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Clinical profile of persistent genito-pelvic postpartum pain

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ABSTRACT

Objective:* the primary aim was to describe the pain characteristics of persistent genito-pelvic postpartum pain (PPP) and compare these characteristics by mode of delivery. The secondary aim was to incorporate psychosocial variables into the conceptualization of PPP by exploring the relationship among postpartum depressive symptoms, fatigue, and PPP.
Design: cross-sectional study design.
Setting: online survey.
Participants: 106 women recruited from the community who gave birth within twelve months prior to completing the survey.
Measurements and findings: questionnaire regarding sociodemographic information, pregnancy and childbirth variables, depressive symptoms (Edinburgh Postnatal Depression Scale), and fatigue (Fatigue Symptom Checklist). Women who were ≥3 months postpartum and indicated they were still experiencing any genito-pelvic pain from childbirth were provided questions about their current pain experience. Twenty-seven (25.5%) women were between 3–12 months postpartum and currently experiencing PPP. The intensity of pain was mild, and had multiple locations and triggers. Compared to women whose acute pain resolved after childbirth, women with PPP were more likely to have had a Caesarean section (15.2% versus 33.3%). Other birth-related (i.e., epidural/spinal anesthesia use during vaginal birth) and psychosocial variables (income) also differentiated women with PPP from women whose gentio-pelvic pain resolved. Postpartum fatigue independently predicted PPP (Odds ratio = 4.7), while postpartum depressive symptoms did not.
Key conclusions: PPP was quite prevalent in this sample, and while the intensity of pain was on average, mild, the pain was widespread in terms of location and triggers. Multiple biopsychosocial factors differentiated women with persistent postpartum pain from those women whose pain resolved.
Implications for practice: PPP is a common health concern for new mothers in the first year postpartum, and may be best addressed by health care professionals using a multidimensional approach, which focuses on the psychosocial aspects of pain.

Introduction

Acute postpartum pain in the genito-pelvic region is a common problem following childbirth, whether delivery was via vaginal birth (VB) or Caesarean section (CS) (Vermelis et al., 2010). Indeed, the rates of acute genito-pelvic postpartum pain may be as high as 85% one day after CS (Eisenach et al., 2008) and 92% one day after VB (Macarthur and Macarthur, 2004). Regardless of mode of delivery, this pain usually resolves within the first two to three months postpartum as the acute injury from childbirth heals (Declercq et al., 2008). However, for some new mothers, the acute genito-pelvic pain from childbirth can persist beyond this time frame.

The estimated rates of persistent postpartum genito-pelvic pain (PPP) after both CS and VB range from 4% to 27% at three months postpartum (Glowacka et al., 2014; Hannah et al., 2002; Kennedy et al., 2009; Leeman et al., 2009) and from 1% to 33% (Eisenach et al., 2013; Kainu et al., 2010, 2016; Paterson et al., 2009; Williams et al., 2007) at one year postpartum. While the majority of studies have not found a difference in the reported rates of PPP as a function of mode of delivery (e.g., Blomquist et al., 2014; Eisenach et al., 2008, 2013; Glowacka et al., 2014; Paterson et al., 2009), others have found that PPP is more common after CS after one year postpartum (Declercq et al., 2008; Kainu et al., 2010, 2016), while a more recent study found that having a VB confers more of a risk of PPP than CS at two years postpartum (Bijl et al., 2016). However, these estimates do not always consider the onset of the genito-pelvic pain (i.e., the pain may have predated pregnancy or childbirth), which may result in inflated estimates of pain and obscure the clinical profile of PPP (Rosen and Pukall, 2016).

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Indeed, in order to address genito-pelvic pain that persists after childbirth, it is important to isolate those women whose pain developed as a result of childbirth.

Considering that well over 100 million births occurred worldwide in 2016 (Population Reference Bureau, 2016), a seemingly small percentage of women with PPP results in a meaningful proportion of the population. By these estimates, at least one million women around the world may be suffering from PPP at or beyond one year postpartum. Although PPP is common, a recent review of the literature suggested that prior studies on the topic are limited by the lack of a comprehensive evaluation of the PPP pain profile, as well as the integration of psychosocial factors to the often-used biomedical model in explaining the transition from acute postpartum pain to persistent pain (Rosen and Pukall, 2016).

Pain profile

Pain is a subjective experience; it is a complex phenomenon that is difficult to describe and assess (Turk and Melzack, 2011). Integral to a comprehensive pain assessment is an evaluation of its characteristics (i.e., intensity, duration, location, quality, onset) and impact. Understanding the nature of the pain itself is an important first step in not only the study, but also the management, of pain. Although certain aspects of pain have been investigated in the postpartum, the overall research literature is sparse in terms of a comprehensive evaluation of the pain profile of PPP (Rosen and Pukall, 2016), especially in terms of factors that impact it.

Women with PPP, regardless of mode of delivery, tend to rate their pain intensity between mild to moderate (e.g., Eisenach et al., 2013; Ortner et al., 2014; Paterson et al., 2009); while the pain may not be perceived as severe, it appears to interfere with a number of daily activities, including standing and sitting (Eisenach et al., 2013). Outside of daily activities, Paterson et al. (2009) found that, for their small sample of women experiencing postpartum-onset genito-pelvic pain at one year postpartum (n = 10), activities involving contact with the genital region also provoked pain (e.g., sexual activities, gynecological examinations). In terms of PPP location, many studies are plagued by the erroneous assumption that the pain is located at the site of injury (i.e., the perineum in women who had a VB and the abdominal incision scar in women with a CS); as a result, other possibly painful areas are not queried (e.g., Declercq et al., 2008; Nikolajsen et al., 2004). Paterson et al. (2009) provided their participants with an anatomical diagram of the genito-pelvic area and found that, of the women with PPP (after both CS and VB) in their sample, *none* reported pain at the perineum. The authors suggested that the rates of perineal pain reported in other studies might actually reflect pain in other areas of the vulva (Paterson et al., 2009). Furthermore, other researchers have found that women who had a planned CS can report pain in areas aside from the site of incision, such as in the genital region (Hannah et al., 2002). Finally, few studies have investigated the quality of pain. Paterson et al. (2009) combined women who had PPP after CS and after VB and found that the quality of pain was most commonly described as “burning”. However, in a study of PPP after CS at one year postpartum, the pain was most commonly described as “tender”, “numbness”, and “itching” (Ortner et al., 2014). Indeed, it is quite likely that there are a number of differences in the persistent pain profiles of women who had a VB and women who had a CS; however, no study to date has compared pain characteristics as they relate to mode of delivery.

Shifting to a biopsychosocial approach to PPP

The research to date has largely used a biomedical approach to study the role of birth-related physical factors in the persistence of pain after childbirth. While these birth-related factors, such as severity of genital tearing and certain surgical techniques for CS, are well-established predictors of acute postpartum pain (e.g., Andrews et al., 2008; Vermelis et al., 2010), it is less clear whether these factors are important in the maintenance of pain. In fact, birth-related physical factors do not consistently predict who will continue to experience genito-pelvic pain after childbirth (e.g., Declercq et al., 2008; Eisenach et al., 2013; Paterson et al., 2009). Thus, if the biomedical model cannot fully capture the experiences of women with PPP, a broader conceptualization is warranted.

Indeed, there is consensus in the persistent pain literature that considering the role of psychosocial factors is key in effective conceptualization, assessment, and treatment of pain (Gatchel et al., 2007). Acknowledging the role of psychosocial factors in the conceptualization of PPP is especially important considering that the postpartum period is a high-risk period for significant physical, relational, and mental health concerns (Brown and Lumley, 1998). Experiencing persistent pain in addition to these common psychosocial struggles can exacerbate a potentially difficult transition to parenthood. The current study sought to determine how fatigue and depression, two factors that are prevalent during the postpartum period and implicated in other pain conditions, are related to PPP.

Postpartum depression

In both research and clinical settings, the rate of depression among individuals with chronic pain is high (Banks and Kerns, 1996). There has been recent attention to the relationship between postpartum depression and pain, and there is converging evidence to suggest that women with persistent postpartum pain (not specifically limited to the genito-pelvic region) are more likely to experience postpartum depressive symptoms (Bijl et al., 2016; Eisenach et al., 2008; Gaudet et al., 2013). In addition, recent evidence from a population-based study found that women who screened positive for depression had a 53% higher prevalence of having vulvodynia (a form of chronic genito-pelvic pain) (Iglesias-Rios et al., 2015). Thus, it is plausible that women experiencing PPP are at an increased risk of experiencing postpartum depressive symptoms.

Postpartum fatigue

Fatigue in the immediate postpartum is extremely common (Milligan et al., 1996) and for many women, the negative effects of postpartum fatigue linger (Gjerdingen et al., 1993). Not only is fatigue a common experience in the postpartum, but sleep disturbances and chronic fatigue are common symptoms reported by chronic pain patients (Menefee et al., 2000), including women with genito-pelvic pain (Arnold et al., 2007; Ponte et al., 2009). In terms of postpartum fatigue, one recent study found that experiencing fatigue after childbirth increased the odds of painful intercourse at 18 months postpartum (McDonald et al., 2015); however, no study to date has examined the relationship between pain and fatigue in a sample of women suffering from PPP.

There is considerable overlap between postpartum depression and postpartum fatigue, especially given that fatigue is a symptom of depression; however, the literature supports a distinction between the two (Milligan et al., 1996). As such, investigating the independent relationships between PPP and postpartum depression, as well as PPP and postpartum fatigue, is an important endeavor. Furthermore, addressing co-morbid psychological symptomatology has implications for clinical conceptualizations of women presenting with PPP, postpartum depressive symptoms, and/or postpartum fatigue.

Present study

The current study had two main objectives, which addressed gaps in the PPP literature to date. The first objective of this study was to describe the pain characteristics of PPP in a sample of new mothers