Abstracts

Prophylactic intramuscular injection of oxytocin versus intravenous infusion of oxytocin to minimize blood loss at cesarean section

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Objectives: The aim of the present study were to compare the effectiveness of prophylactic administration of oxyto- cin intramuscularly before giving uterine incision with intravenous infusion just after delivery of neonate in pre- vention of uterine atony and thereby minimizing blood loss at cesarean section.

Method: The study included 400 informed & consented singleton, full-term pregnant women undergoing elective lower segment cesarean section under spinal anesthesia. They were randomly allocated to receive either 10 units of oxytocin intramuscularly just before giving uterine incision or intravenous infusion of 10 units of oxytocin soon after delivery of the neonate. The placenta was delivered using cord traction combined with external massage. Intra-operatively, for each patient blood loss was assessed subjectively by visual estimation by the attending staffs (Obstetrician, Anesthetist and the scrub nurse). Drugs related side effects both to the mother and neonate were noted.

Result: The estimated mean blood loss and time lag between delivery of the baby and placenta were less in intramuscular group (397.04 ± 108.95 mL vs. 488.99± 159.53 mL; *P* = 0.001 & 17.01 ± 7.2 s vs. 27.96± 13.03 s; *P* = 0.001). The incidence of side effects of drug (i.e., Nausea, Vomiting, Tachycardia & Hypoten- sion) were more in intravenous group. No neonatal side effects were observed in intramuscular group.

Conclusion: Intramuscular injection of oxytocin appears to be more effective than the conventional intravenous infu- sion in reducing blood loss at cesarean section. It is saved and facilitated the delivery of the placenta more quicker.

Keywords: blood loss, delivery, oxytocin, placenta

Cesarean section overview based on the Robson classification at Prof. Dr. R. D. Kandou General Hospital Manado year 2020

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Aim: To determine of cesarean section delivery based on Robson's classification at Prof. dr. R. D. Kandou Gen- eral Hospital Manado.

Methods: A retrospective descriptive study. Data on all deliveries at Prof. dr. R. D. Kandou General Hospital Manado in 2020–2021 were collected, grouped based on the Robson classification and analyzed.

Results: There is 62.81% of deliveries by cesarean section in this study. Group 3 was the largest group repre- senting 22.52%. The second and third largest groups were groups 1 and group 4 with 17.66% and 16.22%. Group 4 is the group that gives the highest relative and absolute con- tribution of 25.07% and 15.74%, respectively. Meanwhile, group 6 is the group that gives the lowest relative and absolute contribution of 2.12% and 1.33%, respectively.

Conclusions: Cesarean section rate is still very high. Groups 4 is the main contributors to the overall cesarean section rate. To reduce the number of cesarean sections, the focus should be on reducing the number of cesarean sections which are the main contributors.

Keywords: cesarean section, Robson classification

Term abdominal pregnancy with healthy newborn: A case report

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Abdominal pregnancy is an ectopic pregnancy in the abdominal cavity except for the tubes, ovaries and broad ligaments. The incidence of abdominal pregnancy is 1%– 1.5% of all ectopic pregnancies with an estimated inci- dence of 1: 8000–10 000. RSUD Dr. Soetomo Surabaya, obtained a percentage of 4.73%, ectopic pregnancy. Maternal mortality (2%–30%) is increased by 7.7 times compared to other ectopic pregnancies and 90 times that of intrauterine

pregnancies, while perinatal mortality is 40%–95%. Abdominal pregnancy there are two, namely primary abdominal pregnancy if implantation first occurred in the peritoneum and secondary if implanta- tion first occurred in the tube then detachment occurs. Risk factors consist of maternal age, number of pregnancies, history of surgery, history of abortion, history of family planning, and PID. Abdominal pregnancy criteria:

(1) The fetus appears outside the uterus. (2) Failure to visualize the uterine wall between the fetus and the mother's bladder. (3) The part of the fetus looks close to the mother's abdominal wall. (4) Abnormal fetal position and placental tissue visible outside the uterus. (5) Absence of amniotic fluid between the placenta and the fetal head or chest. Case report of abdominal pregnancy, G3P2A0 41 weeks with primly old secondary to ectopic preg- nancy. A laparotomy was performed and the baby was born normal with placental attachment in the abdominal cavity without maternal complications.

Keywords: abdominal pregnancy, ectopic pregnancy, maternal

Tranexamic acid and blood loss during and after cesarean section. A randomized case control prospective study

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Objective: To evaluate the effectiveness of tranexamic acid in reducing blood loss during and after cesarean section when given prior to cesarean delivery.

Methods: Singleton primi term pregnancy without any associated complication undergoing elective cesarean section under spinal anesthesia were included in this study and they were randomly divided into two groups. The study group were given tranexamic acid 1 gm IV 30 min before giving skin incision. Injection oxytocin 10 units IM were given soon after delivery of the neonate. Intra-operative and 2 h postoperative blood loss was assessed subjectively by visual estimation. Laboratory analysis of hemoglobin, hematocrit, Urine routine examination, renal function test and liver function test were done on the 2nd postoperative day.

Result: The drop of hemoglobin and hematocrit was significantly more in controlled group (P = < 0.0001). There were no significant difference in heart rate, respiratory rate, renal function test and liver function test. There were no major events of complication due to the drug.

Conclusion: Tranexamic acid significantly reduced the amount of blood loss during & after the cesarean Section. Its use was not associated with any major side effects or complication.

Keywords: blood loss, cesarean section, incision, oxyto- cin, tranexamic acid

Study of cases of puerperal sepsis, its socio-demographic factors, bacterial isolates, and antibiotic sensitivity

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Objective: Due to lack of resources for culture and antibi- otic susceptibility testing in most underdeveloped coun- tries, puerperal sepsis is treated empirically with a wide range of antibiotics. Empirical treatment does not ensure treatment effectiveness and may even contribute to anti- biotic resistance. So, we studied cases of puerperal sepsis, its socio-demographic factors, bacterial isolates, and anti- biotic sensitivity in a tertiary health center.

Material and Methods: A cross-sectional study was con- ducted at the Dept. Obstetrics and Gynecology depart- ment of a tertiary care hospital in India from April 2019 to September 2020. During this time, all patients with sepsis who met the criteria for inclusion were included. After informed written consent, subjects were registered on a pre-designed proforma.

Results: 2049 obstetric admissions during this period, with 106 (5.1%) of these having puerperal sepsis. The majority of these women (58.7%) were age group of 21 and 30, were multiparous (96.5%), and unbooked. Fever 104 (98.1%) was the most prevalent clinical characteristic, while wound gape was the most common consequence (47.1%). Klebsiella aerogens were the most common organism found in various cultures. Many organisms were shown to be multidrug-resistant and sensitive to gentamycin and amikacin.

Conclusion: Klebsiella aerogens was the most common cause of puerperal sepsis in this

investigation. Because the causal agents of puerperal sepsis and their antibiotic sensitivity patterns change over time, positive blood cul- ture and antibiotic susceptibility of the isolates are the best guides for selecting the optimum antimicrobial ther- apy for treating sepsis.

Keywords: antibiotic susceptibility, bacterial resistance, multidrug-resistant, puerperal sepsis

Sensitivity and specificity of AFP and LDH as tumor marker of solid ovarian neoplasm

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Ovarian neoplasms are one of the most common malig- nancy experienced by women in Indonesia. Solid ovarian neoplasm which is a form of ovarian neoplasm possesses low survival rate due to late diagnosis. One of the focuses of research on ovarian neoplasms is early detection using various tumor markers such as the AFP and LDH markers. To determine the sensitivity and specificity of AFP and LDH to diagnose solid tumor cancer. A diag- nostic test using cross sectional method was done. The study was conducted at the Obstetrics and Gynecology Clinic of RSCM Jakarta from 31 January 2015 to 31 January 2020. A total of 182 female patients with suspi- cion of solid ovarian neoplasms were included consecu- tively in the study. Patients with other systemic diseases or those who were pregnant were excluded from the test. A Conformity test was performed using the Kappa test. The Sensitivity and specificity value of each tumor marker were obtained. As a marker of dysgerminoma AFP has sensitivity of 1.92% and specificity of 77.1% respectively; while LDH has sensitivity of 55.67% and specificity of 65.65% respectively. For Teratoma, AFP had a sensitivity and specificity value of 30.43% and 85% respectively; while LDH had a sensitivity and specificity value of 30.43% and 58.13% respectively. As markers for the Yolk sac tumor, AFP showed 100% sensitivity and 88.89% spec- ificity while LDH showed a sensitivity and specificity result of 41.67% and 59.65% respectively. AFP and LDH are tumor markers which can be used for early detection and screening in cases of solid ovarian neoplasms

Catheter-directed ethanol sclerotherapy for endometrioma in patients vulnerable to diminished ovarian reserve

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Aim: To investigate the effectiveness and impact on ovar- ian reserve of catheter-directed ethanol sclerotherapy in patients with endometrioma susceptible to diminished ovarian function.

Methods: This is a retrospective study based on review of electronic medical record. 18 patients with endometrioma sized larger than 3 cm in diameter with preprocedural AMH level less than 2 ng/mL were evaluated. Sclerother- apy was done by insertion of pigtail catheter into the cyst transabdominally or transvaginally followed by aspira- tion of cyst content and 99% ethanol injection with a 20-minute retention time. Ultrasonography was done before and 6 months after the intervention to assess cyst size change. At the same time points, Serum Anti- mullerian Hormone (AMH), Cancer Antigen (CA) 125 levels were obtained to analyze the ovarian reserve and treatment efficacy, respectfully.

Results: Mean cyst size, serum CA-125 levels, pain score decreased significantly 6 months after CDS ($p < 0.05$). Serum AMH levels was not altered before and after CDS ($p = 0.875$). Subgroup analysis of primary and recurrent cases revealed decreased CA-125 level at 6 month post- procedure and no change in AMH level in both groups. Conclusions: Catheter-directed sclerotherapy had positive therapeutic outcome while preserving ovarian function in patients at risk for decreased ovarian reserve.

Keywords: antimullerian hormone, decreased ovarian function, endometriosis, endometriotic cyst, minimally invasive procedure.

Application of sono-elastography in differentiating endometrial carcinoma from benign endometrial lesions: A cross-sectional study

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Aim: To evaluate the diagnostic value of sono-elastography to distinguish endometrial cancer from benign endometrial lesions.

Methods: A cross-sectional study was conducted and included 31 subjects with abnormal uterine bleeding who required endometrial sampling. Sono-elastography assessment was done qualitatively and quantitatively by using Tsukuba elasticity score and strain ratio, respec- tively. Results were compared between those with endo- metrial cancer and those with benign endometrial lesions (hyperplasia and polyp) using Kruskal-Wallis test and Mann–Whitney *U* test. Diagnostic accuracies of Tsukuba elasticity score and strain ratio in differentiating endome- trial cancer from benign endometrial lesions were deter- mined with cut-off values derived from receiver operating curve analysis.

Results: Both the Tsukuba elasticity score and strain ratio value were significantly higher among patients with endo- metrial cancer (n = 15; mean age: 55.07 ± 8.53 years) compared to those with benign endometrial lesions (n = 16; mean age: 41.63 ± 8.02 years) (p < 0.0001). A Tsukuba elasticity score of e"3 showed the highest diag- nostic accuracy at 93.5% (95% CI 79.3%–98.2%), with sensitivity of 86.7%(95% CI 62.1%–96.3%), specificity of 100% (95% CI 80.6%–100%), PPV of 100% (95% CI 77.2%–100%), NPV of 88.9% (95% CI 67.2%–96.9%), positive LR of undefined indicating high value, and nega- tive LR of 0.10 (95% CI 0.05–0.40). A strain ratio value of e"2 showed the highest diagnostic accuracy at 93.5% (95% CI 79.3%–98.2%), with sensitivity of 93.3% (95% CI 70.2%–98.8%), specificity of 93.8% (95% CI 71.7%–98.9%), PPV of 93.3% (95% CI 70.2%–98.8%), NPV of 93.8% (95% CI 71.7%–98.9%), positive LR 14.9 (95% CI 2.1–107.1), and negative LR of 0.07 (95% CI 0.01–0.51).

Conclusion: The results indicate that sono-elastography can distinguish endometrial cancer from benign endome- trial lesions.

Pregnancy outcomes following open transabdominal cerclage: A case-series report

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Aim: To evaluate the outcomes of pregnancies following transabdominal cerclage in women with cervical insufficiency.

Methods: This was a case series study. Women who had a transabdominal cerclage applied at My Duc Hospital from 1/2015 to 11/2021 were included and followed up until birth. Eligible patients either experienced late mis- carriage or preterm birth due to cervical insufficiency where a vaginal cerclage had failed, or had extreme cervi- cal shortening due to congenital or acquired deformities. Laparotomically, a cerclage was placed high at the inter- nal os using a nonabsorbable suture. Primary outcome was delivery at 34 gestational weeks. Secondary out- comes were neonatal survival rates, procedure time and complications following transabdominal cerclage.

Results: 88 women undergoing transabdominal cerclage had each experienced 1.69 late miscarriages and/or preterm births in average, where the mean gestational age at birth was 21.6 weeks. 12 women (13.6%) were pregnant at the time of cerclage placement and 42 women (47.7%) conceived afterwards. The mean operation time was 43.75 ± 13.63 min and the mean estimated blood loss was 34.53 ± 30.64 mL Complications were reported in three cases (3.4%) including abdominal wall hematoma, fetal demise after the procedure,

and uterine perforation. In 39 women who carried their pregnancies beyond the first trimester, 30 (76.9%) delivered at 34 weeks of gestation, neonatal survival rate was 92.3%, mean gestational age at delivery was 34.5 weeks.

Conclusion: Although with higher morbidity, transab-dominal cerclage appears to be a reasonable option for women with refractory cervical insufficiency who cannot undergo the transvaginal approach.

Comparison of ovarian response to recombinant follicle stimulating hormone in lean and obese PCOS undergoing IVF

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Aim: PCOS has two phenotypes, which are obese and lean. Obese and lean PCOS have several different cardi- nal characteristics that might affect IVF outcomes. This study compares the ovarian response and IVF outcomes between lean and obese PCOS using rFSH stimulation.

Methods: This is a cross-sectional study involving 226 PCOS patients undergoing IVF with GnRH antagonist + rFSH protocol. PCOS patients were catego- rized into two groups, lean PCOS (n = 113) and obese PCOS (n = 113). Data regarding clinical and biochemical profile, ovarian response, and IVF outcomes were obtained from patient's medical records. Differences between groups

were determined statistically using Mann–Whitney test. Results: There is a significant difference between lean and obese PCOS groups in terms of AMH level (p = 0.005), initial dose of rFSH (p = 0.000), and total doses of rFSH (p = 0.000). There is no significant difference in number of oocytes retrieved, endometrial thickness, cleavage rate, and pregnancy rate between two groups. In the lean PCOS group, AMH levels are slightly higher (8.80 vs. 6.85) with total doses of rFSH are lower (2128 ± 586 vs. 2752 ± 1136) compared to obese PCOS.

Conclusion: Differences in ovarian response to rFSH between lean and obese PCOS were found in this study. Women with lean PCOS seems to have higher AMH level and better response to rFSH, hence the higher num- ber of oocytes retrieved with lower doses required.

Keywords: anti-mullerian hormone, fertilization in vitro, follicle stimulating hormone, ovulation induction, poly-cystic ovary syndrome