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Editorials

Back pain, pregnancy, and childbirth

Postpartum pain is most likely to be a continuation of antepartum pain

Backache is a common symptom in women of childbearing age. With as many as half of women reporting back pain at some stage during pregnancy,^{1 2 3} it is perhaps not surprising that many of their carers dismiss it as unimportant. But backache in pregnancy is a substantial problem. Many women are helped by understanding the likely cause of the pain and by advice on prevention and management.

There seems to be little difference in the prevalence of backache between pregnant and non-pregnant women.^{3 4} Of Swedish women questioned between the ages of 38 and 64, two thirds reported experiencing back pain at some time, and only a minority said that it had started in pregnancy.^{3 4} However, backache experienced during pregnancy is more severe and disabling and present for a greater proportion of the time.¹ About 10% of women may be prevented by it from working,² and over a third report that it interferes with daily life.³

Though non-specific low back pain (radiating classically to buttocks and thighs) is experienced by both pregnant and non-pregnant women, more severe pain arising from sacroiliac dysfunction is particular to pregnancy. It increases in prevalence with gestation concentrations and is often associated with symphyseal pain.^{2 3} Relaxin, a polypeptide hormone that regulates collagen, softens the ligaments in preparation for parturition. Women with severe pelvic girdle pain in pregnancy have significantly higher serum levels of relaxin than those who are pain free, suggesting that increased joint laxity may be a causative factor.⁵ Other associated factors are a history of backache⁶ (in a sense a self fulfilling prophecy), parity,^{1 3 4} physically strenuous and unrewarding employment,^{2 3} and, paradoxically, younger age.^{3 6}

While ligamentous laxity and extra mechanical stress^{5 7} would seem ample reason for women to experience severe back pain in pregnancy, other causes may be present. Though lumbar discs rarely prolapse de novo during pregnancy, pregnancy may exacerbate a pre-existing condition and seems to be a risk factor for postpartum disc prolapse.¹ Joint laxity may also predispose to spondylolisthesis.

The management of backache is not a glamorous aspect of medicine, yet it has attracted attention recently, not least in the *BMJ*,^{8 9} because of growing evidence that previous strategies such as bedrest, corsets, traction, and physical treatment were valueless. Prevention may be easier than cure for pregnant women and mothers, to whom general advice on back care would seem to be eminently applicable. Take care not to trip, stumble, or move jerkily; bend at the hip and knee rather than stooping forward; avoid twisting the back; do not lift at arm's length; and carry a single load symmetrically in front, on the back, or on the head (would that Western women learnt this art).

If backache occurs, normal activity should be maintained as far as possible. For analgesia, paracetamol is preferred. Specific treatments advocated for sacroiliac joint dysfunction include a trochanteric belt (a form of support for the pelvic girdle) and manipulation,² which produces immediate relief that may not, however, be maintained.

Signs suggestive of nerve root compression—motor, sensory, or reflex changes of root distribution, or, more seriously, sphincter disturbance with sacral anaesthesia suggesting involvement of the cauda equina—merit urgent referral. As conservative management is preferable to surgery during pregnancy, root pain may be managed with transcutaneous electrical nerve stimulation, while opioid analgesics are best avoided.

For many mothers backache resolves in the first few weeks after delivery, but for some it may continue for months, and for a few it first presents postpartum. Immediately after delivery, up to two thirds of mothers may suffer back pain.¹⁰ This is sometimes attributed to epidural analgesia in labour. Regrettably, many investigators have failed to distinguish between localised trauma at the site of insertion, which is not uncommon but usually causes transient pain, and generalised backache or sacroiliac strain, which may be reported by 40% of mothers who do not receive regional analgesia.¹¹ Such symptoms may be a continuation of antepartum back pain or may result from excessive straining during the expulsive phase of labour.

Epidural analgesia for labour has been implicated in the development of chronic backache in two retrospective studies.^{12 13} It was suggested that mothers receiving epidural analgesia adopted positions stressful to the lower back for prolonged periods and this, combined with muscle weakness and immobility, resulted in postnatal back pain.¹² However, when this theory was tested in a prospective study, neither motor block nor the use of epidural analgesia was associated with the development of chronic backache.¹⁴ In both retrospective studies, antenatal backache was reported much less than expected (9% in one¹² and 25% in the other¹³), whereas in the prospective investigation 51% of mothers reported backache during pregnancy.¹⁴ It would seem that, when questioned months or years after delivery, many women forget that they suffered backache before delivery and instead choose to blame the epidural. Further prospective studies have also failed to demonstrate an association between epidural analgesia in labour and new postpartum backache.^{15 16} When backache develops postpartum it is rarely severe and usually related to poor posture.¹³

The most likely cause of postnatal back pain is simply that it is a continuation of antenatal problems,¹⁴ especially since, like antenatal backache, it is more often reported by younger mothers.¹⁵ In the Swedish survey, pain persisted 18 months after delivery in over a third of the women who had backache during pregnancy.¹⁰ Chronic postnatal backache was again associated with an increased frequency of previous backache and heavy monotonous work, and more severe discomfort during pregnancy was associated with a longer postnatal course.

Education is again the first step in effective treatment of chronic postnatal back pain. Mothers should be informed about back care and how best to nurse the new baby and can usually be reassured that, with appropriate care and attention to posture, backache should resolve. Oral analgesics may be required, but,

should symptoms persist and a chronic pain syndrome develop, long term psychological support may be needed.

It is regrettable that not only women but also many medical practitioners happily refer to "backache following epidural" rather than "backache following childbirth." Given this climate of opinion, postnatal back pain has become a focus of attention and a common cause of litigation. Some women with postpartum backache seem to wish to believe that epidural analgesia has done the damage and reject out of hand any evidence to the contrary. For everyone's peace of mind, women must be reassured that in no prospective study has the use of regional analgesia in labour been associated with an increased risk of chronic backache.

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