Pain and epidural use in normal childbirth

Denis Walsh PhD, MA, RM, RGN.
Associate professor of midwifery, University of Nottingham, Nottingham City Hospital, Postgraduate Centre, Hucknall Road, Nottingham NG5 1PB England. Email: denis.walsh@nottingham.ac.uk

This paper is based on the Zepherina Veitch Memorial lecture given at the RCM’s annual event held in Belfast on 18 June 2009.

Abstract

With epidural rates doubling in the UK over the past 20 years, the impact on normal labour and birth is profound. Changes have also occurred in wider birthing milieu, such as the rise of a risk discourse, the diminishing of a 'rites of passage' meaning to birth, the growth of obstetric anaesthetic services and the advent of informed choice in maternity care policy. This paper discusses these issues and argues that inadequate service provision and an impoverished approach to labour pain rather than women’s preferences are contributing to the rise in epidurals. An elective epidural service in relation to low-risk women is challenged and a call made for an urgent debate on how maternity services and ultimately society should respond to these profound changes.

Key words: Epidural, Zepherina Veitch memorial lecture, normal birth, risk, pain, evidence-based midwifery

Introduction

This paper discusses rising epidural rates in low-risk labour in the UK, proffering some reasons for this trend. The side-effects of epidurals are detailed and, from this, the suggestion is made that epidural use is incompatible with normal birth. It then argues that inadequate service provision is the main contributor to the rise. Contrasting pain paradigms are then outlined, based on Leap’s (2000) and later Leap and Anderson’s (2008) seminal research and writing. Their approach of ‘working is pain’ is critically examined to see if it offers a way forward for the current debate around labour pain.

An epidural epidemic?

Epidural rates have doubled in the UK from 17% in 1989 to 33% in 2007/08 (BirthChoiceUK, 2009). Though the reasons for this have never been investigated, it is likely that some of the following play a part in this change:

- Elective epidural provision is now almost universally available in consultant maternity hospitals in the UK. A survey in 2006 found only four out of 196 consultant maternity units did not provide this option (Jones et al, 2008). Obstetric anaesthetists now have their own association and their numbers have grown substantially over the past 20 years (Wee et al, 2002)
- Epidural provision has been available in some UK maternity units for nearly 30 years and hence, crosses two generations of the childbearing women. Anecdotally, midwives say the mothers of the childbearing women now more commonly recommend epidurals to their daughters than they did a generation ago
- Celebrity birth stories and media portrayals of childbirth often include epidurals (Daily Mail, 2004)
- Over recent decades, there has been a loss of ‘rites of passage’ meaning to childbirth, so that pain and stress are viewed negatively (Leap and Anderson, 2008)
- A technorationalist society considers pain either preventable or treatable (Lauritzen and Sachs, 2001)
- The pain relief paradigm is dominant in maternity services (Leap and Anderson, 2008)
- The movement to institutional birth (93% hospital versus 7% home and birth centres) reinforces medical solutions to clinical symptoms, such as pain (Walsh, 2007)
- Fragmented models of care and loss of continuity contributes to greater use of pharmacological agents in labour (Hodnett et al, 2007)
- Informed choice as an ethical imperative influences practitioners’ responses to maternal requests for pain relief in labour (Walsh, 2007)
- The risk discourse predisposes to childbirth intervention including the use of pain-relieving agents (Walsh, 2007).

Several of these factors work in tandem. ‘Technorationalist society’ (Lauritzen and Sachs, 2001) is shorthand for a society that equates all scientific advances with progress. In relation to pain, technology and drugs have either prevented pain from emerging or treated it effectively when it does. It is counter-cultural in such a society to see a purpose to pain, especially physical pain related to biological function, which is how traditional and indigenous societies have probably viewed childbirth over thousands of years (Kitzinger, 2000). Childbirth within indigenous societies studied by Jordan (1993) was viewed as a ‘rite of passage’, an anthropological phrase referring to growth milestones. Rites of passage are associated with movement from one level of maturity and responsibility to another (van Gennep, 1966) – in the context of childbirth from woman to mother. It commonly involves passing through an experience of challenge and uncertainty known as a luminal phase before re-integrating into the new role.

Allied to an antipathy to childbirth pain, is a risk discourse that carries within it several paradoxes. In the West, it has never been safer to have a baby if judged by maternal and perinatal mortality rates (Department of Health, 2007), yet it appears that many women have never been more frightened of the process. The relatively new diagnostic category of ‘tokophobia’ (morbid fear of labour) is testament to that (Hofberg and Brockington, 2000). Another paradox is a high degree of risk aversion, yet a willingness to embrace medical interventions like drugs and surgery that carry risks themselves. Risk aversion appears to operate quite selectively. Mixed messages co-exist like a public health message to avoid any form of drug pre-conceptually and prenatally, but accept an array of drugs during intrapartum care.

Discussion about epidurals is often linked to the broader discussion of medicalisation of childbirth, because epidural typifies the ‘cascade of intervention dynamic’ that contributes to...
Box 1. A story from a midwife typifying the current conflict around pain and labour

The midwife had taken over from her colleague who was looking after a woman having her second baby. The woman had been in the latent phase of labour, but had recently shown signs of her labour accelerating. In the short time it took to hand over, the woman had become very distressed. The midwife rapidly tried to develop a rapport with her and gave some advice about focusing on breathing during the contractions. This was not enough and she began using entonox within a short period. The contractions were long and intense and beginning to get explosive. As the midwife auscultated the fetal heart on the woman’s abdomen, she noted that the auscultation point was tracking down the abdomen to rest over the symphyses pubis. She recognised the familiar manifestation of transition, but by then the woman was shouting loudly ‘to go home’, ‘caesarean now’ and ‘get me an epidural’. Her distress was greater on the bed so the midwife encouraged her to get up, though she was continuously monitored because of meconium-stained liquor. She coped a little better upright or on the floor but still vocalised her distress in no uncertain terms. The midwife was faced with a dilemma. She was sure the second stage of labour was imminent, but the recourse to an epidural would have calmed the woman and made monitoring the fetal heart easier as she would have been semi-recumbent on the bed. After another 15 minutes, the woman was bearing down strongly and birthed a healthy baby boy. Later, both an anaesthetist and another midwife suggested an epidural was wholly appropriate in this situation and a lively discussion ensued.

Evidence Based Midwifery 7(3) 2009: 89-93

and clinical, austere labour rooms would appear to be risk factors in themselves for greater reliance on pain medication.

Research also points out that the best predictor of labour pain is maternal confidence (Leaman et al, 2003) and this opens up two further dimensions to an understanding of labour pain: the significance of relationally-mediated care as a conduit for building confidence and the importance of pre-existing expectations. In addition to the studies of one-to-one care in labour, randomised and non-randomised controlled studies of a specific organisational model called caseload, which guarantees a known carer for labour, consistently shows lower rates of epidural and other birth interventions (Benjamin et al, 2001; North Stafford, 2000). Hodnett (2002) discovered the overlap between pain perception, confidence and how women rate their childbirth experience when she undertook a systematic review of the role of pain in childbirth satisfaction. Her conclusion was that ‘the influences of pain and pain relief... on subsequent satisfaction are neither as obvious, as direct, nor as powerful as the influences of the attitudes and behaviours of the caregivers’ (Hodnett, 2002: 160).

Women reported positive birth experiences when they felt in control, when communication was effective and when power was shared in relation to decision-making (Carlton et al, 2005). Carlton et al (2005) showed that pain relief did not necessarily improve women's childbirth experience and that such a request may indicate a need for emotional support. These findings are backed up by Kannan et al’s (2001) research, where most women requesting an epidural for pain reported being less satisfied with their childbirth experience, despite lower pain intensity.

The importance of prior expectations and beliefs was shown in Heinze and Sleigh’s (2003) study, exploring the differences between women who labour with or without an epidural. The epidural group had a higher fear of childbirth, were less aware of the side-effects, had an external locus of control for childbirth and a desire for passive compliance in the process. The non-epidural group had an internal locus of control and had less fear, and a desire for passive compliance in the process. The non-epidural group had a higher fear of childbirth, were less aware of the side-effects, had an external locus of control for childbirth and a desire for passive compliance in the process.

Table 1. The different approaches of pain relief and the ‘working with pain’ paradigms

<table>
<thead>
<tr>
<th>Pain relief approach</th>
<th>‘Working with pain’ approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language suggestive of pain as a problem</td>
<td>Language suggestive of pain as normative</td>
</tr>
<tr>
<td>Paternalistic – ‘we can protect you from unnecessary stress’</td>
<td>Egalitarian empowerment – ‘we are alongside you’</td>
</tr>
<tr>
<td>Technorationalism age – pain is preventable, treatable</td>
<td>Labour pain – timeless component of ‘rites of passage’ transitions</td>
</tr>
<tr>
<td>Neutral impact of environment</td>
<td>Seminal impact of environment</td>
</tr>
<tr>
<td>Clinical expertise of professional carers</td>
<td>Supportive role of birth companions</td>
</tr>
<tr>
<td>Special session/focus on antenatal education</td>
<td>Woven throughout labour preparation sessions</td>
</tr>
<tr>
<td>‘Menu approach’ to options for coping with pain</td>
<td>Supportive strategies for journey of labour</td>
</tr>
<tr>
<td>Pain as a management issue for assembly-line birth</td>
<td>Pain as one dimension of labour care in one-to-one, small-scale birth settings</td>
</tr>
<tr>
<td>Contributes to trend to less epidural rates</td>
<td>Contributes to trend to less pharmacological analgesia</td>
</tr>
<tr>
<td>Risks of pharmacological agents outweighed by benefits</td>
<td>Cascade of intervention dynamic</td>
</tr>
<tr>
<td>First birth special case for ‘menu approach’</td>
<td>First birth optimal opportunity for working with pain</td>
</tr>
<tr>
<td>Informed choice means all options must be presented</td>
<td>Informed choice within context of birthing plan and philosophy</td>
</tr>
</tbody>
</table>

The transforming power of labour

One of the key questions for maternity care stakeholders is what will happen to the narratives of transformation and growth in childbirth if normal labour pain is effectively removed by rising epidural rates. These are the countless number of personal testimonies that women share about an experience of growth and empowerment through childbirth. The vast majority of these are characterised by drug-free or low intervention labours, though not all (Thompson, 2007). Lundgren and Dahlberg (1998) found that women placed a meaning onto pain that assisted...
them in the transition to motherhood. Women in Callister et al’s (2003) cross-cultural study of pain perception viewed mastering pain as an integral part of a self-actualising experience and, for some, this increased their sense of self-efficacy. The most moving testimonies come from vulnerable women whose lives prior to birth had been blighted by abuse or disempowerment. Phrases like ‘my greatest achievement’ (Esposito, 1999), ‘I can do anything now’ (Spitzer, 1995) and ‘I feel so strong’ (Walsh, 2006) characterise these stories. In addition to these qualitative papers, randomised controlled trials of midwife-led care, where epidural provision is not available, show higher levels of satisfaction with the birth experience (Hatem et al, 2008). All these studies pose a profound challenge to the ‘pain relief’ paradigm.

There is a difficulty in debating the topic because it could imply criticism of women who choose or need intervention. Emerging evidence that normal birth primes the bonding areas of a mother’s brain better than CS birth adds to this perception (Swain et al, 2008). In recognition that CS birth may undermine birth physiology, obstetricians have been researching the so-called ‘natural caesarean’ (immediate skin to skin at birth, delayed cord-cutting) to see if normal physiology can be harnessed in this situation (Smith et al, 2008). The advent of the ‘mobile epidural’ illustrates how obstetric anaesthetists are trying to engage with labour physiology around movement and upright posture to accrue those benefits for women with epidurals.

These attempts to engage with childbirth physiology in the context of medical procedures that undermine it highlights how science struggles to mimic precisely what is natural. The complexities behind oxytocin secretion remind biomedicine that altering one variable (skin to skin in caesarean or bodily movement in epidural), laudable though those initiatives are, will struggle to reproduce the exact conditions for maximising birth physiology (Odent, 2001) – that probably requires a whole system approach (Downe and McCourt, 2008), examining environment, attitudes, beliefs, practices, and relationships, for example.

**Elective epidural service**

In the light of this discussion so far, a rationale certainly exists for questioning the appropriateness of an elective, ‘on-demand’ epidural service for women at low obstetric risk, especially if there is public health commitment to increasing the rate of normal labour and birth in the UK. However, given its embeddedness in maternity service provision, it would be a brave person who would take up such a position. This paper’s intent is to simply encourage debate about these issues.

An anecdote is told of a maternity care professional who used to refer to epidurals as ‘happidurals’. In the context of a fragmented model of care, with little continuity and patchy provision of one-to-one support in labour, in a clinical environment with little resemblance to home, it is understandable that epidurals are a welcome relief. But it is important not to confuse system failure with women’s preference. In fact throughout the UK in different birth settings, women are birthing entirely drug free, even with their first baby. This group can be found in midwifery-led units, birth centres and at home. Although this only represents a small minority of women, surveys suggest many more women would like these options to be available (Redshaw et al, 2007). First birth mothers’ stories of drug-free labours tend to remain hidden in small-scale birth settings because they are seldom told beyond these settings. Their testimonies are important for labour ward midwives, obstetricians and anaesthetists to hear, because they are routinely exposed to the opposite. Case reviews in maternity hospitals tend to be of complications and emergencies only.

**Conclusion**

The evidence is indisputable that epidurals undermine childbirth physiology. That rates are double what they were 20 years ago says more about the context of childbirth and childbirth professionals’ attitudes, than it does about the current generation of women’s ability to adjust to labour pain. In fact, there is considerable anecdotal evidence that women adapt their expectations to the service provision, so the rare consultant unit that does not have an elective epidural service has not seen a fall in bookings (A Musgrave, 2005: personal communication) and, birth centres remain popular with women where available. However, the vast majority of women anticipating a normal labour and birth enter a large maternity hospital where epidural provision is electively available. In this context, the impact on childbirth intervention rates is profound. Addressing this context requires a rethinking of pain paradigms, attention to birth environment, and a move to more relational models of care. Finally, there needs to be a robust debate about whether epidurals really serve the maternity services best by being an elective choice, especially in relation to normal labour and birth.

**References**


References continued