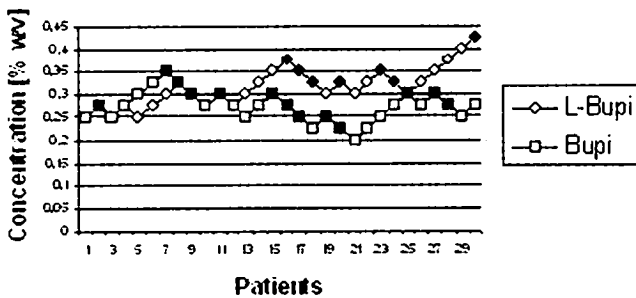


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RELATIVE MOTOR BLOCKING POTENCIES OF BUPIVACAINE AND LEVO-BUPIVACAINE IN LABOUR *Lacassie, H.J.*¹ *Columb, M.O.*² 1. Anesthesiology, Universidad Catolica de Chile, Santiago, Chile; 2. South Manchester University Hospital, Manchester, United Kingdom Minimum local analgesic concentrations (MLAC) have been used to determine the epidural analgesic potencies of bupivacaine and its levo counterpart [1]. There are no reports of the motor blocking potencies of these agents. The aim was to determine the motor block MLAC of both drugs and determine the relative potency ratio. Sixty ASA-II parturients were randomised to one of two groups in this prospective, double blind study during the first stage of labour. Each received a 20 ml bolus of epidural bupivacaine or levo-bupivacaine at the L2-L3 interspace. The first woman in each group received 0.25%w/v. Up-down sequential allocation was used to determine subsequent concentrations at a testing interval of 0.025%w/v. Effective motor block was defined as a Bromage score <4 within 30 minutes. The up-down sequences were analysed using the Dixon and Massey method and probit regression. Two-sided P<0.05 defined significance. The sequences are shown in the Figure. The motor MLAC for bupivacaine was 0.27%w/v (95%CI 0.24 - 0.31) and for levo-bupivacaine was 0.32%w/v (95%CI 0.26 - 0.38) (P=0.28). The ropivacaine:bupivacaine potency ratio was 0.86 (95%CI 0.65 - 1.13). This is the first study to estimate the motor blocking potencies of bupivacaine and levo-bupivacaine in labour. 1. *Lyons G. BJA 1998; 81: 899-901.*

MLAC Bupi/L-Bupi



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DO DIFFICULT EPIDURAL PLACEMENTS OR INEXPERIENCED STAFF CAUSE MORE LOW BACK PAIN ON DAY ONE POSTPARTUM? *Goodman, E.J., Dumas, S.D., Lilly, M.H.* *Anesthesiology, Case Western Reserve University, Cleveland, OH* Introduction: While low back pain following epidural analgesia for labor is expected to subside within days, complaints can be heard in 8-44% of patients many weeks after the childbirth (1,2). This study examines whether the severity of the back pain is related to the difficulty of the epidural catheter placement or to the experience of the one who places it. Methods: After IRB approval was obtained, parturients who requested epidural analgesia (from 1/01 to 1/02) were asked about a history of low back pain before and during their pregnancy. At the time of epidural catheter placement, the no. of needle thrusts and the years of regional anesthesia experience by the person placing the epidural catheter were recorded. Women who subsequently required a c-section were excluded, since differentiating back pain from incisional pain may be difficult. The next day, the epidural site was examined for bruising, pain on deep palpation and pain in the deep structures of the back. The women were asked to grade their overall back pain on a scale of 0-10 (10 worst pain). Statistical significance was established using the t-test. Results: 54 women who received epidural analgesia and 7 controls who delivered naturally were studied. The overall pain score the next day was not significantly different if it took 2-4 or >4 thrusts to place the epidural needle properly compared with the placement on the first thrust. Similarly, the percent of patients in each group who had bruising or pain with palpation at the epidural site as well as the fraction who had deep pain in the back were essentially identical for the 3 groups. If the anesthesia provider had <3 years of epidural experience, the mean pain score the next day was 2.2. Surprisingly, if the epidural catheter was placed by one with >4 years of experience, the postpartum pain score (2.7) was greater (not signif.). Only one of the 7 controls reported any pain the following day. Conclusion: Patients who receive epidural analgesia for labor pain are more likely to experience low back pain the following day. However, the severity of the pain does not depend on the difficulty of the epidural catheter placement or the experience of the one who performs the epidural procedure. 1. *Anesthesiology 1994;81:29-34.* 2. *Canad J Anaesth 1998;45:724-28.*

Number of Thrusts	1	2-4	>4
n	28	16	10
Mean Pain Score	2.3	2.6	2.2
% Bruised	4	6	0
% Painful to Touch	43	44	50
% Aching on Inside	43	44	40