

Oral Presentations

Prenatal Diagnosis of Omphalopagus Conjoined Twins Using Two-dimensional and Three-dimensional Ultrasonography

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We report the prenatal diagnostic findings of a case of omphalopagus conjoined twins diagnosed at 20 weeks' gestation. Two-dimensional ultrasound imaging demonstrated omphalopagus conjoined twins with two faces, two thoraces, two hearts, a fused upper abdominal wall, eight limbs. Three-dimensional ultrasonography established the definitive classification of omphalopagus conjoined twins. Prenatally, two-dimensional and three-dimensional ultrasonography is the most definitive method of diagnosis and characterization of conjoined twins, thereby predicting chances for postnatal survival.

Keywords: *Conjoined twins, Prenatal diagnosis, Ultrasonography*

Maternal Outcome and Perinatal Outcome in Pregnancy with Acute Pyelonephritis

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Objective : *The aim of this study was to assess maternal outcome and perinatal outcome of pregnant women with acute pyelonephritis*

Methods : *Fifty-three pregnant women with acute pyelonephritis were enrolled between May, 1994 and April, 2002 at Ramathibodi Hospital, Bangkok, Thailand. The maternal outcome and perinatal outcome were assessed and compared with the control group. The pathologic organism and antibiotic regimens were analysed.*

Results : *The incidence of acute pyelonephritis in pregnancy was 1.4 in 1,000 cases (0.14%). The mean gestational age at delivery in pregnancy with acute pyelonephritis (36.87 + 6.13 weeks) was significantly less than that in the control group (38.59 + 1.18 weeks) ($P < 0.05$). The most common sign of acute pyelonephritis was leukouria more than 50 cell/high power field (71.7%). The most common causative organism in urine culture report was *Escherichia coli* (77.4%). Ampicillin plus gentamicin was the most common antibiotic regimens in this study (49.06%)*

Conclusion : *The incidence of acute pyelonephritis in pregnancy in our study is lower than other literatures. The mean gestational age at delivery in pregnancy with acute pyelonephritis was significantly less than that in the control group.*

Keywords : *acute pyelonephritis, pregnancy, maternal outcome, perinatal outcome.*

Re-look at the Duration of Human Pregnancy

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Background: Duration of human pregnancy is arbitrarily taken as 280 days. Fetuses are considered to be at high risk for distress once pregnancy goes beyond expected date of confinement. It is observed that in some regions incidence of fetal distress among women with low risk status is higher.

Objective: To determine the mean gestational age in low risk pregnancies who set into spontaneous labor and to compile incidence of fetal distress.

Methods: Low risk, singleton pregnancies admitted in spontaneous labor at a single community hospital in Southern Karnataka, India from June 2002 to October 2003 were analyzed for mean gestational age at the onset of spontaneous labor and rates of perinatal complications by gestational age.

Results: Among the 1,096 women who set into spontaneous labor, the mean gestational age was 272.1 days. Incidence of meconium stained amniotic fluid, meconium aspiration syndrome increased beyond 39 weeks of gestation ($p < 0.0001$), the rate of instrumental delivery and cesarean section all increased beyond 39 weeks of gestation ($p < 0.0000$ and $X^2 = 39.627$).

Conclusion: Since the mean gestational age at the onset of labor was 272.1 days and rate of meconium stained amniotic fluid, meconium aspiration syndrome, operative vaginal delivery and cesarean section increased beyond 273 days, it is concluded that probably the duration of pregnancy in the region is 273 days.

Keywords: Human pregnancy, Mean gestational age

Risk Factors for Birth Asphyxia: A Case-Control Study

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Background: Birth asphyxia is one of the most common causes of perinatal mortality and morbidity around the world, especially in low- and middle-income countries.

Objective: To investigate risk factors for birth asphyxia.

Setting: Department of Obstetrics & Gynecology, Lamphun Hospital.

Design: Case-control study.

Patients: Cases were 361 newborns with 1-minute Apgar scores of 7 or less (birth asphyxia) delivered at Lamphun Hospital between September 21, 1997 and September 30, 2003. Controls were 721 newborns with 1-minute Apgar scores of 8 or more delivered during the same duration. A number of antepartum, intrapartum, fetal and other factors were mainly focused.

Methods: Data relevant to the interesting factors were obtained from medical records. They were analyzed by using univariate analysis and multiple logistic regression.

Results: By the use of multiple logistic regression, factors significantly associated with birth asphyxia include prolonged 2nd stage, OR = 123.2 (95%CI 15.2, 995.2); shoulder dystocia, OR = 46.1 (95%CI 5.6, 376.8); congenital malformation and hydrops fetalis, OR = 13.8 (95%CI 4.2, 45.3); birth weight between 1,000-1,499 grams, OR = 9.4 (95%CI 2.6, 33.4); umbilical cord complication, OR = 9.2 (95%CI 2.7, 31.1); meconium stained amniotic fluid, OR = 7.7 (95%CI 2.8, 21.0); transverse lie, OR = 6.1 (95%CI 1.0, 36.4); antepartum hemorrhage, OR = 5.8 (95%CI 1.9, 17.1); maternal HIV infection, OR = 5.2 (95%CI 1.1, 22.4); abnormal head position, OR = 5.0 (95%CI 2.3, 10.8); fetal distress, OR = 4.7 (95%CI 2.3, 9.6); pregnancy induced hypertension, OR = 4.0 (95%CI 1.3, 11.4); referral cases, OR = 3.5 (95%CI 1.6, 7.1); and oxytocin augmentation, OR = 2.0 (95%CI 1.4, 2.9).

Conclusions: Risk factors for birth asphyxia include prolonged 2nd stage, shoulder dystocia, congenital malformation and hydrops fetalis, birth weight between 1000-1499 grams, umbilical cord complication, meconium stained amniotic fluid, transverse lie, antepartum hemorrhage, maternal HIV infection, abnormal head position, fetal distress, pregnancy induced hypertension, referral cases and oxytocin augmentation. Early detection of these risk factors before delivery are helpful for obstetricians, pediatricians and nurses for preparing safe delivery and neonatal resuscitation in order to reduce birth asphyxia, perinatal morbidity and mortality.

Keywords: Birth asphyxia, Risk factors

Implementation of Active Management in the Third Stage of Labor in Lamphun Hospital

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Objective: To compare effectiveness of active management with physiological management of the third stage of labour.

Design: multiple time series

Setting: Labour ward in Lamphun hospital.

Interventions: Active management in the third stage of labour (during Feb.2004-May.2004); or physiological management (during Oct.2003-Jan.2004).

Results: Routine 'active management' is superior to 'expectant management' in terms of blood loss, post partum hemorrhage and other serious complications of the third stage of labour. The rate of PPH (blood loss >500 ml.) was lower with active than with expectant management (13 [2.61%] of 498 vs 27 [4.90%] of 551). Rates of blood transfusion was lower with active management than with expectant management (3 [0.60%] of 498 vs 7 [1.27%] of 551).

Conclusions: Active management should be the routine management of choice for women expecting a single baby by vaginal delivery.

Keywords: Third stage of labour, Active management

Cord Blood Collection for the National Cord Blood Bank in Thailand

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Umbilical cord blood is an effective alternative source of hematopoietic stem cells transplantation in children and adolescents. However, the efficacy and safety of cord blood transplantation correlates with the quantity and quality of cord blood. To evaluate the collection systems and processing of cord blood donations, a pilot research program to optimize recruitment, collection and processing of cord blood donations was developed. Our results showed that the quality of the cord blood (volume, nucleated cells count, CD34+ and sterility control) collected was satisfactory and discard rate of collecting units (24.2%) were comparable with data from other cord blood bank reported. To find the optimal mode of collection, comparison of 3 cord blood collection methods (Method 1 = Hanging method after delivering placenta, Method 2 = Aspiration from in utero placenta, Method 3 = Aspiration from in utero placenta and Syringe-assisted aspiration) using closed or semi-closed system showed that method 3 was the best method but it required more trained personnel and complicated procedure involved. The National Cord blood bank started its activity in 2002 after several years of pre-clinical studies. To date, a number of transplants using cord blood from related and unrelated cord blood (first report in Thailand) donors have been successfully performed.

Keywords: Umbilical cord blood, Collection methods, Cord Blood Bank, Hematopoietic stem cell, Transplantation

Postpartum Depression Screening Test: Development and Validation

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Objectives: To develop and validate the postpartum depression screening test with respect to the predictors.

Materials and methods: The questionnaire was developed using social support, self-esteem, life stress, childcare stress and anxiety. Its scale was rated as Likert 5-point scale. It was tested to 356 women during 4-8 postpartum weeks in Songklanagarind hospital during November 2003 to June 2004. The internal consistency was analyzed by the Cronbach's alpha. The component factors were re-evaluated by exploratory factor analysis. The validation was determined in terms of sensitivity, specificity and predictive values comparing with the diagnosis of major or minor depressive disorders using Diagnostic and Statistical Manual for Mental Disorders-Fourth Edition.

Results: The Cronbach's alpha reliability of final items was 0.92 and the factors were regrouped by component factor analysis as social support (alpha 0.80), self-esteem (alpha 0.79), stress (0.83) and anxiety (alpha 0.90). Of 317 postpartum women having diagnostic interview, 287 women (90%) were diagnosed with no depression, 27 women (9%) with minor depressive disorders and 3 women (1%) with major depressive disorders. Depressive disorder was predicted significantly by total score of screening test and anxiety ($p < 0.001$). The sensitivity, specificity, positive predictive value and negative predictive value with a cut-off point of 70 were 83%, 68%, 21% and 97%, respectively.

Conclusion: The prevalence of postpartum depression is 10%. The postpartum depression screening test based on the predictor testing is beneficial to screen postpartum depression supported by reliability and validity. The cut-off score of 70 is recommended for major or minor depression.

Keywords: Postpartum depression, Screening test

Acanthosis Nigricans: Clinical Predictor of Abnormal Glucose Tolerance in PCOS Women

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Objective: To study whether acanthosis nigricans can be used as a clinical predictor of abnormal glucose tolerance in PCOS women.

Study design: Retrospective study

Setting: Endocrine Clinic, Department of Obstetrics and Gynaecology, at Ramathibodi Hospital

Subjects: 121 PCOS women attended endocrine clinic at Ramathibodi Hospital from August 2002 to January 2004.

Methods: PCOS women diagnosed by menstrual irregularity, clinical hyperandrogenism and ultrasound appearance of polycystic ovaries were recruited. Anthropometric data including age, BMI, WHR and appearance of acanthosis nigricans were recorded. At their first visit 75 g OGTT was performed. Data were analysed by using Logistic regression analysis.

Results: The mean age, BMI and WHR were 29.1 ± 6.1 , 67.8 ± 17.8 , and 0.84 ± 0.1 respectively. Acanthosis nigricans was found in 48 (39.6%) of cases. Among 121 PCOS women, 52 (42.9%) had abnormal glucose tolerance. Abnormal glucose tolerance was more prevalent in PCOS women with acanthosis nigricans (28, 58.3%) than those without acanthosis nigricans (24, 32.9% $p < 0.05$). Using multivariate logistic regression analysis, acanthosis nigricans and WHR > 0.85 were demonstrated as significant predictors for abnormal glucose tolerance with OR and 95% CI of 2.7 (1.1-7.1) and 10.1 (1.8-20.7) respectively.

Conclusion: Acanthosis nigricans can be clinical predictors of abnormal glucose tolerance in PCOS women.

Keywords: PCOS, Acanthosis nigricans, Abnormal glucose tolerance

Outcome of Laparoscopic Ovarian Drilling in Polycystic Ovarian Syndrome

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Objective: To determine the outcome of laparoscopic ovarian drilling (LOD) in woman with polycystic ovarian syndrome (PCOS)

Design: Retrospective study

Setting: University hospital.

Subjects: 76 cases of PCOS women who underwent LOD in reproductive endocrinology unit

Method: We conducted a retrospective review of patient medical records and interview in PCOS women with CC-resistance who underwent LOD between January 1994 and February 2004. LOD was used by monopolar electrocauterization.

Outcome measurement: 1. Menstrual pattern 2. Pregnancy rate and outcome

Results: After LOD, 19 cases were lost follow up and could not be contact by phone. Only 57 cases were analyzed. Mean age was 31.1 ± 3.3 years, mean duration of infertility was 3.9 ± 2.4 years and mean BMI was 23 ± 3.5 kg/m². During laparoscopy, endometriotic implants and pelvic adhesion were found in 12 cases (22.2%) and 6 cases (11.1%), respectively. Then cauterization of endometriotic lesion and lysis adhesion were simultaneously performed. After surgery, 82.5% had regular menstrual cycle. Forty-two out of 57 women became pregnant. The mean duration after surgery became pregnancy occurred within 12 months. Thirty-one women (54.4%) became spontaneous pregnancy, 10 women became pregnancy after CC induction, CC+IUI, IVF and repeated LOD. The outcomes of pregnancies were 45 live births, 16 abortions, 2 ectopic pregnancies and 6 ongoing pregnancies.

Conclusion: LOD is efficacious for ovulation induction in CC-resistance PCOS and may be alternative option for PCOS with CC-resistance. Further study comparable LOD and other modality such as CC + metformin are interesting.

Keywords: laparoscopic ovarian drilling, polycystic ovarian syndrome, pregnancy rate, outcome

Total Laparoscopic Hysterectomy in Mental Retardation Patients: A Case Series Report

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Objective: To study the clinical outcomes of total laparoscopic hysterectomy in mental retardation patients.

Study design: Descriptive study

Methods: We retrospectively reviewed the patients' characteristics and clinical outcomes of 8 mental retardation patients who underwent total laparoscopic hysterectomy for the indications of menstrual hygiene-problem and sterilization in Ramathibodi Hospital during January 2001 - June 2004.

Results: The mean age of these patients was 14.9 years. Two patients (25%) and 6 patients (75%) have been classified by the intellectual quotient test results as mild degree and moderate degree of mental retardation, respectively. Seizure disorder was the underlying disease of two patients (25%). All of the 8 patients under went successful completion of the total laparoscopic hysterectomy without intra-operative complication. Minimal endometriosis was the unexpected intra-operative pathology detecting in one patient (12.5%). The mean operative time was 138.1 minutes. The mean intra-operative blood loss was 36.3 millilitre. The mean uterine weight was 54.4 grams. In post-operative period, paracetamol was prescribed in 6 patients with mean dose of 968.8 milligrams, pethidine was prescribed in 4 patients with mean dose of 37.5 milligrams, NSAIDs was prescribed in 2 patients with mean dose of 18.75 milligrams. No post-operative febrile morbidity has been developed in all of these patients. The mean post-operative hospital stay was 2.4 days. Post-operative complication was developed in 2 patients (25%), they had vaginal bleeding caused by infection of vaginal stump and disruption of the suture material at the vaginal stump.

Conclusion: Total laparoscopic hysterectomy is a safe surgical procedure in mental retardation patient and offers many advantages, including minimal intra-operative blood loss, low post-operative analgesics requirement and short duration of hospital stay.

Keywords: Mental retardation, Total laparoscopic hysterectomy

Gasless Laparoscopic Salpingo-oophorectomy Using Chulalift : Pre Luminary Study

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Aims : *To study the feasibility and out come of gasless laparoscopic salpingo- oophorectomy using Chulalift in Thai women with adnexal mass.*

Materials and methods : *Five cases of ovarian cysts (2 endometriotic cysts, 2 dermoid dermoid cysts, and one serouscystadenoma) were recruited for gasless laparoscopic salpingo-oophorectomy using Chulalift as the hooking device. The mean \pm SD of age was 20.4 ± 11.4 yrs. The mean \pm SD of operative time was 33.8 ± 4.2 minutes. The mean \pm SD of blood loss was 76.0 ± 25.1 cc. No complication was noted. Simple instrument used in exploratory laparotomy surgery can be used in this gasless laparoscopic technique.*

Conclusions : *Gasless surgery using the Chulalift provided enough space for laparoscopic salpingo-oophorectomy. The simple instrument can be used instead of the expensive laparoscopic equipments. Gasless laparoscopic salpingo-oophorectomy was feasible using the Chulalift equipment. This technique can help reducing cost of the laparoscopic surgery.*

Keywords: *Gasless laparoscopic, feasibility, salpingo-oophorectomy*

Fertilization Rate after Electrical Stimulation of Fail to Fertilize Oocytes after Intracytoplasmic Sperm Injection (Icsi): Preliminary Report

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Objective: *To determine fertilization rate after electrical stimulation of oocytes that fail to fertilize after intracytoplasmic sperm injection comparing with those without electrical stimulation*

Study design: *Prospective, randomized trial of laboratory experimental study*

Setting: *Research laboratory at Reproductive Medicine Unit, Department of Obstetrics and Gynecology, Faculty of Medicine, Chulalongkorn University*

Subject: *Seventy-six discarded, unfertilized oocytes from IVF-ICSI cycle*

Intervention: *Seventy-six discarded oocytes from IVF-ICSI cycle due to fertilization failure at 24 hours were used in this study. They were randomly assigned into 2 groups. In study group, the unfertilized oocytes were electrically stimulated with direct electrical current 1.5 Kv/cm for the duration of 40 s for 3 consecutive pulses in a buffer solution. In control group, the unfertilized oocytes were passed into the same buffer solution as in the study group but without electrical stimulation.*

Main outcome measures: *Oocytes that displayed two pronuclei and a second polar body or developed into cleavage stage embryos within 24 hours after stimulation were considered to fertilize. Fertilization rates were compared between groups.*

Result: *Fertilization occurred in 32 (84.2%) of 38 oocytes in study group comparing with 4 (10.5%) of 38 oocytes in control group ($P < 0.001$).*

Conclusion: *Fail to fertilize oocytes after IVF-ICSI can resume fertilization and further embryonic development after electrical stimulation.*

Keywords: *ICSI, fertilization failure, electrical stimulation*

Adjuvant Low-dose Aspirin in Poor Responders Undergoing IVF Treatment

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The aim of this study was to evaluate the effect of adjuvant low-dose aspirin on utero-ovarian blood flow and ovarian responsiveness in poor responders undergoing IVF treatment.

Methods: A prospective randomized double blind placebo controlled study examining the effect of intervention with 80mg aspirin daily from the commencement of GnRH agonist until the time of HCG. Calculated sample size 62 cases. Mann-Whitney U for continuous variables and chi square test for nominal variables. Outcome variables were: Doppler measurement of intraovarian and uterine pulsatility indices (PI), duration and dose of gonadotropins, cancellation rate and number of oocytes retrieved.

Results: Cancellation rate 33.3% in placebo and 26.7% in treatment (no significant difference). There was also no difference in total dose of HMG (66 vs 57 single 75 IU ampoules), median number of mature follicles recruited (3.5 vs 3.0) nor median number of oocytes retrieved (4 vs 3). There were no differences in either intraovarian or uterine artery PI.

Conclusion: Supplementation with low-dose aspirin failed to improve either ovarian/uterine blood flow or ovarian responsiveness in poor responders undergoing IVF treatment.

Keywords: Aspirin, Poor responders, IVF

A new Role of Combined Heparin/Aspirin in the Treatment of Repeated Implantation Failure in Assisted Reproduction

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Objectives : To evaluate the efficacy of combined aspirin/heparin in the treatment of repeated IVF/ICSI failure.

Design : Historical cohort study

Setting : Jetanin Institute for Assisted Reproduction

Materials and methods : A total of 39 repeated IVF/ICSI failed cycles (IVF/ICSI failure > 3 cycles, donor oocytes were excluded) were included in this study conducted between September 2003 to June 2004. 21 cycles were in the non aspirin/heparin group, 18 cycles were in the aspirin/heparin group. Clinical pregnancies were diagnosed by the presence of gestational sacs and fetal heart beat.

Main outcome measures : Clinical pregnancy rate per embryo transfer.

Results : Background characteristics were similar in the two groups studied. Clinical pregnancy rate was 50% (9/18) in the aspirin/heparin group as compared to 19% (4/21) in the nontreated group ($p < 0.05$).

Conclusions : Despite the small number of cases, the increased clinical pregnancy rate with aspirin/heparin compared with no treatment was significant. More data and prospective randomized control study should further evaluation of its role in the treatment of repeated implantation failure.

Keywords: Implantation failure, Combined heparin/aspirin

The Influence of the Depth of Embryo-Associated Transfer Bubble into the Uterine Cavity on the Success of IVF/ICSI

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Objectives: To determine whether the depth of embryo-associated transfer bubble after embryo transfer has any effect on implantation and clinical pregnancy rates.

Design: Historical cohort study

Setting: Jetanin Institute for Assisted Reproduction

Materials and methods: A total of 347 embryo transfers on day 4-5 from IVF/ICSI cycles between May 2003 and May 2004 was conducted in this study. Implantation and pregnancy rates were analyzed from three study groups according to the distance between the embryo-associated air bubbles and the fundal endometrial surface: upper group (n = 86) : < 1 cm ; middle group (n = 223) ≥ 1 and < 2 cm ; lower group (n = 38) : ≥ 2 cm.

Main outcome measures: Implantation rate and clinical pregnancy rate per embryo transfer.

Results: The general characteristics of the patients between all three study groups were similar distribution. The implantation rates in upper, middle and lower groups were 23.3%, 21.7% and 13.1% whilst the pregnancy rates were 40.7%, 30.9% and 23.7% respectively. Both implantation and clinical pregnancy rates were significantly higher ($P < 0.05$) in upper group than lower group. However, there were no significant differences in middle group compare with both upper and lower groups.

Conclusions: The depth of embryo-associated transfer bubble into the uterine cavity may affect implantation and clinical pregnancy rates. This could be considered for embryo transfer after IVF/ICSI to achieve pregnancy.

Keywords: IVF/ICSI, Depth of embryo-associated transfer bubble

Effect of Transdermal Estradiol Gel (Divigel) on Sebum Production and Facial Skin Aging in Women with Surgical Menopause

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Objective: To evaluate the effects of estrogen replacement therapy on skin sebum level, stratum corneum hydration, dryness score and wrinkle scores in women with surgical menopause.

Design: Randomized double blinded placebo controlled trial

Methods: 64 women underwent hysterectomy with bilateral oophorectomy, women were randomized to receive either transdermal estradiol gel or transdermal placebo gel for 12 weeks. Sebum level, stratum corneum hydration, dryness score and wrinkle scores were measured.

Results: 60 women completed the treatment (29 in estradiol group, 31 in placebo group). Transdermal estradiol gel had shown its effect on significant improvement in dryness score after 12 weeks of treatment when compare to baseline but no improvement in all skin parameters in placebo group. However there were no significant differences in sebum level, skin hydration, and wrinkle scores between both groups.

Conclusion: Transdermal estradiol gel has tendency to improve skin dryness in women with surgical menopause but not statistically significant when compared to placebo.

Keywords: Transdermal estradiol gel, Facial skin aging

The Three Years Results of Tension Free Vaginal Tape (TVT) for the Treatment of Stress Urinary Incontinence in Thai Women

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Objective : To evaluate the three years result of TVT procedure in Thai women with genuine stress urinary incontinence (SUI).

Material and Method : Sixty three women, aged 35-71 years attending gynecology clinic at King Chulalongkorn hospital during February 2000 to May 2001 were recruited in the study. Pre-operative evaluation included history taking and physical examination. All had stress urinary incontinence urodynamically confirmed genuine stress urinary incontinence and were treated with TVT. Follow up at 3, 6, 12, 18, 24, 30 and 36 months were scheduled after surgery.

Results : The mean \pm SD of operative time for TVT was 32.3 ± 10.0 min. The mean \pm SD of hospitalization was 1.8 ± 2.0 days. Two patients had bladder perforations by the trocar without severe bleeding and need no reparation. No healing defect or rejection of prolene mesh was found. The cure rate was 97.7% (84 from 86 cases) at 3 years follow up.

Conclusion : Our three years results revealed that TVT was effective and safe in the treatment of SUI in Thai women.

Keywords: Urinary incontinence, TVT

The Exchange Residency Training Program between Emory University of Medicine with Medicine Phramongkutklao Hospital and College Of Medicine

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Background: Goal of reproductive health system in Thailand and USA are similar. The fundamental goal is good health, better mental health; warm family and society. The relationships between health and health related elements are heredity, behavior, through mind soul, environment, physio-biological, economic, cultural, religion, technology, health care system that may be different from Thailand and USA. EU and PMK Hospital are general hospital, responsible for many levels of education, i.e. undergraduate nursing education for nursing students, postgraduate medical education for intern, house staff and fellow continuing medical education for health care personal nationwide and also patient education. Residency Training Program in most specialty and subspecialty has been organized and accredited by the Thai Medical Council for over 20 years. Gynecology and Obstetrics Department of Emory University School of Medicine has good connection with Obstetrics and Gynecology Dept. Phramongkutklao Hospital, Bangkok, Thailand.

Objectives: 1. To improve a knowledge, an attitude, and a psychomotor skill in OB-GYN. 2. To exchange a health care system for improving the knowledge in the area of a maternal, fetal, morbidity and mortality. 3. To exchange a cultural relationship between Thailand and USA resident.

Materials and Methods: 1. Agreement between Associate Dean for Graduate Medical Education and Director of Residency Training Program of Emory University School of Medicine with Director of PMK Hospital & PCM. 2. A four-weeks elective rotation of 3rd year resident between EU and PMK. Three residents of EU have been visited PMK Hospital since May 2001-June 2002 and the resident of PMK has been visited EU on June 30-July 30, 2002.

Design: Descriptive study

Results: 1. Improve the OB-GYN Training Program for resident. 2. Assist and support medical students training program. 3. Improve a communication gap and the relation of exchange cultural between EU and PMK & PCM. 4. Create the collaboration in the interesting research area.

Conclusion and Suggestion: 1. This program should be continued and extend to the other departments such as Surgery, Medicine, Pediatrics, Nurse, and Midwife nurse 2. Phramongkutklao Hospital and College of Medicine should find the grant for supporting PMK residents and PCM medical students in this program. 3. Administrator of PMK Hospital & PCM should visit EU to create a good relationship between 2 institutes in the near future.

Keywords: Residency training program, Exchange program

Development of Pueraria Mirifica (Thai Herb) for ERT and Inhibits Neurotoxic in Alzheimer's Model in Vitro

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Background: Pueraria mirifica (PM) or White Klao Keur (Thai herb) has long been used as a rejuvenator during aging. This herb contains a variety of phytoestrogens that possess estrogenic activity. In vitro, animal, and epidemiological studies have suggested that estrogen can decrease the risk of developing Alzheimer's disease. Interestingly, the estrogenic effect of PM has been shown to prevent the deleterious effects of certain neurotoxic agents (e.g. glutamate, H₂O₂, and beta-amyloid/25-35) in AD model systems. The mechanism (s) responsible for prevention of neuronal cell death by PM is presently unknown.

Objectives: The current study investigated the neurotrophic and neuroprotective action of the complex formulation of phytoestrogens from a standardized PM extract compared with 17beta-estradiol in an in vitro AD model.

Methods: Crude PM was extracted by ethanol and standardized by HPLC (standardized PM). The ability of standardized PM to inhibit cell death was evaluated in the LA-N5 human neuroblastoma cell line cultured in estrogen deprived medium either alone, or with the neurotoxic agents, 0.2 mM glutamate, 20 uM H₂O₂, or 8 ug/ml beta-amyloid/25-33. Morphologic and biochemical analyses were conducted on the cultures to compare the neurotrophic/neuroprotective properties of the standardized PM with that of 17beta-estradiol. Using MTT for determining the percentage of cells viability. Co-treatment of the cells with the known antiestrogenic compound ICI 164,384, was used to assess the specificity of standardized PM as acting through the estrogen-dependent signaling pathway.

Results: Standardized PM significantly decreased neuronal cell death in dose-dependent fashion in estrogen deprived cultures. In the presence of the neurotoxic agents, beta-amyloid, hydrogen peroxide, and glutamate, standardized PM and 17beta-estradiol were significantly neuroprotective. This protection was antagonized by ICI 164,384. neuroprotection studies demonstrated that 1 ml of PM and 10-8 M 17b-estradiol induced highly significant neuroprotection against beta-amyloid, hydrogen peroxide, glutamate-induced toxicity, 30 % and 37 %, 28 % and 34 % and 30 % and 35 %, respectively. Inhibit action of PM and 17b-estradiol by estrogen antagonist (ICI164,384) after induce neurotoxic with glutamate and H₂O₂, cell dead decrease 50 % and 55 %, 3 % and 2 %, respectively and 34 %, 50 %, 21 %, and 33 %, respectively.

Conclusion: PM shows estrogenic activity similar in potency to 17beta-estradiol. Both agents prevent cell death induced by neurotoxic agents which appears to be mediated through the estrogen receptor signaling pathway. PM may have clinical utility for intervention in Alzheimer's and other neurodegenerative diseases of aging.

Keywords: Pueraria mirifica, ERT, Alzheimer's model, Phytoestrogens

Pre Emptive Analgesia of Intravenous Parecoxib in Undergoing Hysterectomy: A RCT Study Preliminary Report

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Aims : To study the narcotic requirement and visual analogue pain score (VAS) in women undergoing Total Abdominal Hysterectomy (TAH) with preemptive sodium parecoxib compared to placebo.

Materials and method : Ten cases of gynecologic patients undergoing TAH with or without BSO were included in the study. The patients were randomly selected into group A and B. Gr A : received 0.9% NSS 2cc. Gr B: received Parecoxib Sodium 40 mg (volume 2cc). After the operation for 24 hours, visual analogue pain score VAS and dosage of narcotic use were recorded in every 2 hours.

Results : There was no difference in the VAS of post operative pain. The mean total dosage of morphine requirement in 24 hours were lower in patients with parecoxib sodium (28.2 VS 46.4 mg).

Conclusion : From our preliminary study, we found the lower dosage of morphine requirement in patient receiving Parecoxib Sodium 40 mg. than placebo.

Keywords: Pre emptive analgesia, Hysterectomy

Risk Factors of Having High Grade CIN/Invasive Carcinoma in Women with AGUS Smears

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Objective: To find the risk factors of having high grade cervical intraepithelial neoplasia(CIN)/invasive carcinoma in women with atypical glandular cells of undetermined significance (AGUS) smears.

Study Design: A retrospective study of the women with AGUS smears during the three-year period was performed. All of the medical records were reviewed. The correlation between the suspected variables and the histopathological diagnoses were analyzed.

Results: Among 44,071 smears performed, 119 (0.27%) smears were reported as AGUS. Colposcopies were done in 102 (88.7%) cases, and high grade CIN/invasive carcinoma were found in 18 (17.6%) cases. Among the suspected variables, which included age, menopausal status, hormonal contraception, history of previous Pap smears, medical diseases, clinical symptoms, and sub-classification of AGUS, both hormonal contraception and AGUS favor neoplasia were risk factors with an odd ratio of 5.4 and 5.0 respectively. Although clinical symptoms seemed to be a significant variable in univariate analysis, it appeared as a confounding factor in multi-variate analysis.

Conclusion: The incidence of AGUS smears in this study is 0.27%. Hormonal contraception and AGUS favor neoplasia were predictive factors in detection of high grade CIN/invasive carcinoma with an odd ratio of about 5. The clinical symptoms seemed to be a potential risk factor.

Keywords: CIN, AGUS smears

Four Years with Cervical Cancer Screening Using Visual Inspection with Acetic Acid-Roi Et Experience

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Background: Roi Et Provincial Health Office, Department of Health Ministry of Public Health, The Royal Thai College of Obstetricians and Gynaecologists (RTCOCG) and the JHPIEGO Corporation Cervical Cancer Prevention Group had initiated a demonstration project of a single-visit approach (SVA) combining visual inspection of the cervix with acetic acid wash (VIA) and cryotherapy in four districts in Roi Et, a province in northeastern Thailand since February 2000. This study reports the first four years experience with this technique performed by nurse providers in Roi Et province.

Methods: The screening coverage under VIA scheme between February 2000 and July 2004 was analyzed and compared across districts. Data source from Department of Provincial Administration Ministry of Interior (www.dopa.go.th) was calculated to establish eligible population number. Qualitative data collection process and analysis were used through interviews with key district personnel and nurse providers.

Results: By the end of year 2003 Roi Et population was 1,322,389; which 661,303 were male and 661,086 were female. There were 143,845 women aged 30-45 (10.9 percent). Among these women, 62,288 (43.3 percent) were recruited by SVA services. Fifty eight women (0.1 percent) were suspected with cancer. VIA positive results were reported among 3,379 women (5.4 percent). Interview with key district personnel and nurse providers revealed confidence and willingness to roll out SVA services. The support of the Chief Provincial Medical Director was considered the most influential factor.

Conclusion: Screening with VIA was associated with high coverage of target women, especially those outreach group. This method may be considered as one component of the comprehensive cervical cancer control in settings like Roi Et.

Keywords: Cervical cancer, VIA
