

The Role of Catheter-within-a-Catheter Technique in Premenarchal Vulvovaginitis

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Objective: The study aims to identify the microorganisms causing vulvovaginitis in premenarchal girls by using the catheter-within-a-catheter technique compared with swab technique for taking samples from vaginal discharge for smear and culture.

Methods: A retrospective study was done in 60 cases of premenarchal vulvovaginitis who underwent clinical assessment through history taking, clinical examination and investigation of vulvovaginal discharge for smear and routine swab culture of anaerobic and aerobic bacteria. All cases had smears and swabs for culture taken by using the catheter-within-a-catheter technique, under sterile conditions as a comparison in a 24-month period.

Setting: King Hussein Medical Center.

Results: By using swab smear and culture only, the most common pathogens involved in the disease were nonspecific (mixed growth) in 40% followed by candida sp in 11.7% and E.coli in 5%. However, by using catheter-within-a-catheter technique, the most common pathogens isolated were candida sp in 25% followed by nonspecific (mixed growth) in 20%. Enterobacteria (E.coli, Klebsiella, Proteus) in 12%, Streptococci in 5%, and Trichomonas in 3.3% of the 60 cases with premenarchal vulvovaginitis.

Conclusion: It is useful, when evaluating a child with blood tinged vaginal discharge in whom nonspecific (mixed growth), and/or no organisms were isolated on repeated cultures, to use the catheter-within-a-catheter technique to obtain a smear and culture of upper vaginal secretion as this helps more in a single organism isolation.