

## EPIDURALS AND BACK PAIN

It is commonly thought by women who have had an epidural for pain relief in labour that the back pain they experience after they have had their baby, has been caused by the epidural. The following paper is a summary of prospective research study looking into this very problem and a comment by the editor of the journal in which the summary was published.

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**Title:** Is Epidural Anesthesia in Labor Associated With Chronic Low Back Pain? A Prospective Cohort Study.

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### **Abstract:**

The fact that women suffer back pain more often than men suggests that pregnancy may have a role in its development or affect its course. Low back pain commonly is described in the postpartum period, but attempts to learn whether epidural anesthesia is responsible have given mixed results. A previous cohort study did show a significant difference in the risk of back pain between women given epidural and nonepidural analgesia, but only on the first postpartum day. The same study population now has been analyzed to evaluate low back pain a year after delivery. Of 329 women contacted by telephone and asked to complete a questionnaire, 164 had received epidural analgesia for labor and delivery and 165 had not. They were asked to rate their back pain on a numeric scale, and to note whether daily activities were limited. Three fourths of the original study group were contacted. In all, 12 percent of respondents reported having low back pain 1 year after delivery. There were no significant analgesia-related differences in the prevalence of low back pain, its reported severity, or functional impairment. Back pain interfered with normal activities in 6 of the 29 women affected, and 12 women required analgesia or consultation with a physician. This prospective follow-up study, in accord with other studies in North America, revealed no increase in the risk of chronic low back pain after epidural anesthesia. The findings, however, may not apply to women who had significant back pain before pregnancy, inasmuch as these subjects were excluded from the study population.

### **Editor's Comment:**

This study is a welcome follow-up to a previous study by the same authors evaluating the effect of epidural analgesia on back pain in women during the first 6 weeks after delivery. In the previous study of 329 patients, the authors found a nonsignificant increase in back pain at 6 weeks' postpartum in 164 patients who had received epidural analgesia for labor (A Macarthur et al., *Br Med J* 1995;311:226). In the present study, 244 (74 percent) of the patients in the original study were contacted 1 year after their deliveries and questioned in a similar manner about back pain. No significant difference in back pain could be detected for those who had epidural analgesia for labor as compared with those who did not. The authors note that their study had a 77 percent power to detect a 2-fold increase in back pain frequency between epidural and non-epidural groups. They also point out that the previous studies that found an association between epidural analgesia and chronic back pain were all retrospective, whereas studies that have not confirmed this association were prospective. One of the explanations for a possible causal association between epidural analgesia for labor and chronic back pain is that back strain occurs by passive movement during periods of muscle relaxation and immobility. If this theory is correct, the

patients in the present study would have been at high risk for chronic back pain because they received relatively dense epidural blocks with resulting motor dysfunction. In other words, the finding that there was no increase in back pain at 1 year among the epidural group is strengthened by the coincidental use of relatively high doses of local anesthetic for epidural analgesia in this study. Currently, the use of combined narcotic and local anesthetic medications for epidural analgesia results in far less motor block, with the result that patients are more mobile. With the increasing popularity of epidural analgesia for pain relief in labor, the present study is good news for both patients and accoucheurs.-WAB)