MacArthur et al(i) in 1990 did a study of over 1000 women who suffered from back pain after childbirth (nearly 70% of whom had had it for over 1 year).

They concluded that

"The relation between backache and epidural anaesthesia is probably causal. It seems to result from a combination of effective analgesia and stressed posture during labour. Further investigations on the mechanisms causing backache after epidural anaesthesia are required."

Their 1992 paper(ii) discussed 26 women who had numbness or tingling in the lower back, buttocks and leg, of whom 23 had had epidural anaesthesia. Again, they concluded that further study was needed.

They went on to do studies in 1995 (short-term)(iii) and 1997 (long-term)(iv) but these failed to show significant increase in back pain amongst women who had had epidural anaesthesia.

Other studies have also failed to demonstrate a significant correlation between epidural anaesthesia and long-term back pain. Russell et al's study (v) showed 33% of participants suffering from back pain at 3 months post-partum, but only 7% of these had not previously suffered from back pain.

There was further follow-up at one year, but these results are unclear. They concluded that

"Among all demographic, obstetric, and epidural variables examined the only factors significantly associated with backache after childbirth were backache before and during

pregnancy."

In a previous study(vi), Russell had contended that

"Though new long term backache is reported more commonly after epidural analgesia in labour, it tends to be postural and not severe. There were no differences in the nature of the backache between those who had or had not received epidural analgesia in labour."

i MacArthur C, Lewis M, Knox EG, Crawford JS BMJ 1990 Jul 7;301(6742):9-12 Epidural anaesthesia and long term backache after childbirth.

ii MacArthur C, Lewis M, Knox EG BMJ 1992 May 16;304(6837):1279-82 Investigation of long term problems after obstetric epidural anaesthesia.

iii Macarthur A, Macarthur C, Weeks S BMJ 1995 Nov 18;311(7016):1336-9 Epidural anaesthesia and low back pain after delivery: a prospective cohort study.

iv Macarthur AJ, Macarthur C, Weeks SK Anesth Analg 1997 Nov;85(5):1066-70 Is epidural anesthesia in labor associated with chronic low back pain? A prospective cohort study.

v Russell R, Dundas R, Reynolds F BMJ 1996 Jun 1;312(7043):1384-8 Long term backache after childbirth: prospective search for causative factors.

vi Russell R, Groves P, Taub N, O'Dowd J, Reynolds F BMJ 1993 May 15;306(6888):1299-303 Assessing long term backache after childbirth.