Treatment of Dyspareunia Following Childbirth Secondary to Perineal Scar Fibrosis

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Introduction:

Dyspareunia is defined as a recurrent or persistent pain that occurs during sexual intercourse. It can be divided into primary dyspareunia (from the beginning of sexual life and thereafter) and secondary (following a period of pain-free intercourse). It's also sub-classified as deep (deep vaginal penetration) and superficial (attempted penetration of the introitus). Dyspareunia has a negative impact on a woman's physical and psychosocial interactions, impacting body image and relationships, and it is associated with other female sexual dysfunctions.

Barrett et al. found that following the birth of their first baby, 53% of women at three months and 31% at six months reported loss of sexual desire. However, women should be informed that pain during sexual intercourse that arises after childbirth is not expected and that it should be addressed and managed early in order to prevent long-term problems as described earlier.

The postpartum period, due to a decrease in systemic estrogen, especially in breastfeeding women, can result in vaginal dryness and associated pain. The emotional state can also decrease arousal and lubrication, further increasing sexual pain. Perineal lacerations and episiotomy can result in sclerotic healing, resulting in superficial and/or deep dyspareunia.

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 as a secondary pathology, as pelvic adhesions, infections, pelvic inflammatory disease, cervicitis and cystitis are examples of such conditions that can happen secondary to childbirth.

Laser	Fotona SP Dynamis	
	Step 1	**Step 2**
Wavelength	1064 nm	2940 nm
Handpiece	L-Runner	FS01
Irradiance/Fluence	1.2 W/cm^2	50 J/ cm^2
Mode	Piano	MSP Turbo5
Frequency	NA	2.1 Hz
Pulse duration	NA	400 ms
Stacks	NA	NA
Passes	multiple	multiple
Spot size	9 mm	NA
Sessions	two sessions	

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Dyspareunia can also be psychological and related to a traumatic birth experience, and can be associated with anxiety or depression. It is difficult to estimate the true prevalence of dyspareunia following childbirth as it is under-reported. Barrett et al. reported a dyspareunia prevalence rate of 62% at some time during the first three months postpartum and 31% at six months.

CLINICAL CASE:

We report a case of a 38-year-old otherwise healthy woman, who sought consultation one year after vaginal birth with episiotomy correction. She complained of superficial dyspareunia since childbirth, described as a sore, splitting, tearing and burning sensation on entry. Sexual intercourse was only possible with topical lidocaine. She was already observed in another clinic and was treated with perineal massage and ultrasound.

On physical exam a perineal scar retraction with a thin band of scar tissue was noted in the posterior vaginal fourchette. The Nd:YAG laser and the ablative Er:YAG laser were used, combining two different pulses using the L-Runner robotic scanner and the FS01 handpiece. The perineal area was heated to reach 42ºC on the surface and the temperature was maintained for three minutes. Then multiple passages of the second step were made with overlapping of the fractional part with a rotation of 90º compared to the first position in the perineal scar retraction until the scar tissue was released. The laser procedure was performed with good patient tolerance (visual pain scale 4/10) and no side effects after treatment. A break of the thin scar tissue was noted immediately during treatment.

In a second consultation, one month after the first treatment, she reported a 60% improvement of pain, and a lidocaine-free intercourse was possible for the first time in a year. A second treatment was made with the same parameters, with no complications, and at the 1-month evaluation an 80% improvement was reported.

It is important to provide a follow-up for women post-partum and it is imperative to obtain a history using an empathic and non-judgmental approach. The characteristics of the pain can help with the diagnosis (women suffering with vulvodynia tend to present with a more constant generalized vulvar pain, and women with superficial dyspareunia usually describe a piercing, burning or sharp pain).

The classical management of scar tissue formation is surgical correction; laser treatment is presented here as a non-invasive and effective alternative, with good results after one session. For women who suffer from postpartum dyspareunia, it is important to provide timely and proper management to foster the resumption of normal sexual function and prevent long-term physical and psychosocial morbidity.