Epidural analgesia during labour: Friend or foe? A reflection on medicine, midwives and Miranda Kerr

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Choosing a method of pain relief for childbirth is an extremely personal, and often well-considered, decision. For many women, childbirth is the most painful experience they will ever encounter. It is no surprise that a number of pharmacological and non-pharmacological methods have been developed to help manage this painful and sometimes traumatic experience. In Western cultures, epidural analgesia (EA), as well as a number of other methods, is widely used, and its benefits (and risks) are well documented. [1-3] Despite the generally positive evidence base, many women choose not to use EA during their labour. [1,4,5] Clearly, there are other factors that influence their choice of pain relief (or lack thereof). Personal attitudes towards the acceptability of labour pain and fear of the process are key, but outside influences can be significant. [1,5,6] Those around her – her doctors and/or midwives, her family and friends – will almost certainly have shaped her attitude. However, public pressure generated by celebrities such as Miranda Kerr may influence a woman's decision more than we realise. In the age of social media, where opinions are abundant and conflicting, women may be more confused than ever: is an epidural a friend or a foe?

There are a number of methods available for managing pain during the labour process. In discussing these options it often becomes a balancing act between what the woman considers to be an acceptable level of pain, with an acceptable level of risk – a highly personal decision that relies on a woman being able to adequately understand the risks and consequences. Options for analgesia may be non-pharmacological, such as massage, breathing exercises and transcutaneous electrical nerve stimulation (TENS), which have limited evidence of efficacy but appear to improve satisfaction with the childbirth experience (compared to placebo). [2,3] Pharmacological choices include:

- Inhalation agents (i.e. nitrous oxide), which relieve pain compared with placebo but are associated with nausea, vomiting and dizziness [2,3]
- Systemic opioids, which are less effective than regional analgesics and frequently cause nausea and sedation [2,7]
- Local anaesthetic nerve blocks, which are especially useful for instrumental delivery and episiotomy (often in conjunction with EA) [8]
- Regional analgesia, including EA, spinal anaesthesia, and combined spinal-epidural anaesthesia (CSE)

EA is widely used for pain relief in labour and involves injection of a local anaesthetic (such as bupivacaine) into the epidural space. [2] It is typically given with an opioid such as fentanyl to limit the amount of local anaesthetic required for efficacy. This also allows the woman greater ability to bear down and push during the second stage of labour. EA effectively relieves pain (compared to opioids or placebo) but does increase the risk of instrumental delivery and caesarean section for fetal distress, and may prolong the second stage of labour by up to two hours. [2,3,9,10] Other potential adverse effects include hypotension, motor blockade, fever and urinary retention (requiring an indwelling urinary catheter). [3,7] Fear of EA side effects has been noted as a key predictor as to whether a woman will elect for EA, with one study suggesting fear of EA side effects decreases EA uptake by half. [1] As EA allows insertion of a catheter, the medication can be given by bolus injection, continuous infusion or via a patient-controlled pump. This is in contrast to spinal anaesthesia (injection of

local anaesthetic into the subarachnoid space), which, while faster and safer, does not allow insertion of a catheter for continuing analgesia. [2,10] In many centres, a combined spinal and epidural anaesthetic (CSE) is given, where a single injection of local anaesthetic is inserted into the subarachnoid space (for fast onset of pain relief) in addition to insertion of an epidural catheter for ongoing pain management. [10]

Women have widely differing views on what level of pain should be expected when giving birth. Evidence suggests that women who are more fearful of labour pain have a higher likelihood of choosing elective caesarean, and if they do choose labour, a higher chance of having an epidural. [1,6] In contrast, women who are more accepting of labour pain, and more confident in their ability to cope with it, are generally more likely to decide against EA. [1,6,11] Other personal factors that increase the likelihood of a woman choosing EA include having a previous EA, partner preference, and attending a childbirth class. [4,11] In addition, the attitudes and experiences of family and friends can influence a woman's decision. It has been shown that women with friends or family who have had positive experiences with EA are more likely to choose EA themselves. [1] Likewise, hearing stories about how excruciatingly painful childbirth is may increase anxiety about the pain and increase EA uptake for primiparous women. [1]

Looking beyond a woman's immediate circle of family and friends reveals another potential influence – celebrities and the media. There appears to be a widespread opinion (particularly amongst celebrities) that birth should be "natural", which presumably refers to a lack of intervention. [12] Just as organic, gluten-free, paleo, and #cleaneating have taken off, a similar trend appears to be on the rise in childbirth. Perhaps next we will see the emergence of "organic" labour wards. Miranda Kerr had the media buzzing following her comments about having "a natural birth without pain relief" and not wanting a "drugged-up baby." [13,14] Whilst it was absolutely her choice to give birth "naturally" and opt out of pain medication, her celebrity status mean that her personal experiences and opinions are likely to influence the behaviours and attitudes of women all over Australia (and potentially the world). By going out of her way to state in her official announcement of the birth of her son: "I gave birth to him naturally; without any pain medication" it infers that those who decide otherwise are making the 'wrong' decision. [13,14] Sweeping declarations like this have the potential to be damaging to women who did elect to use EA or needed a caesarean section. It may be that public assertions about their choices, made by Miranda Kerr and other

celebrities such as Teresa Palmar and Gisele Bündchen, have turned EA into the enemy. [12] Such statements generate significant media interest and controversy, and have led to the emergence of the term "the smug natural birth" as well as suggestions that giving birth has become "a competitive sport."[12]

But it's not just celebrities and models that have a problem with epidurals. There is a difference of opinion between midwives and obstetricians as to how often epidural analgesia should be used. [15] An article published in Midwifery Today in 2010 referred to epidurals as "the drug trip of the current generation", and even compared anaesthetists to "street drug pushers." [16] Whilst clearly this does not represent the views of all midwives, it is concerning that a prominent publication can present these opinions as if they were fact. This article also advised it's audience of birth practitioners to remember that "a woman who can sit still long enough to have an epidural inserted during labor can have a relatively painless, unmedicated birth if she were provided adequate birth support in the home setting."[16] This misinformation is dangerous given the fact that RANZCOG does not support the practice of planned homebirths due to its inherent and proven risks. [17] The reluctance of some midwives to offer EA has been well documented elsewhere. [15,18,19]

Furthermore, a number of Australian studies have found that the rate of epidural analgesia uptake is much higher in private hospital patients versus those seen in the public system. [20,21] A New South Wales study from 2012 reported a 40% larger uptake of EA in private hospitals compared with public, as well as an overall increase in interventions. [20] This is similar to previous Australian data reporting a 50% increase in uptake of EA in private versus public care. [21] It is clear that many women are not in a position to choose whether they receive public or private care, but nonetheless it is apparent that where one gives birth has an impact on whether an EA will be performed or not. This raises issues of appropriate health care expenditure and a potential two-tier system in Australia that deserves adequate discussion and reflection in its own right. [20]

Ultimately, women should feel free to choose whatever pain relief they believe will help them most during labour, or to opt for none at all. Furthermore, whilst this reflection has focused primarily on women determining a birth plan in the antenatal period, women who choose non-pharmacological methods during that period should also feel free to progress to a pharmacological method during labour if they are not coping with the pain. It is important that women are informed and feel empowered to make these decisions, and this involves adequate discussion of the benefits and potential adverse effects of all their options. As the doctor – whether we are the obstetrician, the anaesthetist, the GP or perhaps even the resident, it is our job to ensure the patient fully understands that discussion. However, in order to communicate benefits and risks effectively we need an understanding of what influences a woman's choice when it comes to pain medication, even more so when attempting to navigate the controversial minefield that is childbirth. Evidence-based medicine is brilliant, but sometimes we live in an evidence bubble – so influenced by statistics that we might forget to look outside at how the opinions and actions of others can also shape our patients' decisions. To our patients, percentages may mean nothing in the face of Miranda Kerr and organic kale smoothies. A thorough discussion of a woman's fears and attitudes towards the birthing process is undoubtedly a crucial component of comprehensive antenatal care.

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Conflict of interest

None declared.

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