78 yrs. We found that the incidence of post operative urinary retention of 43.3%. The incontinence rates at 1, 2, 3, 4 and 5 years were 0, 8.51%, 21.28%, 29.79% and 46.81% respectively*
Conclusion: *Our results showed the high recurrence rate at five years follow up. We emphasized the need of long term follow up and pre-operative counseling about the high chance of having recurrence by this operative technique.*

Keywords: *Stress incontinence, Kelly plication, Anterior colporrrhaphy*

The Association Between Meconium-stained Amnionic Fluid and Intrapartum and Postpartum Infection of Term Pregnant Women in Phramongkutklao Hospital

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Objective: *To assess the association between meconium - stained amniotic fluid and intrapartum and postpartum infection of term pregnant women in Phramongkutklao Hospital.*
Material amd Method: *A five-year retrospective study from January 1, 1999 to December 31, 2003 of 1160 pregnant women in obstetrics & gynecology department, Phramongkutklao Hospital assessing focused on meconium - stained and chorioamnionitis.*
Results: *A total of 1160 pregnant women participated in the study between January 1, 1999 - December 2003, chorioamnionitis was found 1/580 and 12/580 of meconium - stained and clear amniotic fluid group, respectively meconium - stained amniotic fluid was found only 1 among 13 patients who had chorioamnionitis (RR = 0.085).*
Conclusion: *Meconium – stained amniotic fluid did not increase chorioamnionitis.*

Keywords: *Meconium-stained amniotic fluid, Infection*

Reduction of Shoulder Pain after Laparoscopic Surgery: A double Blinded Randomized Controlled Trial

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Objective: *To study the effect of right subdiaphragmatic irrigation with normal saline solution combined with complete evacuation of carbon dioxide gas from peritoneal cavity on shoulder pain relief after laparoscopic surgery.*
Study design: *A double blinded randomized controlled trial.*
Setting: *Department of Obstetrics and Gynecology, Faculty of Medicine, Ramathibodi Hospital, Mahidol University, Bangkok, Thailand*
Material and Method: *Eighty patients undergoing gynecological laparoscopic surgery were randomized to treatment group (group A) or control group (group B). At the end of surgery, patients in group A received irrigation and continuous suction with 1 L of 0.9% normal saline solution at right subdiaphragmatic area under direct vision. While the last trocar sheath was removed, the suction-irrigator probe was placed inside the sheath and continued suction. In group B, the gas was expelled through the open umbilical cannula by pressed abdominal wall. Both shoulder pain were recorded with visual analog scale. Frequency of nausea and vomiting and the analgesic requirements were recorded.*
Results: *Mean right shoulder pain score was significantly lower in group A ($p = 0.03$). The frequency of nausea and vomiting and the amount of analgesic used were no significant differences.*
Conclusion: *Right subdiaphragmatic irrigation with normal saline solution combined with complete evacuation carbon dioxide gas from peritoneal cavity at the end of laparoscopic surgery can reduce postoperative right shoulder pain.*

Keywords: *Laparoscopic gynecological surgery, Postoperative pain, Subdiaphragmatic irrigation, Evacuation of carbon dioxide gas*

Prevalence of Bacterial Vaginosis among Intrauterine Device Users in Thai Women Attending Family Planning Clinic, Siriraj Hospital

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Objective: *To determine the prevalence of BV among IUD users attending at Family Planning Clinic, Siriraj Hospital. In addition, associated risk factors for BV were also explored.*
Material and Method: *This study was carried out from August through November 2003 at the Family Planning Clinic, Department of Obstetrics and Gynecology, Siriraj Hospital. A total of 300 IUD users were enrolled. Bacterial vaginosis is defined by fulfillment of at least three of four findings according to Amsel's criteria. Prevalence and risk factors were determined.*
Results: *The overall prevalence of bacterial vaginosis according to the Amsel's criteria was 20.3% (95%CI 15.7-24.9%). The most common complaints were abnormal vaginal discharge (41.0%) and pelvic pain (41.0%), whereas 32% had no symptoms. The only significant factor associated with BV was duration of IUD use. Women with BV were more likely to have used IUD for a longer period than woman without BV, especially more than 15 years. (19.7% and 9.2% respectively, $P = 0.017$)*
Conclusion: *Our findings showed rate of BV was prevalent among Thai women with IUD insertion. The only risk factor was long time duration of IUD insertion that health care providers should aware of the infection among these women. The influence of IUD use on the occurrence of vaginal flora changes and BV remained a controversial issue. Further study should be conducted to examine the issue in more detail, both among IUD users and other groups of women as well.*

Keywords: *Bacterial vaginosis, IUD, Prevalence*

Synergistic Growth-Inhibitory Effects of Fenretinide with Either Cisplatin or Paclitaxel in Human Ovarian Cancer Cell Line

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Objectives: *To study the growth-inhibitory effects of cisplatin, paclitaxel and fenretinide on human ovarian cancer cell line (SKOV-3) and to determine whether fenretinide can synergy with these drugs.*
Study design: *Experimental study.*
Material and Method: *Human ovarian cancer cell line (SKOV-3) was cultured. Different concentrations of cisplatin, paclitaxel and fenretinide were added into cells.The LD_{50} concentraion of each drug was measured. The number of viable cells was determined by MTT assay. The interactions between fenretinide-cisplatin and fenretinide-paclitaxel were represented as percent inhibition of viable cells.*
Results: *The LD_{50} concentrations of cisplatin, paclitaxel and fenretinide were 1.5 g/ml, 27 nmol/ml and 0.4 mol/ml, respectively. The percent inhibition of viable cells of cisplatin was 35%, 70% and 74% (at 1, 2 and 2.5 g/ml), paclitaxel was 5%, 9% and 43% (at 5, 10 and 20 nmol/ml) and fenretinide was 9%, 12% and 25% (at 0.025, 0.05 and 0.1 mol/ml), respectively. The growth-inhibitory effects of the combination of fenretinide (0.025, 0.05 and 0.1 mol/ml) with either cisplatin (1, 2 and 2.5 g/ml) or paclitaxel (5, 10 and 20 nmol/ml) were 100%.*
Conclusion: *Combinations of fenretinide with either cisplatin or paclitaxel demonstrated the synergistic growth-inhibitory effects. From our results, we expected that the using of fenretinide in combination with cisplatin or paclitaxel can possibly lower the dosage of these drugs. Therefore, the side effects and toxicities of drugs could be reduced.*

Keywords: *Fenretinide, SKOV-3, Synergistic growth-inhibitory effects*

Prevalence of Placental Pathology in Low Birth Weight Babies

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Objectives: *To determine the prevalence of placental pathology in low birth weight babies and collect demographic data of mothers that gave birth to low birth weight babies at Srinagarind Hospital.*
Design: *Descriptive study.*
Setting: *Labour room, Department of Obstetrics and Gynecology, Srinagarind Hospital, Khon Kaen University. Surgical pathology room, Department of pathology, Srinagarind Hospital, Khon Kaen University.*
Subjects: *Placenta from babies weighing between 500-2499 g. from June 2002 to June 2004.*
Material and Method: *Placenta from low birth weight babies were collected to be examined by perinatal pathologist. Demographic data of 114 mothers who gave birth to low weight babies, GA by Ballard score and placental pathology were collected by the researchers.*
Outcome measurement: *Prevalence of placental pathology in low birth weight babies at Srinagarind Hospital.*
Results: Prevalence of placental pathology in low birth weight babies was 80.7% or 92 out of 114 mothers. 43.90% of the placentas had infactions and 30.80% had infections. 82.50% of the mothers were between 20-35 years old. 25.40% were housewives or unemployed. 56.10% of the mother gained a total weight during pregnancy of 6 –10 kilograms. 50.90% were primigravida 99.10% did not have any underlying diseases 50.90% of the babies had gestational age of more than 37 weeks and 77.20% weighed appropriate for gestational age. The mean birth weight was 2,074 g.
Conclusion: *Prevalence of placental pathology in low birth weight babies was 80.70%, thus their placenta should be examined.*

Keywords: *Placental pathology, Low birth weight babies*

Prevalence of Genital Prolapse in Thai Menopausal Women Using the International Continence Society Standardization Classification

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Background: *There was an increasing number of menopausal women in Thailand (estimation of 5 million women). There is no published data on the prevalence of genital prolapse among Thai menopausal woman. So we create this hospital based study to identify the magnitde of this problem in Thai menopausal women.*
Objective: *To study the prevalence and symptoms of genital prolapse in Thai menopausal women attending menopausal clinic in King Chulalongkorn Memorial Hospital.*
Study design: *Descriptive study (Cross-sectional study).*
Material and Method: *Two hundred and fifteen of Thai menopausal women attending the menopause clinic at King Chulalongkorn Memorial Hospital during 1st of January - 28th of February 2004 were recruited. History taking and pelvic examination were done The severity of any prolapse was classified using ICS classification.*
Results: *Prevalance of Thai menopausal women having any type of genital prolapse was 43.3%. Anterior vaginal wall prolapse and superior vaginal prolapse were the two highest prevalences of genital prolapse (29.3% and 14.9%). The prevalence of genital prolapse increased by the menopausal age. The two leading symptoms were stress incontinence and vaginal outlet relaxation (89.3% and 51.6%).*
Conclusion: *From this study,we found the prevalence of any genital prolapse (43.3%) and stress incontinence(89.3%) among Thai women attending menopausal clinic in King Chulalongkorn Memorial Hospital. We strongly recommended the pelvic examination and urinary-symptoms history taking to evaluate the severity of genital prolapse.*

Keywords: *Genital prolapse, Thai menopausal women*

Risk Factors for Early Diagnosis of Gestational Diabetes Millitus

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Objective: *To determine factors possibly associated with early development of GDM (before 24 weeks of gestation).*
Subjects: A total of 196 pregnant women who started antenatal care at antenatal clinic before 24 weeks of gestation, Siriraj Hospital between January 2002 and December 2002 were enrolled. Those who were known cases of DM before pregnancy were excluded.
Material and Method: *Screening test with 50 g GCT was offered to all participants at their first visits and 100g OGTT was used as a diagnostic test. If GDM was not diagnosed, they were retested between 28-32 weeks using the same criteria. Early GDM was defined as the diagnosis of GDM before 24 weeks of gestation. Late GDM was defined as the diagnosis of GDM later than 24 weeks of gestation. Clinical risk factors of the 2 groups were compared to determine the association with early development of GDM.*
Results: *Of 196 women with GDM, 127 (64.5%) were diagnosed before 24 weeks of gestation, and 69 (35.5%) were diagnosed later. Obesity was only one significant risk factor for early development of GDM. Early GDM group were more likely to be obese than late GDM group (20.5% and 8.7% respectively, p=0.042). Other clinical risks were not significantly different between the 2 groups. Early GDM were more likely to diagnose if 3 or more clinical risk factors were found compared to late GDM group (8.75% and 2.9% respectively) but not significantly different.*
Conclusion: *Obese women would attend the screening program at early onset to reduce maternal complication and neonatal adverse effect.*

Keywords: *Clinical risk factors, Gestational diabetes, Early diagnosis*

Screening for Asymptomatic Bacteriuria in Pregnant Women: Urinalysis versus Urine Culture

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Study design: *A descriptive and analytical study.*
Material and Method: *228 pregnant women presenting for their first antenatal care from March 1, 2004 at Khonkaen Hospital. A clean-catched midstream urine was obtained from them. These specimens were sent for urinalysis and urine culture. Main outcome measures were pyuria, bacteriuria, prevalence, risk factors and pathogen of asymptomatic bacteriuria in pregnant women*
Results: *The prevalence of asymptomatic bacteriuria was 5.7%. Urinalysis had a sensitivity of 38.5%, a specificity of 74% and an accuracy of 72% in detecting asymptomatic bactomatic bacteriuria. No factors were associated with asymptomatic bacteriuria in pregnant women. The most common organism were Streptococcus spp.*
Conclusions: *Urinalysis should not be used to screen asymptomatic bacteriuria in pregnant women due to its low sensitivity.*

Keywords: *Asymptomatic bacteriuria, Screening*

Accuracy of Intraoperative Clinical Evaluation of Lymph Nodes in Women with Gynecologic Cancer

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Objective: *To determine the accuracy of intraoperative clinical evaluation of lymph nodes metastasis in gynecologic cancer women.*
Material and Method: *From May 2003 to April 2004, the characteristics of lymph nodes metastasis in women who underwent lymphadenectomy, lymph nodes sampling, or lymph nodes biopsy for surgical procedure of gynecologic malignancies were evaluated in 124 cases. The operation was performed only by gynecologic oncologist. The overall clinical impression and lymph nodes characteristics (lymph nodes enlargement, firmness, shape, and adherence) were correlated with histologic diagnosis.*
Results: *The mean age was 51 years. The type of cancer were cervical cancer 48%, endometrial cancer 33%, ovarian cancer 17%, and vulvar cancer 2%. Overall intraoperative clinical evaluation for lymph nodes metastasis had a high sensitivity, specificity, and accuracy(81%, 91%, and 90%, respectively). But had a high false-negative rate(19%). The positive and negative predictive values of lymph node palpation were 65% and 96%, respectively. Lymph nodes enlargement(size $\geq$ 2 cm) had a highest sensitivity(94%) and round shape of lymph nodes had a highest specificity and accuracy(97% and 94%, respectively).*
Conclusion: *Intraoperative lymph nodes palpation for detecting lymph nodes metastasis in gynecologic malignancy had a high accuracy when performed by experience surgeon and maybe useful in some situation that complete lymphadenectomy can't be performed.*

Keywords: *Gynecologic cancer, Lymphadenectomy, Clinical evaluation*

Knowledge Attitude and Practice of the Gynecologists in Bangkok and Surrounding Areas about Hormone Replacement Therapy (HRT) in Postmenopausal Women

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Objective: *To assess the knowledge, attitude and practice of the gynecologists in Bangkok and surrounding areas regarding hormone replacement therapy (HRT) in postmenopausal Thai women women.*
Study design: *Descriptive study*
Subjects: 203 gynecologists working at the hospitals in Bangkok, Nonthaburi, Samut Prakarn and Pratumthani
Material and Method: *A self-administered questionnaire was sent to a randomly proportional sample of 600 gynecologists in Bangkok and surrounding areas (149 for university hospitals, 451 for general hospitals). Data were collected on demographics, knowledge, attitude to the use of HRT, reason for prescribing HRT, regimens prescribed, duration of HRT and frequency of follow-up.*
Results: *203 questionnaires (33.83%) were completed and eligible for analysis. 76.8% are general gynecologists. The mean age was 37.6 7.3 years. Most of them had sufficient knowledge about HRT (92.1%) and had neutral attitude to HRT (42%). The female gynecologists had a more positive attitude towards HRT than male. Almost all of them experienced prescribing HRT for postmenopausal women. The majority of gynecologists (61.1%) considered vasomotor symptoms to be an indication for HRT. For women with intact uterus, 59.6% preferred to use oral continuous combined (estrogen and progestogen) regimen, whereas for women with no uterus, 87% preferred to use oral continuous estrogen. Most of the gynecologists (73.4%) prescribed HRT with duration of use not more than 3 years and follow-up patients every 3-6 months. 50.7% of gynecologists had problems in prescribing HRT. The common problems were patient refusals (24.1%) and the feeling of their inadequate knowledge to prescribe HRT (17.7%).*
Conclusion: *The majority of gynecologists in Bangkok and surrounding areas had sufficient knowledge of HRT. Most of the attitude towards HRT was neutral. Almost all of them had experience in prescribing HRT. However, more than half of the gynecologists had problems in prescribing HRT due to misunderstanding of patients about the benefits and risks of HRT. The suggestion for problem solving is providing standard guideline to all gynecologists for appropriate management to indicated patients.*

Keywords: *Knowledge, Attitude, Practice, HRT, Gynecologist, Postmenopausal women*

The Incidence of Vaginal Breech Delivery in Siriraj Hospital

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Objective: *To determine the incidence of vaginal breech delivery at Siriraj Hospital and to evaluate factors affecting mode of delivery.*
Design: *Cross-sectional study.*
Setting: *Department of Obstetrics and Gynaecology, Faculty of Medicine Siriraj Hospital, Mahidol University.*
Subjects: *A total of 317 women with singleton breech presentation, ≥ 28 weeks of gestation, who had their deliveries at Siriraj Hospital during January 1st to December 31st 2003.*
Material and Method: *The medical records of these women were reviewed to determine the incidence of vaginal breech delivery. Characteristics regarding current pregnancy and delivery and maternal and fetal outcomes were extracted. Various factors that might affect the mode of delivery were evaluated, including parity, gestational age, estimate fetal weight, cervical dilatation, membranes status, maternal complications, types of breech presentation, and being a private case.*
Results: *The incidence of vaginal breech delivery among these women was 17.7%. Univariate analysis showed that multiparity, gestational age of ≤ 32 weeks, estimate fetal weight of ≤ 2500 grams, advanced cervical dilatation, ruptured membranes, and not being a private case increased the risk of vaginal breech delivery. Multiple logistic regression analysis demonstrated that only advanced cervical dilatation (4-7 cm, adjusted OR 10.7, 95%CI 3.5-33.0; >7 cm adjusted OR 40.4, 95%CI 12.6-129.2), ruptured membranes (adjusted OR 2.9, 95%CI 1.3-6.3), multiparity (adjusted OR 6.4, 95%CI 2.6-15.7), and gestational age < 32 weeks (adjusted OR 9.7, 95%CI 2.7-35.7) were independently associated with vaginal breech delivery. However, lower apgar scores and neonatal complications, especially prematurity, were more frequent in vaginal than cesarean delivery.*

Conclusion: *Vaginal breech delivery was found in 17.7% of singleton breech presentation in our institute. Certain characteristics during labor and delivery can affect the choice for selecting mode of delivery including cervical dilatation, ruptured membranes, multiparity, and gestational age.*

Keywords: *Breech, Vaginal delivery*

A Comparative Study of Effects of Vaginal Cream between Estriol (OVESTIN) and Conjugated Equine Estrogens (PREMARIN) on Plasma estrogen Level, Vaginal Epithelium and Endometrial Thickness in Postmenopausal Thai Women

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Objective: *To compare the effects of vaginal cream between Estriol (OVESTIN) and Conjugated equine estrogens (PREMARIN) on plasma estrogen level, vaginal epithelium and endometrial thickness in postmenopausal Thai women*
Designs: *Comparative study*
Setting: *Menopausal clinic, King Chulalongkorn Memorial Hospital, Bangkok, Thailand*
Method: *Thirty three postmenopausal women were randomized to vaginal cream between Estriol cream 0.5 gm/day (contained 0.05 mg of Estriol) or Conjugated equine estrogens cream 1 gm/day (contained 0.625 mg of CEE) daily for 2 weeks and then twice a week until 12 weeks. They were assessed for plasma estrogen level (estradiol and estriol), vaginal epithelium (vaginal maturation index), endometrial thickness, urogenital symptoms and then they were followed up at 2, 6 and 12 weeks.*
Results: *Sixteen women received Estriol cream and seventeen women received Conjugated equine estrogens(CEE) cream. In this study, significant difference in estradiol level (E_2) between Estriol and CEE groups was reported (P=0.001), there was increased in CEE group but no change in Estriol group. Estriol cream induced a significant increased in estriol level (E_3) and there was statistically difference from CEE cream (P=0.015). Both Estriol and CEE cream were effective in relief the symptoms of vaginal dryness, urinary urgency and frequency. Both groups were statistically significant increased in vaginal maturation index (VMI) (P<0.001) but there were no statistically difference in the mean value of VMI in both groups (P=0.193). No significant changes in endometrial thickness in either cream. There were minimal occurrence of adverse side effects such as breast tenderness, abdominal discomfort and skin irritation in both groups. No abnormal vaginal bleeding was reported.*
Conclusion: *Plasma estrogen level was increased in both Estriol and Conjugated equine estrogens groups. Estriol and CEE vaginal cream are comparable effects in decreased signs and symptoms of urogenital atrophy in postmenopausal Thai women with no serious adverse events.*

Keywords: *Vaginal cream, Estriol, Conjugated equine estrogens, Vaginal maturation index, Endometrial thickness*

Risk Factors for Emergency Peripartum Hysterectomy

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Objective: *To evaluate risk factors for emergency peripartum hysterectomy.*
Material and Method: *We performed a case control study of women who delivered at Ramathibodi Hospital between January 1997 and December 2002. Women who underwent emergency peripartum hysterectomy were identified (n = 57). Using a computer - generated list, two women who delivered around the same time of each case woman were selected as controls (n=114). Demographic data, obstetric history, route of delivery, labor characteristics, indications of hysterectomy, intraoperative and postoperative complications were reviewed from medical records. Cases and controls were compared, and logistic regression was used to calculate the odd ratio (OR) and the 95% confidence interval (CI) for risk factors.*
Results: *Fifty-seven cases of emergency peripartum hysterectomy were identified. The incidence was 1.43 per 1000 deliveries. The main indications were placenta accreta (38.6%) and uterine atony (31.6%). The complications were, bladder injury (3.5%), bowel injury (1.7%), infected wound (1.7%) and infected vaginal stump (1.7%). There was one maternal death due to acute fatty liver. By logistic regression analysis, the odd ratio were 4.86 (95%CI 1.9,12.1) for previous cesarean delivery and 2.30 (95% CI 1.1,4.7) for cesarean delivery.*
Conclusion: *Cesarean delivery and previous cesarean section are the significant risk factors for emergency peripartum hysterectomy.*

Keywords: *Emergency peripartum hysterectomy, risk factors*

Comparison of the Accuracy of Fetal Weight Estimation Using Clinical and Sonographic Methods

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Objective: *To compare the accuracy of clinical and sonographic estimations of fetal weight (EFW) and to determine the contributing factors that may affect the accuracy of these two methods.*
Design: *Prospective study.*
Setting: *Labor room, Siriraj Hospital.*
Subjects: *297 pregnant women from January 6 to February 26, 2004.*
Material and Method: *The fetal weight was estimated clinically then blindly followed by sonographic estimation within 24 hours before delivery. The errors were calculated from the difference between the EFW and the actual birth weight (BW) of each method.*
Results: *The accuracy of clinical EFW was similar to sonographic estimation. The accuracy within 10% were 66.7 (95%CI 61.3, 72.0) and 65.3 (95%CI 60.1, 71.0) respectively. Both methods tend to be underestimated with the mean of absolute error 264.7$\pm$299.6 and 265.0$\pm$236.3 grams respectively, and the mean of percentage error 9.0$\pm$9.7 and 8.6$\pm$6.9% of actual BW. The only one factor effect the accuracy significantly was actual BW<2500 grams in clinical estimation (P<0.05). Sensitivity and specificity for prediction of BW<2500 grams was 82.6, 94.2% by clinical and 64.4, 97.6% by sonographic estimation. The positive predictive value and negative predictive value were 54.3, 98.5% and 82.9, 93.9% respectively, while the efficacy was 93.3 and 92.6%.*
Conclusion: *Intrapartum clinical EFW was accurate as sonographic estimation, while the mean of error in grams or in percentage were indifferent. The low BW influenced the accuracy of clinical estimation significantly. However, clinical estimation is good enough for screening of the low BW because of its high sensitivity and negative predictive value.*

Keywords: *Estimated fetal weight, Clinical estimation of fetal weight, Sonographic estimation of fetal weight*

The Prevalence of Hydronephrosis, Hydroureter and Serum Creatinine

Level in Stage IIIB Cervical Cancer in Srinagarind Hospital

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Background: *The clinical implication of the hydronephrosis in Stage IIIB cervical cancer remains unclear. We investigated the Stage IIIB population treated at the Srinagarind hospital and hypothesized that, if hydronephrosis was present, and there was abnormal levels of creatinine, the worse outcome was probable.*
Material and Method: *From1999 to 2001, there were 302 patients with Stage IIIB cervical cancer who received definitive radiation therapy at the Srinagarind hospital and were assessed for the presence of hydronephrosis, hydroureter and abnormal levels of serum creatinine. There were 299 patients who present with tumors fixed to the pelvic side wall, and 47 of them were associated with concurrent hydronephrosis. There were 35 patients who presented with hydroureter and 19 patients with creatinine level above 1.5 mg/dl*
Results: *The progression- free survival (PFS) at 2 year was 23.4% in patients with hydronephrosis vs. 69% in patients with tumors fixed to the pelvic side wall only ($p < 0.001$). The PFS at 2 years was*
35% in patients with serum creatinine levels above 1.5 mg/dl and 42% 283 patients with serum creatinine level below 1.5 mg/dl ($p = 0.001$). There was acute or chronic renal failure in 14% of patients with hydronephrosis, and 1% in patients without hydronephrosis ($p < 0.001$).
Conclusion: *The presents of hydronephrosis, hydroureter and abnormal serum creatinine level did significantly worsen the progression-free survival at 2 years and KUB outcomes.*

Keywords: *Cervical cancer, Hydronephrosis*

Clinical Use of Antenatal Corticosteroids in Preterm Birth at Songklanagarind Hospital, Southern Thailand During 1998-2002

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Objectives: *To evaluate the use of corticosteroid in pregnant women presenting with preterm delivery during 28-34 weeks of gestation in Songklanagarind hospital during 1998-2002.*
Material and Method: *Quantitative review of medical records of women delivering preterm birth during study period and qualitative interview of doctors by structured questionnaire was conducted. Primary outcome was antenatal corticosteroid use during 28-34 completed weeks. The prescription was described as percentage and the association with maternal and fetal complications was analyzed using chi square test and multiple logistic regression.*
Results: *The prescription rates of antenatal dexamethasone during 28-34 weeks in 1998, 1999, 2000, 2001 and 2002 were 21.8, 31.3, 39.3, 61.3, and 46.0%, respectively. No association between corticosteroid use and maternal complications was found. Fetal complication was not significantly associated with corticosteroid use after adjusted for gestational age. All doctors claimed that they applied dexamethasone to all women presenting preterm labor, except in cases of suspected maternal infection, known fetal anomalies, maternal diabetes mellitus, gestational age > 34 weeks or estimated fetal weight > 2,000 milligrams, suspected intrauterine growth restriction, and presenting with fully cervical dilatation at admission. Most doctors (82%) answered that they prescribed 8 mg of dexamethasone intramuscular every 8 hours for 3 doses.*
Conclusion: *Even the use of corticosteroid in preterm birth during 28-34 weeks of gestation gradually increased, it was not universal based on the best evidence. Education of health workers as to the effectiveness of corticosteroid therapy need to be implemented.*

Keywords: *Antenatal corticosteroids, Preterm birth*

A Comparison of Vaginal Misoprostol 800 μG versus 400 μG in Early Pregnancy Failure: A Randomized Controlled Trial

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Objective: *To compare the efficacy, side effects and patient satisfaction between 800 mg versus 400 mg intravaginal misoprostol for early pregnancy failure.*
Design: *Randomized controlled trial.*
Setting: *Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology,Faculty of Medicine, Chulalongkorn University, Bangkok 10330, Thailand*
Material and Method: *Women diagnosed as early pregnancy failure was randomly assigned to receive either 800 mg or 400 mg intravaginal misoprostol. The second dose was administered if there was no evidence of abortion in 24 h. The treatment failure was reffered to no complete abortion within 48 h. Dilatation and curettage was performed if the patients had heavy vaginal bleeding or evidence of incomplete abortion or no complete abortion.*
Results: *25 patients were randomized to receive 800 mg and 25 patients were to receive 400 mg misoprostol. Complete abortion was not significantly different between the 2 groups (72%, 76% respectively). Although median time to abortion in the 800 mg group was significantly shorter, the patients experienced more side effects especially fever which was significantly different (P=0.04). In the 800 mg group, 2 patients had heavy vaginal bleeding and one patient developed endometritis. There was no significant difference in the patients' satisfaction between both groups.*
Conclusions: *400 mg of vaginal misoprostol are as effective as 800 mg in producing complete abortion in early pregnancy failure with less side effects and similar patient satisfaction.*

Keywords: *Early pregnancy failure, First trimester, Misoprostol, Termination of pregnancy*

Agreement Between Colposcopic Directed biopsy and LEEP or Hysterectomy in Diagnosis of Cervical Intraepithelial Neoplasia at Phramongkutklao Hospital

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Objective: *To evaluate agreement between colposcopic directed biopsy and LEEP or hysterectomy in diagnosis of cervical intraepithelial neoplasia at Phramongkutklao Hospital.*
Material and Method: *A five-year retrospective study from January 1, 1999 to December 31, 2003 was conducted in 90 patients with abnormal cervical cytology who had satisfactory colposcopic examination at Phramongkutklao Hospital. The agreement between colposcopic directed biospy and LEEP or hysterectomized specimen were analyzed. The agreement was accepted when both reports were either the same or within one step disparity of pathologic diagnosis and no invasive cancer was missed.*
Results: *In comparison of colposcopic directed biopsy and LEEP or hysterectomy, the agreement was in 60 of 90 case (66.7%). The colposcopic directed biopsy was found to be less and more severe than LEEP or hysterectomy in 23 cases (25.6%) and 7 cases (7.8%) respectively. Eight cases of invasive cancer were missed at the time of colposcopic directed biopsy but subsequently diagnosed by LEEP.*
Conclusion: *This study had agreement between colposcopic directed biopsy and LEEP or hysterectomy is 66.7%*

Keywords: *Cervical Intraepithelial Neoplasia, Agreement, Colposcopic directed biopsy, Loop Electrosurgical Excision Procedure (LEEP)*

Impact of Hemoglobin H Disease on Pregnancy Outcomes

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Objective: *Assess the pregnancy outcomes and hematologic values of pregnant women with hemoglobin H disease.*
Study design: *A retrospective descriptive study.*
Setting: *Department of Obstetrics and Gynaecology at Ramathibodi Hospital.*
Subjects: *111 pregnant women with hemoglobin H disease attending antenatal care and delivered at Ramathibodi Hospital between 1997 and 2003.*
Material and Method: *Pregnant women with hemoglobin H disease diagnosed by hemoglobin typing (High Performance Liquid Chromatoghraphy technique: HPLC) were recruited. Red cell indices at first and early third trimester were recorded. Main outcomes measured were birth weight, preterm delivery, preeclampsia, GDM, route of delivery, antepartum and postpartum hemorrhage.*
Results: *The mean hemoglobin level at first and early third trimester was 8.5 g/dl. The mean MCV, MCH and MCHC were 61.37 $\pm$ 8.57 fl, 18.07 $\pm$ 3.18 pg and 29.50 $\pm$ 2.11 g/dl respectively. Low birth weight rate was 15.45%, preterm delivery rate was 3.6%. Total cesarean section rate was 34.23% whereas 25.51% were primary cesarean section.16 out of 111 women (14.4%) whose hemoglobin H was diagnosed prior to pregnancy had mean Hb levels of 7.5 $\pm$ 1.1 g/dl ay first trimester and 8.0 $\pm$ 1.7 g/dl at early third trimester. Low birth weight rate of this group was 37.5% and no preterm delivery. The primary cesarean section rate in this group was 35.71%.*
Conclusions: *Asymptomatic hemoglobin H disease had no adverse effect on pregnancy outcomes. The incidence of low birth weight was higher if Hb H were diagnosed prior to pregnancy.*

Keywords: *Hemoglobin H disease, Pregnancy outcomes, Alpha thalassemia*

Maternal Grief after Abortion and Related Factors

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Objective: *To investigate maternal grief after abortion and the factor that might relate to the intensity of maternal grief.*
Design: *Cross-sectional, descriptive study.*
Subject: *Women who attended at abortion clinic, Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Thailand.*
Material and Method: *The subjects were interview by the researcher, and asked to complete the questionaire including data of demographic characteristics, history of previous pregnancy, history of previous abortion and Perinatal Grief scales. The data was then analyzed to determine maternal grief and related factors of grief intensity.*
Results: *The results showed that there were 7 women with severe grief intensity (5.3%), 50 with moderately grief intensity (37.9%) and 75 with mild grief intensity (56.8%). Mean grief score was slightly lower in active grief subscale. The factors that found to be associated with PGS scores were low income, ever had ultrasonography, gestational age > 16 weeks and methods of treatment.*
Conclusion: *Grief is worldwide among women recently aborted. The related factors with grief intensity can use for screening psychological problems of the women who experience abortion. If found, the physicians can close observe and help them to work through their coping mechanism and prepare to get another successful pregnant in the future.*

Keywords: *Abortion, Maternal grief*

Diagnostic Evaluation of Karman Cannula Endometrial Aspiration Comparing with Fractional Curettage for the Detection of Abnormal Endometrium in Patients with Abnormal Uterine Bleeding

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Introduction: *Abnormal uterine bleeding is a common gynecologic problem. There are various methods of endometrium sampling for diagnose the cause of abnormal uterine bleeding. We assumed that Karman cannula endometrial aspiration has a good diagnostic valve and may benefit to cease the abnormal uterine bleeding.*
Objectives: *To assess sensitivity and specificity of Karman cannula endometrial aspiration with the conventional curettage aiming to diagnose abnormal endometrial histology and evaluate tissue adequacy obtained by Karman cannula.*
Material and Method: *The women, who presented with abnormal uterine bleeding and came to Songklanagarind Hospital between August 2003 and July 2004, underwent Karman cannula aspiration prior to the conventional curettage. The final diagnosis was defined as the most severe histopathology from either Karman cannula or conventional curettage. Abnormal endometrium included inflammation, polyp, hyperplasia and malignant changes.*
Results: *Two hundred and twenty-six women were assessed. The endometrial aspiration showed a sensitivity of 89.6% and specificity 100.0% in diagnosis of abnormal endometrium. Abnormal endometrium was detected in 58 women. Of 11 women diagnosed as endometrial cancer, only one case was undetected by Karman cannula aspiration due to a failure to create negative pressure in the uterus. Endometrial aspiration yielded tissue adequate in 86.7%.*
Conclusion: *Karman cannula endometrial aspiration is an accurate and easy procedure, and should be considered in the initial evaluation of abnormal uterine bleeding.*

Keywords: *Abnormal uterine bleeding, Karman cannula*

Prevalence of Urinary Incontinence in Menopausal Women

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Objective: *To determine the prevalence of urinary incontinence in menopausal women.*
Design: *Descriptive study.*
Setting: *Menopausal clinic and Outpatient unit, Department of Obstetrics and Gynecology, Srinagarind Hospital, Khon Kaen University.*
Subjects: *229 menopausal women attended menopausal clinic and outpatient clinic between 23 April 2004- 15 July 2004*
Material and Method: *Menopausal women were interviewed to identify the symptoms of urinary incontinence using the questionnaire which was already tested.*
Outcome measurement: *The prevalence of urinary incontinence in menopausal women.*
Results: *229 menopausal women were recruited with mean age of 55.79 years (30-80 years). Prevalence of urinary incontinence was 38.86% (95%CI 32.50-45.23).The most common type was mixed urinary incontinence (82.02%), the second was stress urinary incontinence (12.36%) and the third was urge urinary incontinence (5.62%).This study suggested that HRT reduced risk of urinary incontinence but menopause and elder age were increased risk of urinary incontinence*
Conclusion: *The prevalence of urinary incontinence in menopausal women were 38.86%*

Keywords: *Prevalence, Menopause, Urinary incontinence*

The Effect of Mefenamic Acid on Controlling Irregular Uterine Bleeding Secondary to Implanon® Use

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Objective: *The aim of this double-blind, placebo-controlled study was to evaluate the effect of mefenamic acid and placebo on controlling irregular uterine bleeding secondary to Implanon use.*
Design: *Randomized placebo controlled trial.*
Setting: *Family Planning Clinic, King Chulalongkorn Memorial Hospital, Bangkok, Thailand.*
Participants: *A total number of 50 Implanon users with irregular bleeding who attended the Family Planning Clinic at Chulalongkorn Memorial Hospital. These subjects were randomly allocated into two groups. Twenty-five users received mefenemic acid, 500 mg per oral three times a day for 5 days, and placebos were given to the rest of studied subjects in the similar manner. During the follow-up periods, the participants were requested to maintain their daily record of bleeding, spotting, and adverse effects. The days of bleeding and spotting and the percentage of bleeding stopped women were analyzed in week 1 and 4.*
Results: *The percentage of subjects in whom bleeding was stopped during week 1 after initial treatment was significantly higher in the mefenamic acid group than that of the placebo group (65.20%, 21.70%;$p < 0.05$). During the follow–up period (4 weeks after initial treatment), a bleeding free-interval of > 20 days was found in 56.50% of the subjects treated with mefenamic acid and 21.70% of those treated with placebo; The mean number of bleeding/spotting days was lower in the group of patients with mefenamic acid treatment (10.52 and 16.78 days; $p< 0.05$). The difference is statistically significant.*
Conclusion: *Mefenamic acid was more effective than placebo in short–term treatment of irregular bleeding and spotting associated with Implanon use.*

Keywords: *Bleeding-irregularities, Implanon implant, Mefenamic acid*

Coitus Interruptus in the Female Patients at Rajavithi Hospital

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Objective: *To study the epidemiology of coitus interruptus in the female patients at Rajavithi hospital.*
Design: *Descriptive cross-sectional study.*
Subjects: *Sexually active female patients attended at family planning, postpartum and Gynecology clinics of Rajavithi hospital, between March 1,2004 to May 31,2004.*
Main outcome measures: *Incidence,demographic characteristics, knowledge, attitude, and practice of the female patients using the coitus interruptus as the method of contraception.*
Results: *There was 140 out of 200 women who used coitus interruptus as the choice of contraception (70%). All of the patients using coitus interruptus were analysed. The mean of women's age was 27.39 years.The most common occupation was employment (49.3%);but no occupation(house wife) 35%.The most common marital status was couple 95.7%, and the most common religion were Buddhism 96.4%, and the others were Islamism 2.1%,Christianity 1.4%.The primary high school (30.0%)was the most common educational level.The most common ways to obtained information about coitus interruptus were from friends 46.4%,relative 15.7%, but 5.0% never heard about coitus interruptus before. The reasons that the patients selected this contraceptive method was for contraception and didn't want to be pregnant 24.0%, no other contraception; such as condom or oral pills was available at that time 15%, and couldn't tolerated the side effect of hormonal contraception 9.3%. The satisfactory for this method of the women and their partners were 68.6% and 34.3%,respectively.The other combine contraception were oral pill 42.9%,condom 20.0%,and not used combine method 22.1%.The regularity of using coitus interruptus was 28.6%.*
Conclusion: *There was 70% woman who used coitus interruptus as the choice of contraception. Buddhism was the most common religion, the primary high school was the most common educational level and couple was the most common marital status interruptus. The satisfactory for this method of the patients and their partners were 68.6% and 34.3%, respectively.*

Keywords: *Coitus interruptus*

Reference Centile Charts for Ratio of Fetal Transverse Cerebellar Diameter to Abdominal Circumference in a Thai Population

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Objective: *To establish the centile chart for the ratio of transverse cerebeller diameter to abdominal circumference throughout pregnancy from 13-40 weeks.*
Design: *Cross-sectional study.*
Setting: *Maternal-Fetal Medicine Unit, Department of Obstetrics and Gynecology, Faculty of Medicine Siriraj Hospital, Mahidol University.*
Subjects: *The participants are women with gestational age between 13 and 40 weeks who attend Antenatal Clinic, Siriraj Hospital.*
Material and Method: *A total of 643 pregnant women were recruited in this study. The exclusion criteria were uncertained date of last menstrual period, multiple pregnancies, fetal abnormalities and maternal conditions which could affect fetal growth. Transverse cerebellar diameter and abdominal circumference of all the subjects were measured out by gestational age. The approximately equal numbers of fetuses were measured at each week of gestation. The mean and standard deviation of TCD/AC ratio is estimated at each week of gestation. In addition the 5^{th}, 10^{th}, 50^{th}, 90^{th} and 95^{th} percentiles were calculated at each week of gestation.*
Results: *Of 643 pregnant women, 149 (23.1%) were scanned before 20 weeks of gestation and 286 (44.5%) were scanned between 20 and 30 weeks of gestation. The last group was intervened after 30 weeks of gestation. TCD/AC ratio slowly declined from early pregnancy until about 20 weeks then remained stable. After 30 weeks of gestation it started to decline again.*
Conclusion: *The normal reference value of TCD/AC ratio in Thai fetus was shown in this study. This ratio can be used to calculate gestational age in intrauterine growth restriction fetus.*

Keywords: *TCD/AC ratio, Reference centile chart, Thai fetus*

A Randomized Comparative Study of the Effect of Standard and Low Dose Transdermal Estradiol Patches on Vasomotor Symptoms and Skin Reaction

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Objective: *To compare the efficacy in healthy postmenopausal Thai women using transdermal estradiol patch low dose 0.025 mg/day (Climara 25 g/day,6.5 cm^2) and standard dose 0.05 mg/day (Climara 50 g/day,12.5 cm^2) on vasomotor symptoms,local skin irritation.*
Design: *Randomized Controlled Trial.*
Setting: *Menopausal Clinic, King Chulalongkorn Memorial Hospital, Bangkok, Thailand.*
Participants: *Postmenopausal women (surgical or natural menopause) between the ages of 40-60 years old having amenorrhea at least 12 months,BMI between 19 - 29 kg/m^2.*
Material and Method: *Postmenopausal women were randomized into 2 groups: transdermal estradiol patch low dose 0.025 mg/day (Climara 25) and standard dose 0.05 mg/day (Climara 50) as group A and B respectively.The study period was 12 weeks.Green climacteric scales were recorded from baseline to the end of the study (12 weeks).Skin irritations and tolerability were assessd and the participants were asked to grade the subjective acceptance of treatment.*
Results: *One hundred and twenty-six women were enrolled.Sixty-three women received (Climara 25 ug/day) and 63 women received standard dose (Climara 50 ug/day).The decrease of vasomotor symptom scores on green climacteric scale was observed in both groups but no statistically significant compare to baseline and between groups of treatment.The common skin irritation in group A and B was redness 23.8% (22.4%,27.9%) itching 22.2%(19.0%,27.9%) and induration 7.1%(8.6%,6.6%) respectively.No severe skin reaction was observed.Twenty-nine (50%) participants treated with 0.025 mg transdermal E2 experience less skin reaction than thirty- eight (62.2%) participants in 0.05 mg transdermal E2 but no statistically significant difference between both group and most of cases did not require any treatment.*
Conclusions: *In this study, Both groups of patch size 0.025 mg/day (Climara 25) and 0.05 mg/day (Climara 50) showed the decrease of vasomotor symptom scores with no difference.In percentage of cases the low dose regimen had less skin reaction than standard group and most of cases did not required any treatment. Therefore,low dose regimen may be acceptable to use in postmenopausal Thai women.However,we should consider other beneficial effect of ERT such as effect on BMD.*

Keywords: *Postmenopausal women, Estradiol transdermal patch, Vasomotor symptom, Skin irritation and tolerability*

The Cutoff Point of Serum CA 125 in Differentiating Malignant Ovarian Tumor

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Objective: *To evaluate the cutoff point of serum CA 125 for discrimination of benign and malignant ovarian tumor.*
Design: *Diagnostic test.*
Setting: *Department of Obstetrics and Gynecology, Faculty of Medicine, Siriraj Hospital.*
Subjects: *153 women who had been diagnosed as ovarian tumor and admitted between July 2003 and April 2004.*
Material and Method: *Serum CA 125 were collected before the operation. Statistical analysis was performed for sensitivity, specificity, positive and negative predictive values (PPV & NPV) of serum CA 125 in diagnosing of malignant ovarian tumor which all cases were confirmed by histopathological diagnosis.*
Results: *132 out of 153 patients (86%) were defined as ovarian tumor. 21 patients (14%) were non-ovarian diseases, 64 cases (48%) of ovarian pathological group were malignant while 68 (52%) were benign. The most appropriate selected level of serum CA 125 was 145 IU/ml as cut off benign from malignant with the sensitivity 43.8% (95% CI 32.3, 55.9), specificity 76.5% (95% CI 65.1, 85.0), PPV 63.6% (95% CI 48.9, 76.2), NPV 59.1% (95% CI 48.6, 68.8).*
Conclusion: *The cutoff point of serum CA 125 determined for differential diagnosis of benign and malignant ovarian tumor has not been shown to be useful in most circumstance. The sensitivity of this study remained low, precluding its indiscriminate use for diagnosis of malignant ovarian tumor.*

Keywords: *Serum CA 125, Malignant ovarian tumor*

Mammographic Changes in Menopausal Women after Hormonal Replacement Therapy: Comparison Betweencyclic Sequential Combined Estrogen and Progestin Regimen with Continuous Combined Estrogen and Progestin Regimen

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Objective: *To compare the mammographic changes in menopausal women on hormonal replacement therapy(HRT) between cyclic sequential combined estrogen and progestin regimen with continuous combined estrogen and progestin regimen before and after use for 12-18 months*
Design: *A retrospective cohort study*
Setting: *Menopause clinic, Maharaj Nakorn Chiang Mai Hospital*
Material and Method: *The mammographic density was recorded in women participating in a population based screening program for HRT, before and after use for 12-18 months. The study population included 108 women, 62 using cyclic sequential regimen (estradiol valerate 2 mg/d and norgestrel 0.5 mg/d, Cycloprogynova), and 46 using continuous combined regimen (conjugate equine estrogen 0.625 mg/d, Premarin and MPA 2.5 mg/d, Provera). The baseline mammographic parenchymal density was classified according to the Breast Imaging Reporting and Data System (BI-RADS). The mammographic changes were categorized as follows: no change, increased density as minimal change (10-25%), moderate change (26-50%), and marked change (>50%).*
Results: *The mean age (+ SD) of the patients was 49.36 years (49.5+3.7). The mean duration (+ SD) of HRT was 14.08+1.78 months. Ten of 46 women (21.7%) on continuous combined regimen developed an increased parenchymal density which was minimal in 5 (10.9%), moderate in 3(6.5%) and marked in 2 (4.3%). No mammographic change was observed in all women receiving cyclic sequential regimen (P<0.001).*
Conclusion: *An increase in mammographic parenchymal density after HRT was seen in only 10/108 (9.3%) of women and was dependent upon the hormonal regimen.*

Keywords: *Mammographic breast density, hormonal replacement therapy*

Comparison of Postoperative Pain Relief with Morphine Intravenous and Intramuscularly Regimen

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Objective: *To compare post operative pelvic pain relief by using intravenous and intramuscularly morphine regimen.*
Design: *Randomized controlled trial*
Setting: *Gynecological ward, Department of Obstetrics and Gynecology, Faculty of Medicine, Siriraj Hospital.*
Subjects: *Women undergoing gynecological surgery and candidated for postoperative morphine pain relief.*
Material and Method: *After operation the women were divided randomly into two groups for either morphine 2 mg. every 2 hr. intravenously (IV) or 10 mg. every 4 hr. intramuscularly (IM). The pain score, pain relief satisfaction and their side effects were recorded.*
Results: *The percentage of IM patient with >3 pain score was slightly more often than those of IV. The more numbers of satisfy patient but with the lesser number of gastro-intestinal tract discomfort were statistically significant found in IV group (P<0.05).*
Conclusion: *Morphine 2 mg. every 2 hr iv can be used as effective postoperative pain relief.*

Keywords: *Morphine, Postoperative Pain Relief*