HOSPITAL PHYSICIAN®

OBSTETRICS AND GYNECOLOGY BOARD REVIEW MANUAL

Vaginitis: Case Studies; Noncontraceptive Benefits of Oral Contraceptive Pills: Case Studies

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Chapter 1—Vaginitis: Case Studies

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I. INTRODUCTION

Vulvovaginitis is a serious ailment consisting of numerous symptoms that affect more than 75% of women at least once in their lifetimes. Patients with vulvovaginitis have the classic signs and symptoms of vaginal discharge, burning, pruritus, odor, and dyspareunia. For the patient population presenting to a primary care physician, vulvovaginitis is about as commonplace as lower back pain and respiratory infections.[1] However, improper diagnoses, therapeutic failures because of inappropriate choice or use of medication, and symptom recurrence may become more common because of the increasing availability of numerous over-the-counter medications (which lead to inappropriate self-medication) and the increasing use of phone triage systems in physicians' offices. The potential sequelae of vaginitis include pelvic inflammatory disease (PID), preterm labor/delivery, premature rupture of membranes, and an increased risk for postprocedure infections.[2–7] The material presented in this manual focuses on the most common causes of vaginitis and reviews its differential diagnosis and treatment. Two case patients are presented to illustrate and highlight important concepts in diagnosis and management of vaginitis.

II. THE VAGINAL ECOSYSTEM

To understand the changes that take place during vaginal infections, the normal physiology of the vagina must first be understood. Healthy vaginal discharge is classically described as being white and curdy (not homogeneous), with an acidic pH (4.0 to 4.7).[8] This discharge is the product of the vaginal ecosystem, a complex interrelationship of bacteria, their metabolic products, and the hormonal environment. Normally, lactobacilli are the predominate bacteria in the vaginal ecosystem; they suppress the growth of gram-negative and gram-positive facultative/obligate anaerobes. Lactobacilli maintain a normal pH by producing lactic acid, which is toxic to the anaerobes. Vaginitis occurs because of an alteration in the vaginal ecosystem, caused either by a pathogenic organism or by a decrease in the normally predominant lactobacilli and an increase in other bacteria that are usually less common. As a general example, when the vaginal pH increases, lactobacilli growth is inhibited, allowing any anaerobes present to multiply. A combination of factors is usually responsible for a disruption substantial enough to result in vaginal pathology (eg, diabetes, antibiotic use).[9–11]

Epidemiologic research has helped to form a better understanding of the frequency of these pathologic