

# Understanding the Role of Central Sensitization in Endometriosis-Related Sexual Pain

## Key Information for Healthcare Providers

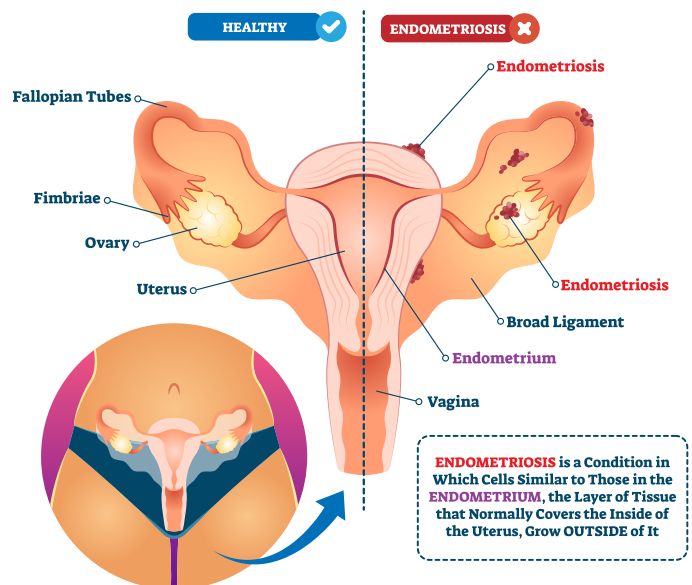
Deep dyspareunia is pain with deep vaginal penetration/insertion and is a common symptom in patients with endometriosis<sup>1</sup>.

In some cases, this pain persists even after treatment due to **central sensitization**, a condition where the nervous system becomes hypersensitive and amplifies pain signals.

The **Central Sensitization Inventory (CSI)** is a useful tool for assessing whether central sensitization is contributing to a patient's pain. By identifying central sensitization, healthcare providers can develop more targeted treatment plans.

This resource provides key information for healthcare providers on how to determine whether central sensitization is a major factor contributing to the sexual pain experienced by patients with endometriosis.

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**Figure 1.** Endometriosis: Uterus and Tissue Growth



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## Key Insights from Research

A recent study looked at the relationship between central sensitization and sexual pain in patients with endometriosis.

Women aged 18-50, diagnosed with endometriosis, were asked to complete the CSI and rate their pain levels. Based on their pain and tenderness, they were divided into three groups:

- Severe pain with bladder/pelvic floor tenderness (BPFT)
- Severe pain without BPFT
- Mild or no pain

The results showed that women with both severe pain and BPFT had the highest CSI scores, indicating that central sensitization played a significant role in their pain.

This suggests that central sensitization could be a key factor in persistent pain after conventional treatments.

## Clinical Application

### Use of the CSI during assessment:

- Use the CSI during initial assessments of endometriosis patients with pain. A CSI score of 40 or higher is an indicator of significant central sensitization.
- Conduct a pelvic exam, checking for bladder or pelvic floor tenderness (BPFT) to assess whether the pain is localized or centrally mediated.

### Multidisciplinary Approach:

For patients with high CSI scores and BPFT, consider a multidisciplinary approach to address both the physical and psychological aspects of the condition:

- **Pelvic floor physiotherapy:** to address muscle tenderness and improve pelvic floor function.
- **Cognitive Behavioral Therapy (CBT):** to manage pain perception and reduce the impact of central sensitization.
- **Pharmacological treatments:** consider medications that target central pain pathways.
- **Conventional Treatments:** use of hormonal and surgical treatments as needed, while recognizing that people with central sensitization may be more likely to have persistent pain after medical/ surgical treatment of endometriosis.

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## References

- 1 Orr, N. L., Wahl, K. J., Noga, H., Allaire, C., Williams, C., Bedaiwy, M. A., Albert, A., Smith, K. B., & Yong, P. J. (2020). Phenotyping sexual pain in endometriosis using the central sensitization inventory. *Journal of Sexual Medicine*, 17(4), 761-770. <https://doi.org/10.1016/j.jsxm.2019.12.019>
- 2 Alia Medical Media. (2019). Endometriosis vector illustration. Labeled uterus gynecology illness scheme. Outside tissue growth condition inside female body. Compared vagina organ structure with painful sick and healthy example[Illustration].Shutterstock. <https://www.shutterstock.com/image-vector/endometriosis-vector-illustration-labeled-uterus-gynecology-1454292614>