Constipation and haemorrhoids: A midwifery perspective for the childbearing continuum

Abstract

Minor disorders of pregnancy and the puerperium can be debilitating, and have an impact on a woman's physical and emotional wellbeing during her transition into motherhood. Constipation and haemorrhoids are among the most common of these disorders and can arise or worsen during pregnancy and the puerperium. Due to the embarrassing nature of these disorders, women may be reluctant to seek midwifery or medical assistance and may perceive constipation and haemorrhoids as something normal to be tolerated. However, if left untreated these disorders could progress and worsen, becoming pathological and potentially leading to chronic lifelong impairment. As frontline practitioners, midwives are key in ensuring gastrointestinal wellbeing through enabling disclosure, educating women, swiftly referring when required and ensuring appropriate management. This review of relevant literature explores both constipation and haemorrhoids from the viewpoint of the midwife, including the importance of midwifery knowledge, recognition and management of the disorders in both pregnancy and the puerperium.

Keywords: **Constipation, Haemorrhoids, Piles, Midwifery management, Pregnancy, Puerperium**

Constipation and haemorrhoids are common disorders and women who have previously experienced these issues are at risk of recurrence during pregnancy and the puerperium; however, they may develop for the first time due to hormonal changes in this period. Constipation in the general population is reported to be around 27% (Tack, 2011) with an antenatal incidence between 11–38% (Jewell and Young, 2012). Postnatal rates are higher still, with reported incidences of 24–41.8% (Bradley et al, 2007; Ponce et al, 2008). Constipation is characterised by infrequent bowel movements, discomfort when passing stools, hard stool consistency, straining upon bowel evacuation and the sensation of not achieving complete bowel evacuation (Jewell and Young, 2012; Basilisco and Coletta, 2013; Turawa et al, 2014). However, these symptoms can indicate underlying pathologies, therefore, gauging a thorough clinical picture and differential diagnoses are essential when considering diagnosis (Cullen and O'Donoghue, 2007), especially as conditions including irritable bowel syndrome have overlapping presenting symptoms (Paré et al, 2007). Current literature suggests definitions of constipation are misleading and widely debated (Bradley et al, 2007) and women's perceptions of what constitutes constipation is broad ranging in relation to their normal bowel habits. Guidance such as the Rome III Criteria (Drossman et al, 2006) can therefore be useful as a diagnostic and patient communication tool. Rome III Criteria is not pregnancy-specific so midwives are required to define the woman's constipation based on their individual levels of satisfaction about effectiveness of bowel evacuation and frequency (Basilisco and Coletta, 2013).

Haemorrhoids (or piles) are another common anorectal issue with suggested general population prevalence ranging from 13–36% (Perera et al, 2012). This wide variance may be due to reliance on self-reporting, and patients may not be equipped to self-diagnose or may be unwilling to disclose symptoms, leading to under-reporting. Rates in pregnancy are widely acknowledged to be higher than that of the general population (Medich and Fazio, 1995), suggested to be around 38%, although rates in excess of 80% have been cited in certain populations during the latter stages of pregnancy (Lim et al, 2014).

Although seemingly minor, constipation and haemorrhoids can worsen and potentially lead to chronic lifelong impairment (Jones and Gardiner, 2014), significantly damaging a woman's emotional and physical wellbeing. Constipation can also have detrimental consequences on intrapartum progress leading to further complications such as faecal impaction, incontinence and overflow diarrhoea, which can be distressing, diminishing women's quality of life (Lee-Robichaud et al, 2010; Lacy et al, 2012). Due to its complexity and high incidence rates, constipation also has considerable economic consequences to health services (Peppas et al, 2008; Lacy et al, 2012). To ensure maternal wellbeing, midwives must be able to rapidly recognise symptoms of constipation or haemorrhoids and advise or refer as required. As with many pregnancy disorders, encouraging

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prevention is superior to providing treatment to the already unwell woman, and midwives should endeavour to educate woman accordingly, but this is only possible if midwives have a comprehensive knowledge base to draw on.

Pathophysiology

Constipation is multifactorial and thought to be influenced by physiological, psychological, emotional and environmental factors, which are often poorly understood (Kyle, 2009; Tan and Tan, 2013). This intricate clinical picture highlights the importance of understanding the underpinning physiology of constipation and haemorrhoids through the childbearing continuum to enable accurate recognition of each disorder.

Mechanically, the expanding gravid uterus displaces digestive organs, specifically the stomach and intestines, thought to impede the movement of faeces, obstructing evacuation and potentially causing intestinal malrotation (Cullen and O'Donoghue, 2007; Tan and Tan, 2013). Damage to the pelvic floor muscles in the intrapartum period can lead to constipation because the levator ani muscle forms part of the external anal sphincter, thus playing an important part in evacuation (Shafik and El-Sibai, 2002; Cullen and O'Donoghue, 2007). Forceps delivery, prolonged second stage of labour, and birth weight above 4.5 kg, can result in anal sphincter damage, further increasing this risk (Sultan et al, 1993). Similarly, haemorrhoids can occur following birth, particularly when birth is expedited by episiotomy or instrumental delivery, potentially as a result of strenuous expulsive efforts in the second stage of labour. Practices such as directed pushing could be deleterious to long-term pelvic floor and anorectal outcomes (Roberts and Hanson, 2007). Haemorrhoids cause painful defecation and anal oedema which may in itself result in constipation (Kamm, 1994; Glazener et al, 1995; Turawa et al, 2014). Constipation and haemorrhoids are subsequently interrelated, having similar causalities and can arise from or exacerbate the other, leading to a cyclical deterioration of gastrointestinal comfort and wellbeing.

Hormonally, elevated progesterone levels in pregnancy are believed to contribute to delayed gastric emptying and increased gastrointestinal transit times (Jewell and Young, 2012) as well as increasing vasodilation which can cause haemorrhoids (Tiran, 2003). Progesterone is thought to cause intestinal smooth muscle relaxation, leading to bowel hypomobility (Cullen and O'Donoghue, 2007). During labour, anxiety, pain and the use of opioids may further decrease this smooth muscle mobility, leading to delays in evacuation (Peppas et al, 2008). Many women, especially those at high risk of medical intervention, are encouraged to fast during active labour due to the increased risk of aspiration of gastric contents accompanying delayed gastric emptying (Simkin and Ancheta, 2011; Tan and Tan, 2013). However, this may further contribute to constipation and the National Institute of Health and Care Excellence (NICE, 2014) suggest women should be encouraged to eat a light diet throughout labour unless under the influence of opioids or they have/develop risk factors which increase likelihood of general anaesthetic (NICE, 2014). This emphasises the importance of making individualised midwifery risk-assessments that accurately reflect the entire clinical picture, as erroneous intrapartum care decisions can have long-lasting effects on the care continuum into the puerperium.

Haemorrhoidal veins form part of the neuromusculature of the anus and are asymptomatic while they function correctly (Quijano and Abalos, 2012). Haemorrhoids occur when these veins swell or undergo structural change in the normal functioning of compression and drainage which accompanies bowel evacuation (Quijano and Abalos, 2012). Symptoms are broad-ranging and haemorrhoids are determined by four classifications depending on symptom type and presence of prolapse, although levels of discomfort do not necessarily relate to severity. The scale of classification ranges from first degree indicated by symptoms without prolapse, to fourth degree where haemorrhoids are constantly prolapsed through the anus (Quijano and Abalos, 2012; Crea et al, 2014). Symptoms include burning sensations, presence of itching, sporadic rectal bleeding, leakage of mucous, varying levels of pain/discomfort and perineal hygiene problems, and reduced quality of life, with the most common symptom being some degree of bleeding accompanying bowel movement (Lohsiriwat, 2012; Riss et al, 2012; Quijano and Abalos, 2012; Crea et al, 2014).

Psychological and emotional effects of constipation and haemorrhoids

Constipation and haemorrhoids can be emotive subjects for women. Midwives must not underestimate the difficulty that disclosing this personal information can have on women's anxiety levels, and must therefore use appropriate forms of communication to put them at ease. The midwife–mother relationship is the foundation of care through the transition to motherhood and

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Self-help measures include a high water ingestion diet, increasing fruits and vegetables

initial encounters are important for interpersonal cooperation between midwives and women. Circumstances such as the booking appointment, pose challenges with a need to quickly establish rapport to enable midwives to assuage women's feelings of awkwardness and foster a relationship of trust. Women are often accompanied and hesitant to openly communicate in front of intimate partners as constipation and haemorrhoids can affect women's sexual activity (Ayaz and Hasir, 2014), provoking the need for midwives to ask during subsequent appointments to ensure an accurate clinical picture. Midwives require confidence to ask about women's perceptions of constipation, and although seemingly innocuous in the booking appointment context, this full evaluation is essential. Successful midwifery communication is fundamental to perception of care (Donnelly and Neville, 2008) and if not tackled, minor disorders can leave women anxious and depressed. Certain mental health issues including anorexia nervosa or bulimia have been associated with constipation (Chiarioni et al, 2000), with anxiety surrounding bowel habits or concerns about faecal impaction indicating underlying psychological conditions surrounding defecation, including obsessive compulsive disorder (Rao et al, 2007). Mental ill health, particularly anxiety and depression, predispose women to develop constipation, as psychological disorders are thought to slow down colonic transit. Psychological illness is also associated with decreased use of coping strategies (Haug et al, 2002; Cheng et al, 2003; Peppas et al, 2008). Constipation and haemorrhoids, therefore, need to be discussed unambiguously using correct terminology, assuaging women's feelings of embarrassment in frank discussion with professionals. Although time constraints in current midwifery practice may lead to compartmentalising physical symptoms from psychological manifestations, the importance of a flexible, holistic approach is paramount in making correlations between seemingly unconnected issues. This communication should be afforded to colleagues across different clinical areas, informing community midwives if women have experienced constipation as a result of a dietary change from hospital food, or haemorrhoidal discomfort following delivery, thus ensuring the continuation of gold standard care and completion of treatment.

Lifestyle factors, prevention and education

Lifestyle factors have significant impact on constipation and haemorrhoids, with pregnancy providing an optimal time to engage women in discussions around the benefits of healthy eating and risk minimisation of minor disorder development. As well as maternal health benefits, women may be further motivated when informed and educated about the implications of diet and nutrition on fetal health (Blinco, 2008). Vulnerable women including those with low socioeconomic status, certain ethic minorities, obesity issues, and teenage pregnancy, are especially at risk of suboptimal nutrition; midwives are well-placed to provide additional information and support to these women (Wyness, 2014).

Constipation can usually be treated with explanation, reassurance and advice (Cullen and O'Donoghue, 2007) and many women only

need to make minor dietary and lifestyle changes to have positive results (Tack et al, 2011). Diet influences both disorders, especially postnatally where women may struggle to maintain a well-balanced diet (Cullen and O'Donoghue, 2007) due to the new demands of motherhood. Furthermore, postnatal cultural beliefs and practices may lead to behaviours which increase the risk of constipation, such as following specific diets or not exercising (Liu et al, 2009). Physical inactivity is believed to increase the risk of developing constipation, although strenuous activity can also be detrimental (Cullen and O'Donoghue, 2007; Peppas et al, 2008).

Daily supplements of bran or wheat fibres are shown to increase frequency of bowel movements and correct stool consistency, as well as indirectly assisting in the correction of haemorrhoids (Quijano and Abalos, 2012). High-fibre diets consisting of bran and certain fibre types may also have a detrimental effect, causing cramping pain and feelings of bloating and distension (Cullen and O'Donoghue, 2007). Re-evaluation of symptoms should take place after dietary changes have been instigated to monitor whether treatments are effective or further assistance is needed to resolve the issue. If women are making dietary changes, it may be appropriate to advocate keeping a food diary to give a full dietary picture.

Water intake is significant to maternal wellbeing as inadequate hydration can contribute to the development of constipation and haemorrhoids (Sielezneff et al, 1998). Augmented levels of progesterone and oestrogen in pregnancy are thought to enhance renin secretion, leading to increased aldosterone levels. Aldosterone increases colonic water absorption, which may lead to the formation of hard stools and constipation (Arnaud, 2003). Other minor pregnancy issues such as vomiting and anaemia may contribute to dehydration with constipated women showing significantly decreased hydration levels (Derbyshire et al, 2006). Self-help measures include a high water ingestion diet, increasing fruits and vegetables (Liu et al, 2009), and accompanying food with appropriate levels of hydration. Although widely perceived that iron supplementation negatively impacts bowel function, evidence shows that low levels of oral supplementation has no bearing on levels of constipation or gastrointestinal effects unless dosage exceeds 20 mg daily (Makrides et al, 2003).

Abdominal massage may be worth further consideration postnatally as it is shown to increase peristalsis (Sinclair, 2011) as long as there are no contraindications, such as caesarean mode of delivery. However, this could be too time consuming and overwhelming for women while caring for a newborn.

Many women experiencing haemorrhoids choose to access self-managing strategies such as eating a high fibre diet, increasing fluid intake, water immersion and taking sitz baths. The use of topical ice packs are also reported to alleviate discomfort levels and reduce irritation when used for short periods of time. All of these self-management strategies help with aiding and alleviating symptoms (Nazik and Erylmaz, 2013). Caution should be excised and advice given around the safety of self-help strategies. Practices such as ingesting cooking oil which 9-20% of women participate in (Nazik and Erylmaz, 2013) can potentially be harmful, leading to irritation of the uterus as well as unpleasant side-effects (Siegel and Di Palma, 2005). Encouraging women toward healthy changes throughout pregnancy and the puerperium could prevent constipation and improve haemorrhoids by association (Ayaz and Hisar, 2014; Turawa et al, 2014). Conservative management of haemorrhoids is similar to management of constipation, with the use of fibre showing consistent benefits for symptoms and bleeding (Quijano and Abalos, 2005). However, if haemorrhoids have prolapsed through the anus, they have undergone structural change and are unlikely to improve with any change in faecal consistency (Quijano and Abalos, 2005). Treatment during pregnancy often seeks to alleviate symptoms, as for many women, haemorrhoids will resolve spontaneously in the postnatal period (Perera et al, 2012).

Pharmacological management

Pharmacological management of constipation should be reserved for more severe cases when alternative management strategies have been unable to resolve the problem (Cullen and O'Donoghue, 2007). Should pharmacological management be necessary, midwives should refer to prescribing professionals and dissuade women from accessing over-the-counter medications. Due to medication safety during pregnancy and breastfeeding, laxatives should always be prescribed and taken with caution (Cullen and O'Donoghue, 2007). Although many women are often reluctant to self-medicate due to these reasons (Twigg et al, 2010), the embarrassing nature of constipation and haemorrhoids may lead women to use medication previously prescribed to them, or seek guidance from friends and family rather than accessing advice from health professionals. This highlights the benefits of the role of the midwife prescriber, enabling the women to minimise the volume of

people to disclose symptoms to. However, if the midwife cannot prescribe, swift referral should be made to the appropriate practitioner such as the GP, nurse prescriber or hospital doctor. Following up referral is essential to ensure that women have accessed support and are being effectively treated. Treatment for constipation and haemorrhoids may be unfamiliar to midwives, especially those who are direct entry, and certain procedures such as phosphate enemas in acute constipation may pose challenges to the midwife. Midwives should endeavour to familiarise themselves with treatment strategies in order to fully inform women.

When choosing medications for pregnant or postnatal women experiencing constipation, the practitioner should use a medication which is effective, with minimal side-effects, non-teratogenic, and is not excreted in breast milk (Cullen and O'Donoghue, 2007). Although few laxatives have been assessed for safety in pregnancy, all have minimal systematic absorption, and therefore are not expected to be associated with increased risk of congenital abnormalities (Trottier et al, 2012). Bulk-forming laxatives (eg. ispaghula husk, methylcellulose) work by increasing faecal mass and stimulating peristalsis, although they can take a number of days to take effect and they may worsen symptoms of bloating, gas and cramping (Tack, 2011; Trottier et al, 2012). Osmotic laxatives (eg. lactulose, magnesium citrate, polyethylene glycol) work by retaining fluid in the bowel, although prolonged use is hypothesised to cause electrolyte imbalance and side effects can include flatulence and bloating (Longo et al, 2010; Trottier et al, 2012). Jewell and Young (2012) conclude that stimulant laxatives (eg. senna, glycerol suppositories) are more effective than bulk-forming laxatives in pregnancy, as they increase intestinal motility. However, anthraquinone stimulant laxatives (eg. dantron) are associated with congenital malformations, therefore are often avoided in pregnancy (Nelson and Forfar, 1971) due to their potential for carcinogenic and genotoxic effects (Joint Formulary Committee, 2014). Although stimulant laxatives are associated with side effects such as abdominal pain and diarrhoea, this can be managed by dose titration, nevertheless they should only be used in the short-term as they are also thought to potentially cause electrolyte imbalance (Longo et al, 2010; Mueller-Lissner et al, 2010). Although treatment strategies in pregnancy mirror those of non-pregnant women (Jewell and Young 2012), Turawa et al (2014) found insufficient research to assess pharmacological interventions for treating postpartum constipation. Further research would be beneficial to assist and lead treatment of constipation in the puerperium (Turawa et al 2014). Adjuvants such as stool softeners (eg. sodium docusate) increase the content of water in the stool and are considered safe to use in pregnancy, although evidence supporting their use is weak (Liu, 2011). Lubricant laxatives (eg. mineral oil) are poorly absorbed by the gastrointestinal tract and do not appear to have many adverse effects, although it is hypothesised that prolonged use could reduce the absorption of fat-soluble vitamins, and caution should be taken in women who experience nut allergies, as some oils may contain nuts (Gal-Ezer and Shaoul, 2006).

Local interventions for haemorrhoids are wide-ranging and frequently used, including anaesthetic ointments, phlebotonics or glucocorticosteroids, and can be used alone or in combination. However, there is little robust evidence to support their use (Quijano and Abalos, 2005). A Cochrane review (Perera et al, 2012) around the use of phlebotonics suggests that they may alleviate symptoms of haemorrhoids such as bleeding, discharge and leakage and pruritus in the general population, although due to limited research around their use in pregnancy, their use cannot be recommended.

If not self-corrected then pregnant women do not have many treatment options, and it may be advised to wait until the puerperium when, if haemorrhoids persist, it may be possible to select more intrusive treatment including laser treatment and surgery.

Conclusion

Although constipation and haemorrhoids are common minor disorders throughout pregnancy and are closely interrelated, if left untreated they can be debilitating and worsen a woman's physical and emotional wellbeing, with potentially devastating long-term consequences. As frontline practitioners midwives are in a prime position to discuss subjects which can be uncomfortable for women to divulge, but relatively simple to treat, having a significant impact on women's daily wellbeing during pregnancy and comfort levels in the puerperium. Haemorrhoids and constipation should be discussed routinely with women throughout pregnancy and as an ongoing conversation surrounding general perineal hygiene in the puerperium, with education to aid prevention being gold standard.

The midwife, because of their unique rapport and role as autonomous practitioners, can effectively monitor the progression of these disorders, referring to the appropriate practitioner when deviation from the normal occurs and

Key points

- Definitions of constipation vary dramatically, consequently an individualised woman-centred approach considering perceptions of her own 'normal' are essential to diagnose and treat effectively
- Although common, the physiology underpinning constipation and haemorrhoids is complex and poorly understood
- Women may find constipation and haemorrhoids embarrassing, therefore communication and creating a trusting mother-midwife relationship is crucial, with midwives utilising clear language and open dialogue
- Education is key to facilitate prevention of manifestation or deterioration of constipation or haemorrhoids
- Constipation can often be treated by making subtle dietary changes and using self-help strategies, pharmacological treatment should be used only if these changes do not resolve symptoms
- Where multidisciplinary team input is indicated, the midwife can act as care coordinator, communicating between health professionals in order to preserve dignity and ensure maternal wellbeing

ensuring to follow up care, acting as a care-coordinator between professionals if required. Midwives working in all clinical settings should therefore be familiar with all treatment options in order to provide the best option for the women in their care and able to detect when a minor disorder extends out of their sphere of practice and able to counsel women about options moving forward into more complex management scenarios. BJM

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