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Intrapartum care for women with pelvic girdle pain: a midwifery perspective

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Abstract

Pelvic girdle pain (PGP) affects up to 20% of the birthing population. Sufferers report pain of varying severity and frequency in and around the pelvic joints, in the hips and groin, and in the lumbar or thoracic spine. This pain is associated with activities of daily living. Pelvic girdle pain is understood to be caused mainly by mechanical dysfunction, i.e. asymmetry in any or all pelvic joints, or the lumbar spine, with muscle tightness in or around the pelvic joints possibly causing additional effects. Relaxin levels also play a role, but a much smaller one than was previously thought. This paper discusses intrapartum care for women with PGP from a midwifery perspective. Sufferers need particular specific, but easily organized, interventions to assist them in experiencing optimum health during the childbearing year. Chief among these are: community-based self-referral physiotherapy services; better-informed and aware midwives, general practitioners and other healthcare professionals; and coordination and careful communication between all healthcare providers. Perhaps the most obvious, but least frequently achieved, intervention of value would be a named midwife for each woman in order to provide caseload midwifery, and thus, follow the woman through her whole pregnancy, birth and post-birth recovery with her baby.

Keywords: intrapartum care, midwifery, pelvic girdle pain, women's health.

Introduction

Pelvic girdle pain (PGP) affects up to 20% of the birthing population (Albert *et al.* 1997, 2000; Larsen *et al.* 1999). Although this makes PGP a common condition for women, it is certainly not a normal one. Sufferers report pain of varying severity and frequency in and around the pelvic joints (i.e. the symphysis pubis and sacroiliac joints), in the hips and groin, and in the lumbar or thoracic spine. This pain is associated with the activities of daily living, making simple things like a good night's sleep impossible for many women.

Early theories about what was then called symphysis pubis dysfunction (SPD) proposed that this form of pain was caused by the rising levels of the hormone relaxin circulating in the pregnant woman. These relaxin levels were thought to make her pelvic joints more mobile,

and hence, generate pain on movement. Reduced movement and a stoic attitude were advised, and women rarely received the appropriate referrals for full physiotherapy assessment and access to manual therapy that might have mitigated or resolved their pain. These ideas have now been largely discredited because the early studies of SPD were done on blood samples taken from pigs rather than human beings. While there are physiological similarities, the physical loads on and orientations of the gravid uteri of human females and sows are very different. The ideas were further discredited when no correlation was observed between the rise, peak, fall and levelling off of human relaxin levels, and the time of onset and rise in symptoms (Fig. 1) reported by pregnant woman (Peterson *et al.* 1994; Hansen *et al.* 1996; Albert *et al.* 1997; Björklund *et al.* 2000).

Pelvic girdle pain is now understood to be caused mainly by mechanical dysfunction, i.e. asymmetry in any or all pelvic joints, or the

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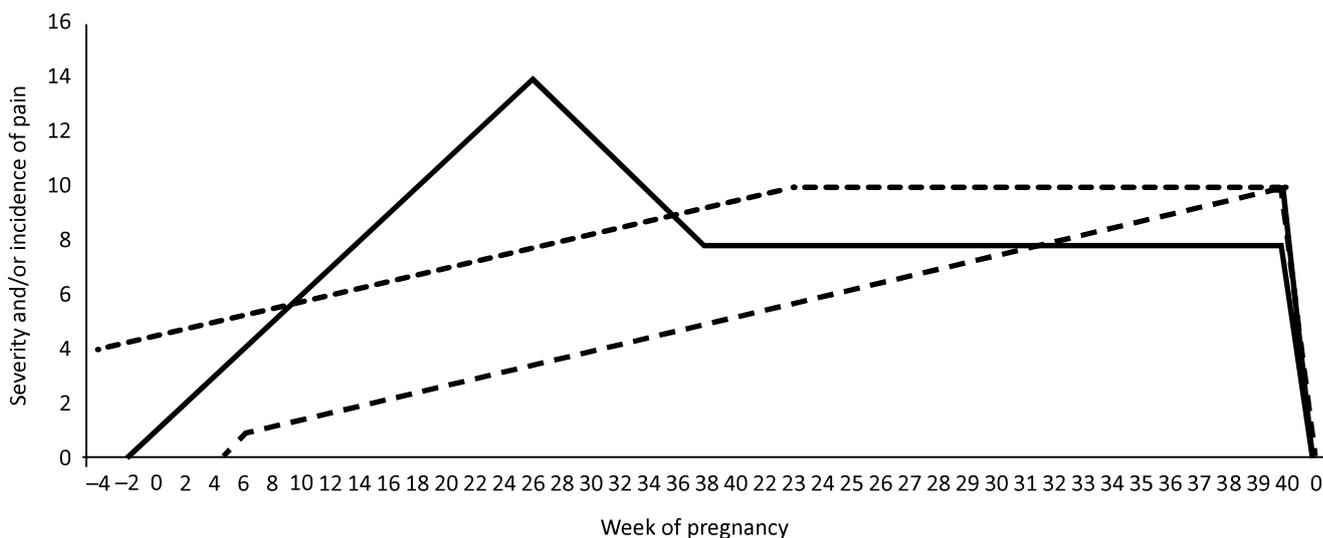


Figure 1. Relaxin levels and the correlation with the incidence and severity of pelvic girdle pain (PGP): (—) relaxin levels; (-----) incidence and severity of PHP; and (.....) pattern of pre-existing PGP.

lumbar spine, with muscle tightness in or around the pelvic joints possibly causing additional effects. Relaxin levels also play a role, but a much smaller one than was previously thought (Hansen *et al.* 1996; Albert *et al.* 1997).

Women with PGP find that this condition affects every aspect of their lives. Chronic and sometimes severe pain is physically exhausting, and in combination with the inability to sleep comfortably, this is emotionally draining. If the condition is not acknowledged or recognized, and therefore, no treatment programmes are commenced to mitigate or resolve the condition, the likely consequences are: more complex births; slower and more difficult maternal recoveries; and more antenatal and postnatal depression. Pelvic girdle pain can also have an effect on a woman's personal, social and financial situations. Guilt, anger or fear about being unable to undertake her normal roles of mother, lover and partner are common, as is social isolation since the increasing pain makes normal mobility in and outside the home less and less feasible. For some women, the pain becomes so severe and disabling that they are essentially housebound, and neither able to continue paid work nor attend hospital-based physiotherapy sessions because all modes of transport have become too painful to access. Thus, their self-determination is reduced yet again.

Intrapartum care for women with pelvic girdle pain

As an independent midwife, the present author offers continuity of midwifery care to the women who book her to provide it. This means that she

supports these individuals throughout their pregnancies, attends the births of their babies, and continues to observe and support the postnatal recovery of the mother and ensure the baby's well-being. Because the author is self-employed, she can choose her own working times. Antenatal appointments are conducted in the woman's own home and rarely take less than an hour. This means that there is plenty of time to explore various aspects of care and also permits a good deal of information exchange, allowing the woman to make decisions, informed by evidence, that suit her personal circumstances. A professional friendship develops between the woman and her midwife, which leads to a positive and productive emotional engagement, and engenders mutual trust, in line with recent guidance from the National Institute for Health and Clinical Excellence (NICE 2012), which has now been renamed the National Institute for Health and Care Excellence.

This personal experience is in sharp contrast with that of her colleagues in the National Health Service (NHS), who rarely see the same woman throughout her pregnancy despite recent NICE guidance that all women should experience continuity of care from a known midwife during pregnancy (NICE 2012). Antenatal appointments in busy NHS clinics may last for as little as 10 or 15 min. Such timescales make any discussion of, let alone a full debate about, evidence or birth preferences impractical, which is frustrating for both the mother and the midwife. Such fragmented care simply cannot meet the needs of a woman living with PGP. These individuals need: acknowledgement and recogni-

tion of their pain and the potential consequences of the condition; prompt referral for full physiotherapy assessment and follow-up treatments as needed; additional support from friends and family; and adequate analgesia from their general practitioners (GPs).

Physiotherapy services such as those recently instituted in the Norfolk and Norwich University Hospitals NHS Foundation Trust (Gill & Jones 2011) need to be commissioned across the country. This scheme combined widespread education for midwives and GPs about appropriate and prompt referrals, including self-referrals, of PGP sufferers, physiotherapy services that were accessible to women, and service user feedback. Prompt and effective treatment of women with PGP led to fewer expensive complex births (e.g. forceps and ventouse deliveries, and Caesarean sections), and also a reduction in perinatal mental illness, thus creating both long-term health benefits for the birthing population as well as cost savings for the commissioning body.

Discussions with a woman about where and how she hopes to give birth are part of the role of the midwife during pregnancy. For women with PGP, the time constraints on NHS midwives mean that this aspect of care may be glossed over or passed on to obstetric colleagues. In the latter case, an offer of elective Caesarean section, with all its attendant pathological sequelae for both mother and baby, may be made. As an independent midwife, the present author aims to discuss the risks and benefits of both home and hospital births with her clients during unhurried home antenatal appointments. This discussion will range over topics such as: maintaining upright mobile postures in the familiar surroundings and comfort of home, or a less-familiar birth centre or delivery suite; the importance of knowing and working with a woman's pain-free gap; minimizing leg abduction during labour, birth and afterwards; and the role of the midwife as an advocate seeking to remind all involved in intrapartum care of the physical limitations and pain levels experienced by the woman with PGP. Unlike her NHS colleagues, the independent midwife is able to be with her client throughout the pregnancy, birth and recovery period. This helps women to request and obtain the emotional and physical assistance, as well as the mobility aids that they need to minimize their pain and expedite their recovery.

At present, early or pre-labour midwifery care can be rudimentary within the NHS. When

women contact their healthcare providers in the early stages of labour, some form of telephone triage is often offered (Reed 2012). Where this is undertaken systematically, it has proved to be successful in giving some women the confidence to remain at home until labour becomes further established, and thus, frees up overstretched midwives who are aiming to offer one-to-one care to women in established labour (Weavers & Nash 2012). Discouragement from attending their planned place of birth may be less helpful for women with PGP, many of whom will also have higher than normal levels of anxiety as a result of the effects of their condition on their physical, mental and emotional health. A face-to-face meeting with a midwife, ideally in the woman's home or at the planned place of birth is sensible because it offers both the woman and the midwife the chance to revisit and review their plans and hopes for the birth, and to facilitate these as appropriate.

In an ideal world, all women would be cared for by a midwife whom they knew and trusted during early and established labour. This would mean that the routine observations of the mother's and baby's well-being would have been discussed and considered prior to the birth itself. During labour, midwifery care includes clinical assessments such as blood pressure, maternal pulse and temperature, as well as regular auscultation of the foetal heart rate, but also more subtle aspects of the birth such as the frequency, length and intensity of uterine contractions. Many midwives who attend primarily normal births (including home births) also assess progress and well-being in labour by less-quantifiable factors such as: maternal behaviour (her engagement with the outside world or lack of it, sometimes called "the birth trance"); the amount of speech used (which grows less as labour progresses); birth noises and vocalizations; the movements and postures adopted; and where the sensations of birth are felt and what a woman spontaneously says about these.

All of these subtle assessments can offer information that may enable experienced practitioners to dispense with, or defer, the vaginal examination as the sole marker of progress. Useful though these are, in fragmented care, where staff shift changes mean that a woman in labour may see several midwives during the course of her baby's birth, such examinations may cause unnecessary pain for the PGP sufferer. Midwives usually undertake vaginal examinations to "diagnose" established labour,



Figure 2. The BirthRite Birthing Seat, which gives a midwife the access that she needs while the mother only has to sit with her legs abducted to a limited degree (image © BirthRite, reproduced with permission).

monitor progress during labour (at least every 4 h), ensure full dilatation, and monitor progress during the second or birth stage of labour. In order to undertake a full and careful vaginal examination, most midwives need a woman to be semi-supine with her legs abducted. Adopting, let alone maintaining, this position can be very painful to a woman with PGP and possibly compound existing pelvic dysfunction. Some midwives will feel competent and confident to defer these examinations. Others may wish to proceed, but ask the women to adopt a side-lying posture or use aids such as a BirthRite Birthing Seat (Fig. 2) (BirthRite, Ebersdorf, Germany), which gives the midwife the access she needs with the mother sitting with her legs abducted to only a limited degree.

An upright posture and mobility are known to shorten labour, facilitate progress, and are associated with less use of pharmacological analgesia (MacLennan *et al.* 1994; Lawrence *et al.* 2009). For women with PGP who wish to facilitate normal birth, this poses some difficulties, especially in an unfamiliar hospital environment. Mobility aids such as birthing balls and BirthRite Birthing Seats (Fig. 3) can play a useful role.

Even simple ideas like raising the hospital bed up high so that the women can lean forward with her weight held more by her upper body can be

valuable. She may also value times resting on her side with her upper leg supported within the limitations of her pain-free gap.

The use of water pools, such as the Birth Pool in a Box (The Good Birth Company Ltd, Birmingham, UK; see Fig. 4), for pain relief during labour and even for birth can have many advantages for a woman with PGP. The relative weightlessness that she experiences means that maintaining upright postures and changing posi-



Figure 3. Another view of the BirthRite Birthing Seat (image © BirthRite, reproduced with permission).



Figure 4. The Birth Pool in a Box (image © The Good Birth Company, reproduced with permission).

tions is very simple, and can often be done by using only the upper body muscles. The pain relief that water immersion offers may also facilitate relaxation and, hence, progress during birth. Finding comfortable positions to rest in between contractions is also easy and simple.

Many women (whether they have PGP or not) value the sense of privacy and control that water pools offer them, allowing them to sink deeper and more easily into their birth trance. The hormones released facilitate and expedite birth, and are an essential part of normal birth physiology (Buckley 2009).

A common concern of mothers and midwives is how women are to enter and exit the water pool safely and, if necessary, swiftly. This is simply expedited if a stool of the same height as the side of the pool is placed close to its edge. If the stool and pool can be close to secure surfaces that the woman can use to lift her upper body, so much the better. Ideally, the stool should have a swivelling head, or if not, it can be topped with a carrier bag or other mobility aid to facilitate the mother turning herself.

The mother sits on the stool with her legs together. Bracing herself against nearby solid surfaces, and perhaps with someone standing behind her to help her feel secure, she swivels her body around through 90°, while the birth partner or midwife slowly and carefully lifts her legs, held together, over the side of the pool and places them in the water pool at the same time as she moves, keeping her legs and body in a pain-free line. The mother lifts herself with her upper body to a sitting position on the side of the pool and then is assisted, if necessary, to stand in the pool. She can then sink into the delightfully warm water in any position she

wishes. Most women exclaim in delight and relief at this point.

This process is reversed in order to exit the pool. If necessary and consented to by the woman, vaginal examinations can be done with her floating on or near the surface of the water, with her birth partner supporting her by holding her upper body from behind. The present author believes that the use of hoists to remove women with PGP from water pools in an emergency would dangerously delay the process and potentially cause very considerable harm by making the women's PGP much worse.

Although widely used, both intramuscular injections of opiates and the use of epidural analgesia have some negative impacts on maternal and foetal well-being, and this is even more so when women have PGP. While their pain may be effectively reduced or eliminated, this in itself can be a problem. Without awareness of the effects of various movements, such as changing positions or leg abduction, the woman with PGP may complicate or worsen her existing biomechanical dysfunction, thus making an already bad situation even worse after the birth. The midwife needs to be especially vigilant in these circumstances to ensure that she knows the woman's pain-free gap and range of movements. It is also essential that any other members of the healthcare team are reminded of these limitations during any and all interactions with the birthing mother. Shift changes or births becoming more complex are key times when this vital information can be forgotten or not be prioritized. In caseload midwifery, such as independent midwifery practice, this is much easier to remember and prioritize because the mother–midwife bond is based on a deeper connection and mutual understanding, and the same midwife will be offering postnatal care to the women. This means that such midwives will also be considering how current events may impact on her client's future pelvic health or dysfunction.

For the birth itself, any position that the mother can tolerate and the midwife feels is effective will serve (RCMCNB 2012). Women with PGP often find that they can push well and give birth kneeling forward but fairly upright. The need for leg abduction is minimized in this posture. Side-lying, or the use of a water pool or BirthRite Seat may also be possible. The avoidance of positions that involve extended periods of leg abduction is essential.

In cases in which this is unavoidable, such as forceps or ventouse deliveries, the midwife will

want to ensure that the amount of time that the woman spends with her legs in stirrups is minimized, and that all members of the team involved are aware and respectful of her condition. Many midwives are willing and able to suture small perineal tears without the use of stirrups, but a careful and thorough examination of the full extent of any damage is vital before this plan can be made in order to avoid failing to diagnose third-degree tears.

Complex births, such as those involving forceps or ventouse deliveries, shoulder dystocia, with the woman being pushed in McRoberts' position, or Caesarean sections will mean that the mother comes into contact with many other healthcare providers and their assistants. As the only form of continuity in this situation, it falls to the midwife to ensure that everyone in the team remembers to move the anaesthetized woman's legs carefully and that abduction is minimized. Most operating theatre teams are wonderfully proficient at this. The new mother with PGP may have more difficulty when she reaches the less well staffed postnatal wards. The midwife handing over care needs to ensure that the information about the woman's PGP is part of the transfer, and that referral to physiotherapists and occupational therapists is initiated. These actions will ensure that the mother has both the information and the resources she needs to move safely and mobilize without doing any further damage to herself either in hospital or at home. Once again, caseload or independent midwifery means that these plans should already be in place.

Ideally, the hours after birth should be spent with the mother in close physical contact with her new baby. Both the mother and father should enjoy this closeness while they greet the new member of their family. Uninterrupted quiet time immediately after birth, without the urgency to conduct clinical routines (e.g. examining, weighing and labelling the baby, and the administration of routine prophylactic medications), is more likely to facilitate the initiation of breastfeeding (Colson 2010) and less likely to be associated with postpartum haemorrhages (Fahy *et al.* 2010). This golden hour or two can be the start of a relaxed and happy "babymoon" and maternal recovery.

Conclusions

Women with PGP need particular specific, but easily organized, interventions to assist them in

experiencing optimum health during the child-bearing year. Chief among these are: community-based self-referral physiotherapy services; better-informed and alert midwives, GPs and other healthcare professionals; and coordination and careful communication between all healthcare providers. Perhaps the most obvious, but least frequently achieved, intervention of value would be a named midwife for each woman in order to provide caseload midwifery, and thus, follow the women through her whole pregnancy, birth and post-birth recovery with her baby.

References

- Albert H., Godskesen M., Westergaard J. G., Chard T. & Gunn L. (1997) Circulating levels of relaxin are normal in pregnant women with pelvic pain. *European Journal of Obstetrics & Gynecology and Reproductive Biology* **74** (1), 19–22.
- Albert H. Godskesen M. & Westergaard J. (2000) Evaluation of clinical tests used in classification procedures in pregnancy-related pelvic joint pain. *European Spine Journal* **9** (2), 161–166.
- Björklund K., Bergström S., Nordström M.-L. & Ulmsten U. (2000) Symphyseal distension in relation to serum relaxin levels and pelvic pain in pregnancy. *Acta Obstetrica et Gynecologica Scandinavica* **79** (4), 269–275.
- Buckley S. J. (2009) *Gentle Birth, Gentle Mothering: A Doctor's Guide to Natural Childbirth and Gentle Early Parenting Choices*. Celestial Arts, Berkeley, CA.
- Colson S. (2010) *An Introduction to Biological Nurturing: New Angles on Breastfeeding*. Hale Publishing, Amarillo, TX.
- Fahy K., Hastie C., Bisits A., *et al.* (2010) Holistic physiological care compared with active management of the third stage of labour for women at low risk of postpartum haemorrhage: a cohort study. *Women and Birth* **23** (4), 146–152.
- Gill C. & Jones C. (2011) Changes in Norwich: cost-effectiveness in providing an effective and woman-centred physiotherapy service. Paper presented at the Pelvic Partnership Conference for Healthcare Professionals 2011: The Latest Solutions for Treating PGP, Didcot, Oxfordshire, 21 May 2011.
- Hansen A., Jensen D. V., Larsen E., Wilken-Jensen C. & Peterson L. K. (1996) Relaxin is not related to symptom-giving pelvic girdle relaxation in pregnant women. *Acta Obstetrica et Gynecologica Scandinavica* **75** (3), 245–249.
- Ho S. S. M., Yu W. W. M., Lao T. T., *et al.* (2009) Effectiveness of maternity support belts in reducing low back pain during pregnancy: a review. *Journal of Clinical Nursing* **18** (11), 1523–1532.
- Larsen E. C., Wilken-Jensen C., Hansen A., *et al.* (1999) Symptom-giving pelvic girdle relaxation in pregnancy, I: Prevalence and risk factors. *Acta Obstetrica et Gynecologica Scandinavica* **78** (2), 105–110.
- Lawrence A., Lewis L., Hofmeyr G. J., Dowswell T. & Styles C. (2009) Maternal positions and mobility during first stage labour. *Cochrane Database of Systematic Reviews*, Issue 2. Art. No. CD003934. DOI: 10.1002/14651858.CD003934.pub2.

- MacLennan A. H., Crowther C. & Derham R. (1994) Does the option to ambulate during spontaneous labour confer any advantage or disadvantage? *Journal of Maternal and Fetal Medicine* **3** (1), 43–48.
- National Institute for Health and Clinical Excellence (NICE) (2012) *Information for People Who Use NHS Antenatal Care Services*. [WWW document.] URL <http://www.nice.org.uk/nicemedia/live/13898/60825/60825.pdf>
- Östgaard H. C., Zetherström G., Roos-Hansson E. & Svanberg B. (1994) Reduction of back and posterior pelvic pain in pregnancy. *Spine* **19** (8), 894–900.
- Peterson L. K., Hvidman L. & Uldbjerg N. (1994) Normal serum relaxin in women with disabling pelvic pain during pregnancy. *Gynecologic and Obstetric Investigation* **38** (1), 21–23.
- Reed R. (2012) *Early Labour and Mixed Messages*. [WWW document.] URL <http://midwifethinking.com/2012/09/22/early-labour-and-mixed-messages/>
- Röst C. C. M. (2008) *Relieving Pelvic Pain During and After Pregnancy: How Women Can Heal Chronic Pelvic Instability*. Hunter House, Alameda, CA.
- Royal College of Midwives Campaign for Normal Birth (RCMCNB) (2012) *Positions for Labour and Birth Video Clips*. [WWW document.] URL <http://www.rcmnormalbirth.org.uk/practice/positions-in-labour-and-birth/>
- Weavers A. & Nash K. (2012) Setting up a triage telephone line for women in early labour. *British Journal of Midwifery* **20** (5), 333–338.

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