

# Dyspareunia as a Symptom of UTI

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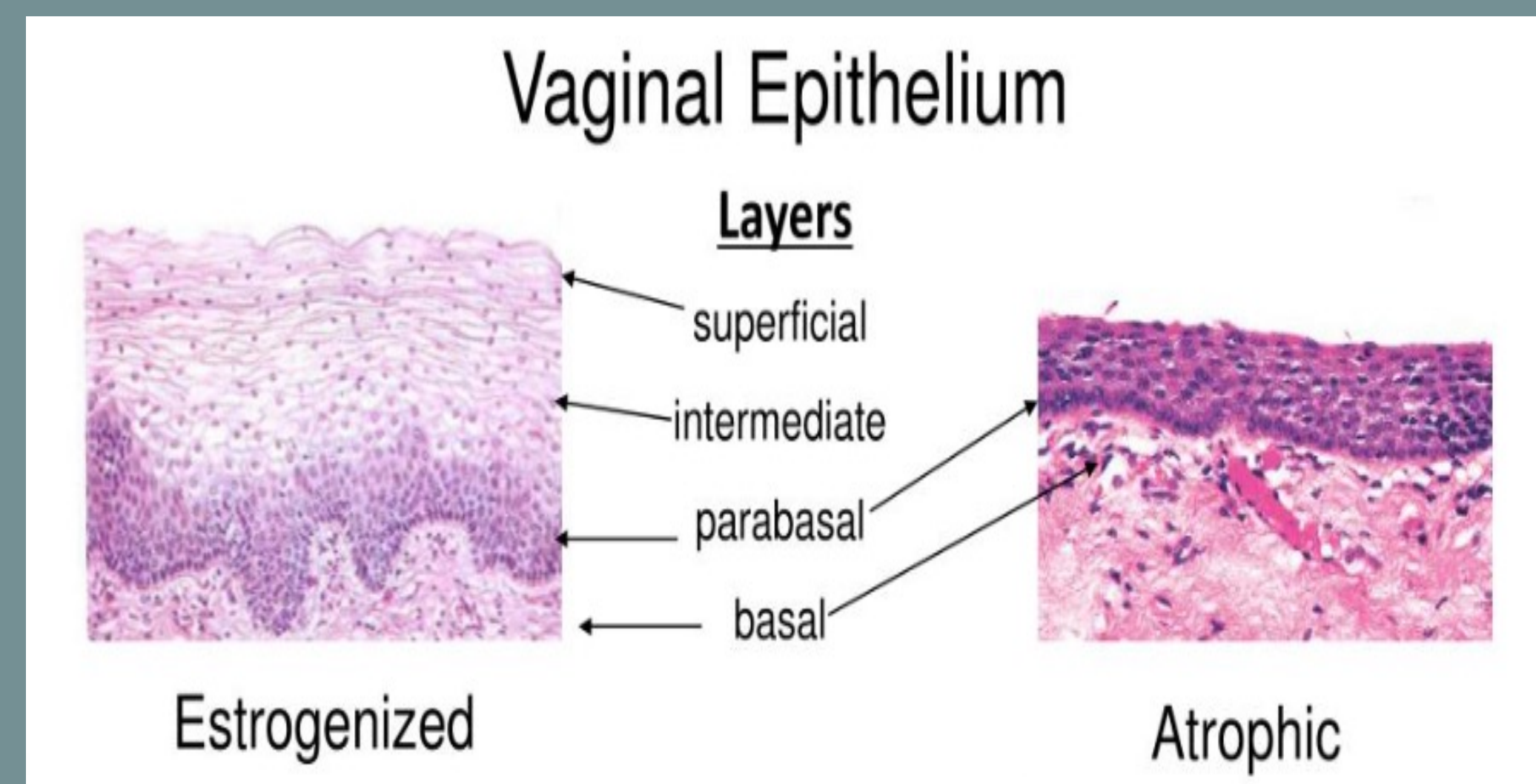
## Abstract

Dyspareunia, characterized by pain during intercourse, is a multifaceted issue that significantly impacts women's sexual health and quality of life. While historically attributed to conditions such as interstitial cystitis and vaginal dryness, its association with urinary tract infections (UTIs) has garnered limited attention in the medical literature. Previous studies have primarily focused on dyspareunia in the context of interstitial cystitis, overlooking the potential role of UTIs as a contributing factor.

Research exploring dyspareunia as a symptom of UTI remains scarce, with existing literature predominantly concentrating on UTIs' typical urinary symptoms such as dysuria, frequency, and urgency. However, a comprehensive understanding of UTIs should encompass their diverse clinical manifestations, including less recognized symptoms like dyspareunia. Recognizing dyspareunia as a symptom of UTI is essential for accurate diagnosis and optimal management, particularly among premenopausal and postmenopausal women.

## Methodology

We conducted a retrospective analysis spanning 15 years, involving a large patient cohort. Medical records of 19,661 patients were reviewed to identify cases of dyspareunia associated with UTI. Statistical analyses were performed to assess the prevalence and significance of this association



## Results

Analysis of 19,661 patients over 15 years revealed distinct patterns in premenopausal and postmenopausal cohorts. Among premenopausal patients (n=7,223), UTIs were diagnosed in 68.7%, with dyspareunia as a common symptom (31.3%). Treatment predominantly involved antibiotics alone (72%), while a subset received combination therapy with antibiotics and local estrogen (10.7%). In the postmenopausal cohort (n=12,438), UTI diagnosis occurred in 27%, often accompanied by dyspareunia (24.3%). Notably, a larger proportion of postmenopausal patients received combination therapy with antibiotics and local estrogen (64%) compared to antibiotics alone (33.3%). Additionally, a subset of patients experiencing dyspareunia and/or genitourinary syndrome of menopause (GSM) responded favorably to estrogen and vaginal cream (94%).

## Conclusions

These findings underscore the potential of vaginal estrogen therapy as an adjunctive approach in managing recurrent UTIs, particularly in postmenopausal individuals. By restoring mucosal integrity, modulating the vaginal microbiome, and lowering vaginal pH, vaginal estrogen offers a multifaceted therapeutic benefit. However, further research is warranted to optimize treatment protocols, elucidate long-term safety profiles, and refine patient selection criteria. In conclusion, vaginal estrogen therapy represents a promising avenue for personalized and comprehensive care in the management of recurrent UTIs. Integration of data from diverse clinical settings, including the Miami Center for Obstetrics and Gynecology, enhances our understanding of its clinical utility and informs future research endeavors aimed at improving patient outcomes and reducing the global burden of UTIs.