

ISP-24-1 Impact of a history of myomectomy on cesarean section

The University of Tokyo

Asuka Yoshiara, Seisuke Sayama, Rieko Shitara, Toshio Nakayama, Takayuki Iriyama, Atushi Komatsu, Atushi Nagamatsu, Yutaka Osuga, Tomoyuki Fujii

[Objective] Women with a history of myomectomy often undergo a cesarean section in consideration of the risk of uterine rupture due to myomectomy surgery. This study aimed to clarify the impact of prior myomectomy on cesarean section (C/S). [Methods] This study was conducted under approval of our ethics committee. Clinical data including gestational age, infant weight, intraoperative blood loss and operation time were analyzed in 56 women of singleton pregnancy who underwent elective C/S with a history of myomectomy (group M). Group M were categorized based on the procedures into laparoscopic myomectomy (LM, n=19), laparoscopic assisted myomectomy (LAM, n=19) and abdominal myomectomy (AM, n=18). As a control, 122 women receiving elective C/S for breech presentation were chosen (group C). [Results] The infant weight and the gestational age were comparable between group M and C. Regarding blood loss and operation time (presented as median, 10-90 percentile) were 1490ml (862-2398) and 77 min (69-85) in group M and 1000ml (510-1854) and 69 min, (54-88), showing significant difference in both parameters ($p<0.01$). In comparison with group C, there were especially larger only in AM ($p<0.01$) but not in LM and LAM. [Conclusion] Pregnancy with a history of myomectomy, especially a removal by abdominal myomectomy, is associated with an increase in blood loss and operation time at cesarean section.

**ISP-24-2** Comparative analysis of 15-years ago and the current cesarean delivery rates using 10-group classification

Osaka University

Takao Owa, Kazuya Mimura, Aiko Kakigano, Yuri Matsumoto, Tomomi Takata, Shinya Matsuzaki, Keiichi Kumasawa, Masayuki Endo, Takuji Tomimatsu, Tadashi Kimura

[Objective] Cesarean delivery rates continue to rise throughout the developed world. The aim of this study was to examine the transition of cesarean delivery rates in the same institution by using 10-group classification. [Methods] We used the Robson's 10-group classification which is based on obstetrical parameters (parity, previous cesarean delivery, gestational age, onset of labor, fetal presentation and number of fetuses). Cesarean delivery rates of 2000 and 2014 were examined. Total delivery numbers were 615 in 2000 and 524 in 2014. [Results] From 2000 to 2014, overall cesarean delivery rates increased from 15.6% (96/615) to 35.1% (184/524). Of 10-group classification, cesarean delivery rates increased from 10.9% (32/294) to 21.9% (50/228) among term, singleton, and cephalic nulliparous women, from 31.4% (16/51) to 56.7% (38/67) among preterm singleton cephalic women, and from 45.5% (25/55) to 100% (56/56) among previous cesarean delivery, term, singleton, cephalic women. [Conclusion] The increase in cesarean delivery rate of term, singleton, cephalic nulliparous women and previous cesarean delivery, term, singleton cephalic women correlated with the increase in current overall cesarean rates throughout 15 years. By using this objective classification system, we can analyze trends of cesarean delivery over time in the same institution and between different institutions.

ISP-24-3 Risk factors for birth canal trauma with forceps delivery

Juntendo University

Yasuko Sano, Chihiro Hirai, Xianglan Li, Jun Takeda, Youta Shimanuki, Shintaro Makino, Atsuo Itakura, Satoru Takeda

[Objective] Forceps delivery (FD) is associated with perineal and vaginal trauma. To clarify the risk factors for birth canal trauma associated with FD, we retrospectively evaluated the medical records of FD cases in a single hospital. [Methods] Data of 558 delivered women who underwent FD at term with singleton cephalic position were obtained from 2010 to 2014. The relationship between clinical characteristics and birth canal trauma was analyzed. Birth canal trauma included third and fourth perineal laceration as well as hematoma in vagina and perineum. Univariate and multivariate models of logistic regression were employed. Statistical significance was defined when $p<0.05$. [Results] The incidence of severe laceration and hematoma were 11%, 5%, respectively. Fetal station, maternal gestational weight gain, and birth weight were higher ($p=0.014$, 0.016 , 0.025 , respectively) among women with severe laceration, whereas the rates of obstetrical analgesia was lower among women with such lacerations ($p=0.015$). Maternal age was higher among women with hematoma ($p<0.001$). Neither indication for FD nor nulliparous showed any influence on the rate birth canal trauma. [Conclusion] Birth canal traumas with FD were associated with higher fetal station, gestational weight gain, birth weight and maternal age. Obstetrical analgesia may reduce severe lacerations.