Breivik ([i])commented that

"A number of well documented cases have been published in which surgery or patient-related pathology were primary causes of "typical" spinal or epidural neurological complications. These emphasize the importance of searching for other risk factors of neurological sequelae after surgery or child birth in cases where there is no obvious deviation from the normal epidural or spinal procedures"

Durbridge and Holdcroft ([ii]) at the Hammersmith Hospital stated that

" prospective studies have not confirmed any causal relationship between epidural analgesia and backache and neurological complications are five times more common after childbirth itself than after regional nerve blockade. Postpartum symptomatology describes significant morbidity in the community but its relationship to analgesia in labour is still to be proved. Equot;

This is an important point: childbirth itself can cause problems, so we would need to establish to what degree this is a significant causative factor in cases of arachnoiditis.

History of complications during labour (e.g. forceps delivery) must be taken into account. However, MacArthur's 1990 study ([iii]) did not find any difference between "normal" and "abnormal" deliveries.

This obviously needs to be investigated further.

The majority of medical literature does appear to suggest that epidural anaesthesia is not a significant cause of chronic back pain in young mothers.

However, one must bear in mind that some studies will not have looked at neurological aspects or will have concentrated on problems within the first year following childbirth and it may be that more long-term studies are needed to establish the incidence of arachnoiditis.

Also, it is vital to remember that ALL medical treatment carries some risk and what must be borne in mind is the BENEFIT:RISK RATIO.

In the case of a healthy mother with a normal labour and a healthy baby, epidural anaesthesia does carry a relatively low benefit: risk ratio: other pain relief can be used successfully with less risk.

On the other hand, in a more complex clinical situation, say pre-eclampsia or other maternal morbidity, epidural anaesthesia may confer less maternal risk than general anaesthesia. Similarly, foetal morbidity risks must be taken into account.

It is important to put the above information into context, but unfortunately, there is insufficient data to allow this, as the true incidence of arachnoiditis remains unknown.(adverse drug reactions are under-reported).

What is probable is that those who have pre-existing spinal problems (whether recognised or not) are likely to have a higher risk of adverse events following epidural or spinal anaesthesia.

In the meantime, until further research is carried out, it would seem advisable to counsel caution with these procedures in patients who have back problems.

Arachnoiditis is a recognised complication of epidural anaesthesia and this should be mentioned as a risk (albeit probably rare) in obtaining informed consent to this invasive procedure.

A final point: those patients who have persistent back pain with or without discernible neurological deficit, following epidural anaesthesia, should be fully investigated to exclude arachnoiditis, which of course, is as yet an incurable and devastating condition.

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- [i] Breivik H *Tidsskr Nor Laegeforen* 1998 Apr 30;118(11):1708-16 [Complications during and after surgery and childbirth where spinal or epidural analgesia is used. Guidelines for safe practice].
- [iii] Durbridge J, Holdcroft A *Baillieres Clin Obstet Gynaecol* 1998 Sep;12(3):485-98 The long-term effects of analgesia in labour.
- [iii] MacArthur C, Lewis M, Knox EG, Crawford JS *BMJ* 1990 Jul 7;301(6742):9-12 Epidural anaesthesia and long term backache after childbirth.