

# Dyspareunia following childbirth

Christine Kettle, Khaled Ismail and Fidelma O'Mahony

While a temporary reduction in libido is acceptable following childbirth, women should not expect postpartum dyspareunia to occur. If these symptoms are left untreated a woman can become afraid of having intercourse and the problem can escalate, causing long-term physical and psychological morbidity. This can lead to sexual disharmony and relationship breakdown. Early and sensitive management is crucial in the prevention of long-term problems. In this article we present a multidisciplinary approach for managing women with dyspareunia following childbirth.

## Introduction

Dyspareunia can be defined as any pain or soreness that occurs during sexual intercourse. Women can suffer from primary dyspareunia, in which pain has always occurred during sexual activity, or secondary dyspareunia, in which it occurs after a period of pain-free intercourse; for example, after childbirth. This can be sub-classified as deep or superficial dyspareunia depending on where the woman experiences the discomfort. Women are usually unaware that it is quite normal for sexual interest to be decreased during pregnancy and the early postpartum period. Barrett *et al.*<sup>1</sup> found that 53% of women at three months and 31% at six months reported loss of sexual desire following the birth of their first baby. Similarly, a reduction in postpartum sexual desire was reported in other studies,<sup>2-4</sup> and this did not seem to be affected by the mode of delivery.<sup>1</sup> While a temporary reduction in libido is acceptable following childbirth, women should be aware that pain during intercourse is not expected to occur unless such sexual problems were evident prior to conception. Postpartum dyspareunia should be managed appropriately to promote the resumption of normal sexual function and prevent long-term physical and psychosocial problems.

## Aetiology

Dyspareunia following childbirth can be physical or psychological, or a combination of both. Physical or organic superficial dyspareunia can be secondary to scar tissue formation, poor anatomical reconstruction following perineal trauma or vaginal dryness. Breastfeeding is known to cause vaginal dryness, dyspareunia and

a reduction in libido.<sup>1,5</sup> This is due to the physiological hyperprolactinaemia of lactation reducing the levels of maternal oestrogen, progesterone and androgens. Similarly, oestrogen deficiency secondary to some types of hormonal contraception can lead to vaginal dryness and vaginitis.<sup>6</sup> Characteristically, the pain or discomfort associated with superficial dyspareunia is located around the introitus or can involve the vulva or urethral areas.

Deep dyspareunia tends to occur secondary to gynaecological and urological disorders. Pelvic adhesions, infections, pelvic inflammatory disease, cervicitis and cystitis are examples of such conditions that can happen secondary to childbirth.

Psychological dyspareunia can happen secondary to a traumatic birth experience and can be associated with anxiety or depression.

## Prevalence

It is difficult to estimate the true prevalence of dyspareunia following childbirth as many women with persistent symptoms do not seek medical attention. Furthermore, when comparing the findings of research studies, consideration must be given to both the obstetric and clinical variables of the population being studied, as these will affect the rates of dyspareunia reported. It is also important to highlight that most of the studies that reported rates of postpartum dyspareunia refer to superficial dyspareunia or painful intercourse in general; therefore, it is difficult to know the actual prevalence of postpartum deep

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dyspareunia. Several research studies<sup>1,4,5,7-11,12</sup> have reported that 62–88% of women resume intercourse by 8–12 weeks postpartum. However, 17–23% continue to experience superficial dyspareunia at three months after delivery and 10–14% at 12 months. Barrett *et al.*<sup>1</sup> reported a higher prevalence rate: 62% of women in their study experienced dyspareunia at some time during the first three months postpartum and 31% still complained of dyspareunia at six months. However, 12% of the study participants had experienced dyspareunia in the 12 months prior to conception.

### Associated risk factors

#### Type of delivery

Previous research has attempted to estimate the prevalence of postpartum superficial dyspareunia but few studies have been specifically designed to identify associated risk factors. Data from a large longitudinal postal survey with a 90% response rate, carried out by Glazener,<sup>5</sup> demonstrated that perineal pain persisting after eight weeks was significantly associated with assisted vaginal delivery (30%) when compared with spontaneous vaginal delivery (7%). Barrett *et al.*<sup>1</sup> carried out a multi-factorial data analysis and found that dyspareunia at three months after delivery was significantly associated with the type of delivery, extent of perineal damage and dyspareunia before pregnancy. However, the causal effects of the type of vaginal delivery and perineal trauma sustained in relation to dyspareunia were no longer significant factors by six months postpartum.

Fear of dyspareunia following vaginal delivery is sometimes cited as one of the main reasons why women request caesarean section. However, a small study conducted by Goetsch<sup>13</sup> reported that 29% of women suffered postpartum dyspareunia despite having a caesarean section. Moreover, a cohort analysis of data from a large randomised controlled trial carried out by Klein *et al.*<sup>14</sup> found that women who underwent caesarean section experienced more dyspareunia than those who had an intact perineum after vaginal birth (40.7% and 26.2%, respectively).

#### Perineal injury

Factors strongly associated with both the severity and rate of postpartum dyspareunia are the type and degree of perineal injury sustained and the method of delivery. Follow-up of participants in a study comparing restricted versus liberal use of episiotomy found that 14% of women experienced dyspareunia up to three years following delivery, irrespective of the allocated

intervention.<sup>15</sup> More recent research<sup>16,17</sup> found that women who delivered with an intact perineum reported the best outcomes in terms of sexual function and pain. The effect of suture materials and methods used for repair of episiotomies and perineal tears following delivery has been assessed in several clinical trials with conflicting results relating to reported rates of dyspareunia.<sup>4,7,10-11,18</sup>

Implementation of strategies to reduce assisted vaginal deliveries using the Ventouse vacuum extractor as the instrument of choice rather than forceps, reducing episiotomy rate and improving perineal repair techniques, will probably help in decreasing the extent of postpartum sexual morbidity experienced by women.

#### Breastfeeding

Hormonal changes associated with breastfeeding can lead to decreased libido and/or superficial dyspareunia secondary to vaginal dryness. Confounding factors that can contribute to postpartum sexual morbidity are: tiredness, change in role, depression, lack of privacy, poor housing, pressure to return to work and lack of financial and social support. Glazener<sup>5</sup> found that women who breastfed their babies were three times more likely to be temporarily uninterested in sexual intercourse. A subgroup analysis of data from the study carried out by Kettle *et al.*<sup>4</sup> also showed that the incidence of dyspareunia at three months following delivery was increased among women who were breastfeeding (21.2% versus 15.9%). This finding was also supported by Barrett *et al.*<sup>1</sup>

### Diagnosis

It is important to provide follow-up care for women who have experienced a traumatic birth or sustained complex perineal trauma to ensure that they are not experiencing any sexual difficulties. For those who are, it is imperative to obtain a detailed history using a sensitive, non-judgmental approach. Understanding of the organic aetiology must be incorporated with appreciation of underlying psychological factors such as postnatal depression, anxiety and negative expectations that can perpetuate the pain cycle.

The woman's perspective of the problems and details of the order of events in relation to her presenting symptom should be obtained during assessment. For example, organic dyspareunia can be secondary to scar tenderness and this can lead to vaginismus or arousal dysfunction resulting from fear of expected pain. Similarly, arousal disorders that can affect vaginal lubrication can cause painful intercourse. Figure 1 is a diagrammatic representation of this complex

sequence of events. It is essential to establish whether the problem is pre-existing or acquired following childbirth and this must include details of past sexual experiences, onset, duration of the problem, location, description of the pain, its intensity and also whether the pain is associated with physical or psychological components. Quite often depression or anxiety disorders are present in women experiencing dyspareunia and sometimes it is difficult to unravel the underlying cause. Furthermore, there may be dissonance within the partnership. It is therefore important to take a detailed history to assess whether the relationship is suffering due to sexual problems or whether the sexual problems are secondary.

The characteristics of the pain experienced can help with diagnosis of the problem. For example, the pain associated with superficial dyspareunia may be described by the woman as sore, splitting, tearing or burning on entry, whereas deep dyspareunia may be described as a shooting pain on deep penetration or as a dull ache following intercourse. In contrast, women suffering with vulvodynia tend to present with a more constant generalised vulval pain, which is sometimes described as a feeling of having broken glass under the skin's surface.

Assessment should include careful inspection of the external genitalia and introitus for swelling, irritation, warts, varicosities, abrasions, poor

anatomical alignment of perineal tears or episiotomy and scar tissue. During the examination the woman must be treated sensitively and reassured that she can stop the procedure at any time. Physical examination can elicit tenderness similar to the pain experienced by the woman during sexual activity. The muscular involuntary spasm associated with vaginismus can be replicated by inserting one finger into the vagina. This should be carried out prior to proceeding to full pelvic assessment, including bimanual examination, to minimise confusion arising from abdominal tenderness.<sup>19</sup> Pressure exerted on the cervix can reproduce the same deep pain or discomfort experienced during intercourse. Palpation of the lateral vaginal walls can elicit the source of pain and can also reveal if there is pudendal neuropathy. If infection is suspected a speculum examination should be performed and swabs taken.

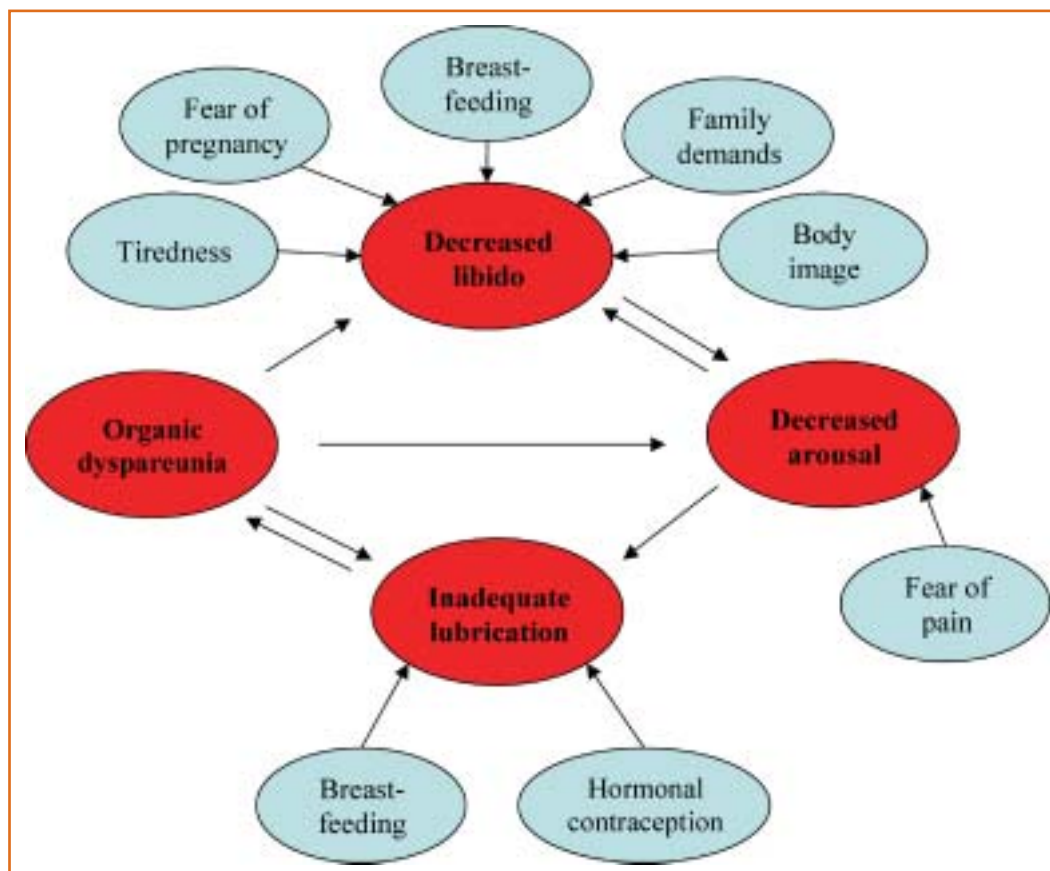
### Management

Postpartum perineal problems can lead to more complex sexual disorders. Hence, it is important to deal with them promptly and effectively. In our unit there is a dedicated perineal care clinic and a structured care pathway for managing women with such problems. This service is backed up with a multidisciplinary team that provides expert input for the management of more complex cases.

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**Figure 1.** Flow chart illustrating the relationship between postpartum dyspareunia and non-organic sexual dysfunction

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The management of dyspareunia should focus on the underlying cause. Indeed, it can sometimes take a considerable amount of time to work out the true cause and provide appropriate treatment. As previously discussed, the main aim of diagnosis is to confirm or exclude organic problems that can be the underlying cause of the woman's symptoms (Figure 2).

**Decreased libido**

In most women decreased libido is simply due to tiredness caused by the demands of the newborn and other family members. This can be exacerbated by the hormonal changes associated with lactation. The couple should be reassured that these symptoms are expected to happen in the postnatal period and, given time, they should improve spontaneously provided there are no underlying organic causes, depression or relationship problems.

**Scar tenderness**

A thin band of scar tissue at the introitus is a fairly common cause of superficial dyspareunia. Typically this causes severe pain during penetration and sometimes splits and bleeds during intercourse. These distressing symptoms can be relieved by division of the band of scar tissue using a modified Fenton's procedure, which can be performed under local anaesthetic. We would initially advise the woman to massage the area of scar tissue with good quality oil (such as vitamin E or sweet almond oil) and if the superficial dyspareunia does not improve in 3–6

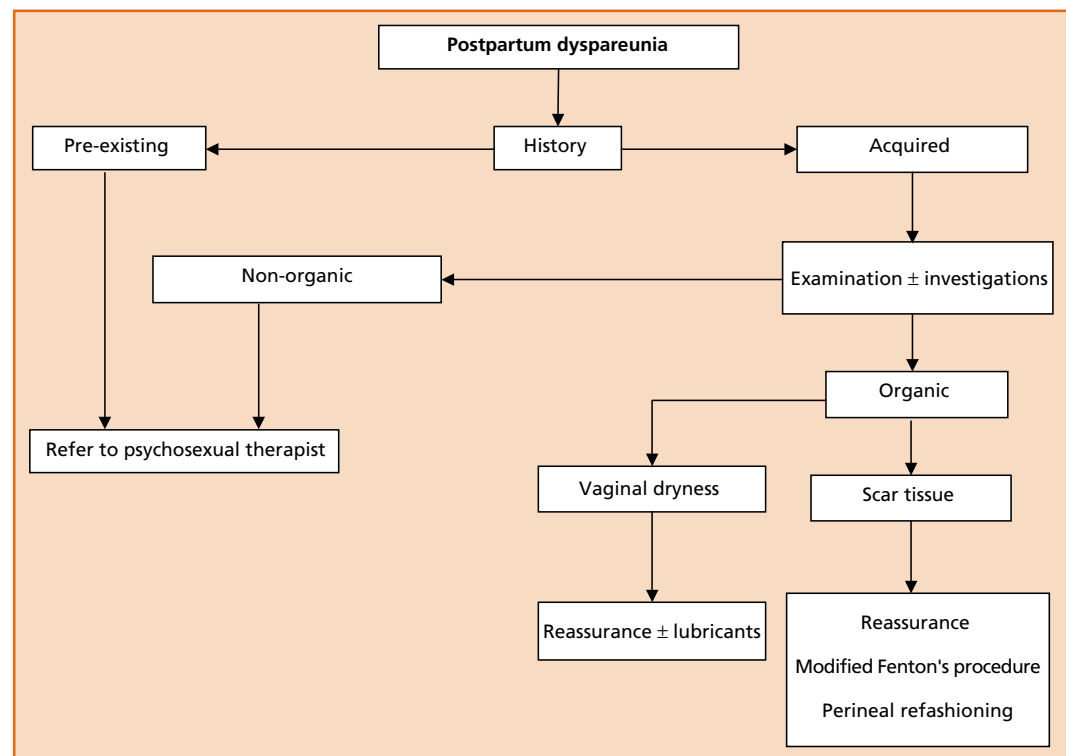
months postpartum a modified Fenton's procedure can be performed. Occasionally, extensive scarring secondary to delayed wound healing, infection or poor tissue alignment requires perineal refashioning.

**Vaginismus**

Involuntary spasm of the introital muscles (vaginismus) can occur secondary to localised pain or discomfort associated with perineal scarring or vaginal dryness following childbirth. The pain causes a conditioned response with subsequent spasm of the superficial perineal muscles (organic vaginismus). In view of the complexity and limited evidence of best therapy for vaginismus, women in whom muscle spasm persists despite treating the underlying cause of pain and women with non-organic vaginismus should be referred to an expert sex therapist.<sup>20–21</sup>

**Vaginal dryness**

In the absence of any physical cause, the most likely source of superficial dyspareunia is inadequate arousal resulting in decreased vaginal lubrication. When the woman is fully aroused the vagina becomes lubricated, enabling pain-free penetration by the erect penis. Vaginal dryness can also occur secondary to the hormonal changes in the postpartum period. Reassurance and advice should be given regarding ensuring adequate vaginal lubrication before penetration, and a water soluble lubricant can be used to relieve vaginal dryness and minimise associated pain. If the woman repeatedly experiences pain on intercourse it is likely that she will tense up on



**Figure 2.** Algorithm of management of postpartum dyspareunia

future occasions in anticipation of further pain. Hence, relaxation exercises prior to or during intercourse can be helpful.<sup>20</sup>

Following childbirth women can have low levels of oestrogen due to breastfeeding or the use of hormonal contraception, which can lead to vaginal dryness and atrophic vaginitis.<sup>6</sup> Topical oestrogen is used successfully in relieving symptoms relating to atrophic vaginal changes in postmenopausal women. However, there is sparse information relating to application during the postpartum period. Vaginal lubricants can be offered to women wishing to avoid the use of topical oestrogen.

### Deep dyspareunia

When managing deep dyspareunia, initial advice should be given regarding modification of intercourse positions and adopting those in which the woman is in control of the depth of penetration (woman on top) or in which penetration is not too deep (side by side or 'spoons' position).<sup>20</sup>

If the woman experiences deep pain in the hours or days following intercourse, this can be secondary to pelvic congestion syndrome. This pain is sometimes associated with backache and urinary and breast symptoms. Pelvic congestion can be due to failure to achieve orgasm; however, this assumption should only be made after excluding an underlying organic cause. In such cases, advice should be given to the woman to ensure that she achieves orgasm either through intercourse, masturbation or the use of a

vibrator to alleviate pelvic congestion in the shortest time possible.

Where symptoms of deep dyspareunia persist despite the above advice, further investigations may be needed to exclude underlying gynaecological or urological causes.

### Non-organic causes

This diagnosis is made after exclusion of an underlying organic cause for the woman's symptoms. It is important to emphasise that the generalist obstetrician and gynaecologist is unlikely to possess the skills necessary to assess and treat the complex problems associated with non-organic sexual dysfunction. Hence, once an organic cause has been excluded, couples should be referred to a specialist in psychosexual disorders for further counselling, advice and management.

### Conclusion

Dyspareunia affects many women following childbirth. However, the true extent of the problem is difficult to estimate due to the fact that many women are reluctant to seek medical advice. Women should be informed that although it is quite normal for sexual interest to decrease during the early postpartum period, painful intercourse should not be expected to occur. For those women who suffer postpartum dyspareunia it is important to provide prompt, appropriate management to promote the resumption of normal sexual function and prevent long-term physical and psychosocial morbidity. ■

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