

## Understanding painful sex

Feeling severe pain while trying to have intercourse is one of the worst experiences that can occur in a sexual relationship. The most frequent cause of such pain is felt immediately upon penetration, i.e. at the entrance of the vagina (called introitus). When examining women with introital pain (pain while trying penetration), 3 main categories emerge. One reason is related to vaginal problems that have an effect on the introitus, such as candida vaginitis (vaginal infection with yeast), or aerobic vaginitis (an infection with signs of atrophy, bacterial infection and/or inflammation). A second finding is provoked vulvodynia, which is defined as an increased sensitivity on certain spots on the lateral side of the introitus. The third reason is due to a central hymenal rim, or scar, at the 6 o'clock position of the introitus. As the type of pain may be related to the vaginal microbiota alternations as described in the first association, we correlated in this study the presence of vaginal aberration such as aerobic vaginitis (AV), candida vaginitis (CV) and bacterial vaginosis (BV) with the severity of painful intercourse due to introital pain.

In an observational study, we measured vulvodynia pain by a Q-tip touch test (score 1 (no pain) to 10 (worst possible pain) on 7 introital locations in 231 patients presenting with penetration pain (vulvodynia) in the Vulvovaginal Disease Clinics in Tienen and Antwerp, Belgium, and compared it with the severity score of pain upon attempting sexual intercourse. Both scales were compared to microscopy tests on vaginal fluid indicating the presence of BV, AV and CV.

There was an inverse relation between the presence of *Candida* in the vaginal smears and pain score. There was no relation of clinical pain score, or Q-tip score, with BV. Patients with severe pain scores had more often AV, and the severity of AV was worse than in women with lower pain scores.

As treatment differs according to the findings, detailed study of the vaginal microflora in patients with painful intercourse, which demonstrates that the most severe patients suffer more from AV and less from *Candida*, matters. Therefore these abnormalities need to be actively looked for by performing proper microscopy of vaginal fluid and corrected before considering surgery or other therapies.

**Gilbert GG Donders**

*University Antwerp, Antwerp, Belgium*

*General Hospital, Tienen, Belgium*

*Femicare Clinical Research for Women, Tienen, Belgium*

## Publication

[Abnormal vaginal microbioma is associated with severity of localized provoked vulvodynia. Role of aerobic vaginitis and Candida in the pathogenesis of vulvodynia.](#)

Donders GGG, Bellen G, Ruban KS

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