POSTER REVIEW #2

A43 **(Poster 33)**

LABOR EPIDURAL ANALGESIA GUIDELINES: FRIEND OR FOE? *Ray, D.; Harrison, B.; Burkle, C.; Vasdev, G. Anes. Dept., Mayo Clinic, Rochester, MN* Complications during Labor epidural analgesia (LEA) may occur. Professional bodies issue guidelines (G) to maintain safety. Grilli et al analyzed 431 published G per predefined criteria (1. description of stake holders, 2. search information, 3. grading of recommendations) and found only 22 met all 3 criteria.[1] We analyzed LEA G from the USA, UK and Australia to see if they met Grilli's criteria. G relevant to LEA were obtained from the American Society of Anesthesiologists (ASA), The Association Of Anaesthetists of Great Britain and Ireland (AAGBI), and the Australian and New Zealand College of Anaesthetists (ANZCA). The authors then reviewed each of these per Grilli's criteria. Only the ANZCA's G for the Conduct of Major Regional Analgesia in Obstetrics had a specific G for LEA, while the ASA contained LEA G in G for Regional Anesthesia in Obstetrics and the AAGBI contained LEA G in G for Obstetric Anaesthesia Services. Both the ASA and ANZCA failed to meet all three of Grilli's criteria while the AAGBI described the stake holders and gave details of the source of information, but did not state its search strategy and failed to grade the recommendations. Only the AAGBI specified an anesthesiologist be involved and immediately available, while the ASA specified a physician or under the direction of a physician and be readily available while the ANZCA specified a doctor with appropriate training be readily available. Therefore, G help establish a standard of medical care and as a result are used as evidence in medical malpractice cases. A study showed that G were implicated in 2:1 cases.[2] Our analyses of LEA G show that they do not meet Grilli's criteria and analysis of one aspect-personnel. There is lack of conformity implying that no evidence based G is in operation. G are important but in the area of LEA they need to be multidisciplinary, well searched, documented, and evidence graded to be acceptable. **Reference:** 1. The Lancet 355:103-6, 2000 2.Ann Int Med 122:405-5,1995

A44 **(Poster 34)**

NALBUPHINE GIVEN DURING LABOR CAN CAUSE A TRANSIENT DECREASE IN THE BASELINE FETAL HEART RATE *Goodman, E.J.[1]; Thomas, S.E.[1]; Stupi, R.J.[1]; Jaffe, K.M.[2] 1. Anesthesiology, Univ. Hosp. of Cleveland, Cleveland, OH; 2. OB/GYN, Univ. Hosp. of Cleveland, Cleveland, OH* **Introduction:** Nalbuphine often is used as a mild analgesic and as an antipruritic for women in labor. Giannina(1) and Frank(2) reported that nalbuphine did not alter the baseline fetal heart rate (FHR), although it could reduce the number of accelerations and variations in the tracing. **Methods:** After IRB approval, a list of pts. who received nalbuphine (5-10mg) on the L & D floor during a 2 month period (2/00-3/00) was obtained from the hospital pharmacy. A baseline value was noted 30min before the medication was given. All FHR readings were made by visual inspection of the tracings. Baseline FHR values were also recorded for 30, 60, and 90min after the parturient received the nalbuphine. Patients who had no FHR tracing monitored 30min before the nalbuphine was given and those whose FHR tracing was not monitored at least at 2 of the 3 post medication times were excluded. If multiple doses were given to the same patient, only the FHR tracing after the first dose was considered. **Results:** A total of 94 patients were included, although not all had tracings available at all of the post medication times. At the 30, 60, and 90min times after the medication, the baseline FHR had decreased an average of 4, 6 and 8 beats per min, respectively. However, the standard deviations for these values were large (11, 12 and 12, respectively). If just the 90min post medication values were considered, 72%(64/88) of the patients experienced a decrease in the FHR, 18%(16/88) an increase, and 10%(9/88) saw no change in their base line FHR. **Conclusion:** Mild decreases in the baseline FHR after nalbuphine is administered to parturients are a common occurrence. These minor changes should not encourage the labor team to check the fetal scalp pH or otherwise seek reassurance as to the wellbeing of the fetus. **Reference:** 1. Obstst Gynecol 1995;86:441. 2. Anaesthesia 1987;42:697.

A45 **(Poster 35)**

HOW DOES AMNIOTIC FLUID EFFECT CAOGULATION? *Harnett, M.J.; Datta, S.; Bhavani-Shankar, K. Anesthesia, Brigham and Women's Hospital, Boston, MA* There is controversy surrounding the mechanism of the coagulation abnormalities caused by amniotic fluid(AF). Thromboelastography(TEG)® was used to study the effect of different concentrations of AF on coagulation in pregnancy. Following IRB approval,to date, 20 parturients were studied using 2 dual channel TEG analyzers®(Haemoscope). In group 1(n=7), 0,10,20 and 30μL of AF was added to 330μL of citrated blood obtained from the same parturient and 20μL 0.2M calcium chloride. In group 2(n=7), 0,20,40 and 60μL of AF was used. The effect of AF on platelet function was assessed in group 3(n=6) with or without Reopro® added to 40 and 60μL of AF and 330μL blood. As there was no significant difference (Student T-test) in baseline TEG values(0μL) between groups 1 & 2, the data in these 2 groups was analyzed together using ANOVA with Bonferroni's correction for multiple comparisons. Paired T test was used to study platelet function.φ= significant **Results:** R(clot initiation) is significantly shorter at the addition of 10μL AF and above, suggesting AF to be a procoagulant. Both K and α(fibrinogen function) show significant increases from 40μL AF. There is no effect of AF on MA (platelet function),lysis, or G (clot strength). Platelet contribution to coagulation as studied by reopro was 50% which is similar to that in healthy parturients **Reference:** (1). Anesthesiology;90:A67

Mean (SD)	R (mm)	K (mm)	α (degree)	MA (mm)	Lysis %	G (dyn/cm2)
0μ	9.1(2.0)	3.5(1.3)	66.8(7.8)	56.6(7.4)	0.5 (0.9)	6986 (3033)
10μ	**5.3(2.2)**φ	3.1(1.3)	70.1(6.9)	65.1(6.2)	1.4 (1.7)	9786 (2975)
20μ	**4.6(1.6)**φ	2.4(0.7)	73.2(4.1)	63.9(5.5)	2.2 (3.1)	9143 (2128)
30μ	**3.9(1.5)**φ	2.4(0.5)	73.3(3.5)	63.6(5.0)	2.8 (3.4)	8991 (2077)
40μ	**4.1(1.2)**φ	**2 (0.7)**φ	**76 (3.3)**φ	60.5(5.3)	2.2 (1.7)	7854 (1721)
60μ	**3.7(1.1)**φ	**2.2(0.7)**φ	**76 (3.7)**φ	52.3(8.0)	3.6 (6.2)	5694 (1538)