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A NEW CLASSIFICATION OF EMERGENCY LSCS: DOES IT WORK? *Duke, C.; Braysbaw, S.; Sasbidbaran, R. Anaesthesiology, The Royal London Hospital, London, United Kingdom* **Introduction:** The conventional classification of LSCS as 'elective' and 'emergency' is inadequate as some emergencies are more urgent than others. A group in the UK(1) recently proposed a new four-grade classification system based on clinical definition on reason for surgery. They recommended time to delivery should not be a deciding factor. The Royal College of Obstetricians & Gynaecology(UK) recommended this system to its members(2). We adopted this classification recently with a recommended decision to delivery time for each grade. **Methods:** We retrospectively reviewed the LSCS operation charts filled by the obstetricians who were not aware of the audit, prior to and after the adoption of the new classification. The pre charts included a classification for caesarean section as immediate, urgent, semi-elective and elective with no clinical definition nor time suggestion. The post charts included the new four-grade system with time limit recommendations. In our audit, we compared a similar sized sample of emergency LSCS with regards to the urgency and the ability to achieve the recommended decision to delivery times proposed. **Results:** As per Table **Discussion:** Our data shows that not attaching time to delivery to the classification performed better than when time limits were suggested. We agree with the new clinical classification as a suitable one to use. **Reference:** 1. Lucas DN et al. JRSM 2000;93:346-350 2. RCOG Newsletter October 2000

	Dec -Del Time	Pre	Post
Grade 1	<30 min	5/9 (56%)	11/24 (46%)
Grade 2	<30 min	4/51 (8%)	0/31
	<30 min	22/51 (43%)	7/31 (23%)
Grade 3	<24 hours	6/6(100%)	15/15(100%)
	08.00-17.00	6/6(100%)	5/15 (33%)

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PERIOPERATIVE MORBIDITY IN OBSTETRIC HYSTERECTOMY: ELECTIVE VERSUS EMERGENCY *Friedman, J.¹; Ramsey, P.¹; Ramin, K.¹; Vasdev, G.² 1. Dept. OB/GYN, Mayo Clinic, Rochester, MN; 2. Dept. Anes, Mayo Clinic, Rochester, MN* **Obstetric hysterectomy (OBH) occurs in 1.5/1000 births. Improvements in antenatal care has made elective OBH possible. This study examined the maternal and fetal perioperative morbidity associated with emergency and elective OBH. After IRB approval, a retrospective chart review of all OBH from 1992 to 1999 was performed. The following data was recorded: age, weight, gravidity, parity, gestational age, blood loss, transfusions, obstetric indication, duration of anesthesia, surgical time, maternal and fetal outcome. The patients were divided into two groups. Group A had emergency OBH and Group B was elective. The data was compared with either an unpaired t-test or a Fischer's Exact test as applicable. 17 consecutive patients with OBH were identified. The groups did not differ in regard to maternal age, gravidity, parity, gestational age, operative time, anesthesia time, cryoprecipitate units used, and fetal outcome (prematurity was the largest risk factor Group A=31±6.5, Group B= 34±3, p=NS). The groups did differ in operative blood loss (Group A=1200±470 mls; Group=B 4288±714 mls; p=0.0012); blood units transfused (Group A=1.6±1.1 units Group B=11±8 units, p=0.005); fresh frozen plasma (Group A=0, Group B=3±3 units, p=0.008); platelets (Group A=0, Group B=6±, p=0.023); perioperative infections (Group A=18.3%, Group B=35%, p=NS). Maternal outcome; ICU admissions (Group A=0%, Group B=41%, p=0.023), urological injury (Group A=6%, Group B=6%, p=NS), decimated intravascular coagulopathy (Group A=0%, Group B=6%, p=NS). In summary, emergency OBH is associated with increased blood loss and factors transfused. Most of these patients subsequently requires ICU management for the postpartum period. Fetal outcome is complicated by prematurity, with group A having a lower mean. Although this did not reach statistical significance, the neonatal period is challenging with longer NICU stay.**

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IS EPIDURAL OR INTRATHECAL MORPHINE FOR POST C-SECTION ANALGESIA SAFE ON A BUSY POST-PARTUM FLOOR IN A LARGE TEACHING HOSPITAL? *Patton, C.M.; Lai, M.; Steadman, J.; Toyama, T.; Ranasinghe, S. Anesthesiology, Univ of Miami, Miami, FL* **Introduction:** Epidural morphine is used in our institution for post-operative analgesia after C-Section. Sedation and respiratory depression are concerns because our patients go to a regular postpartum floor with no special respiratory monitoring equipment. **Methods:** During regional anesthesia for C-Section, patients receive one dose of intrathecal morphine 0.25mg or epidural morphine 4mg. Post-operatively, nurses check respiration and sedation hourly. The anesthesia team is called if resp. rate is below 10/min or the patient is not easily arousable. **Results:** In 3 yrs 5117 patients were treated. 4618 received epidural morphine(EM). 499 received intrathecal morphine(ITM). One complication occurred in each group (0.02% of EM; 0.2% of ITM; 0.04% overall.) Complication #1 had ITM and experienced sedation with respiratory depression beginning at the 3rd post-op hour. By the 7th hour, when the anesthesia team was belatedly summoned, she was barely arousable and had a respiratory rate of 5-6/min. Bag/mask ventilation followed by Naloxone resolved the problem quickly. Complication #2 had EM. At the 10th hour she was barely arousable. Her respiratory rate was 12. Naloxone 0.4mg given twice kept her awake. Neither patient suffered sequela. Two additional problems were caused by medication errors. One patient received both intrathecal and epidural morphine. Another received the epidural dose of 4mg administered intrathecally. Both errors were quickly recognized. The patients were treated with naloxone infusions for 18 hours. Neither had evident respiratory depression. **Discussion:** We now use the epidural route almost exclusively, although we believe both intrathecal and epidural morphine are safe for routine floors if the nurses are intensively educated to recognize complications and avoid complacency. The delayed responses in cases #1 & #2 were a warning that more training was necessary.

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HOW USEFUL WOULD AUTOTRANSFUSION BE IN THE MANAGEMENT OF OBSTETRIC HEMORRHAGE?: A THEORETICAL ANALYSIS BASED ON HOMOLOGOUS TRANSFUSION PRACTICES DURING CESAREAN SECTION *Fong, J.; Kump, L.; Gurewitsch, E. Anesthesiology, Weill Medical of Cornell, New York, NY* **Introduction:** We sought to determine to what extent intraoperative autotransfusion might theoretically prevent exposure to homologous blood products in the obstetric setting. **Methods:** With IRB approval, medical records of patients undergoing cesarean section (CS) from 1/1/92-6/30/96 who required blood transfusions were reviewed to identify those who received blood products during a "critical time period"-intraoperatively and up to 12 hours postoperatively-in which intraoperative blood salvage (BS) could have had potential benefit. For each patient, we calculated the number of units of homologous packed red blood cells (HPRBC) which could theoretically have been avoided had intraoperative autotransfusion been performed. Assuming a HPRBC unit=250 ml, 75-85% hematocrit (Hct) and when leukocyte depleted=200 ml, Hct 85%, [preprocessed BS volume(z) X patient Hct] = homologous red cell volume (180 ml). Due to a 30% processing loss¹, final required preprocessed BS volume (y) = [(z X 0.30) + z]. Theoretical number of BS pRBC units=[estimated blood loss/y]. Kruskal-Wallis tests, Chi-square tests and 95% confidence intervals were used where appropriate to analyze the data. P<0.05 was deemed significant. **Results:** 122 of 4287 CS patients (2.8%, 95% CI 2.4-3.4%) required transfusion. Of the 122 women requiring blood transfusions, 63 (51.6%) could have derived benefit from use of intraoperative blood salvage. In 33 transfused patients (27%), transfusion of homologous blood products, theoretically, could have been entirely avoided. **Conclusions:** Intraoperative blood salvage has the potential to reduce exposure to homologous blood products in a substantial proportion-over half-of the cases requiring transfusion during cesarean section. The overall incidence of transfusion in this population, however, is low. **Reference:** Int J Gynecol Obstet 56:141-5, 1997.