

# HOSPITAL PHYSICIAN®

## INTERNAL MEDICINE BOARD REVIEW MANUAL

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## Sexually Transmitted Diseases: General Principles and a Case Study

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#### I. INTRODUCTION

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Sexually transmitted diseases (STDs) are a substantial health problem and may be caused by various infectious agents, such as bacteria, viruses, and protozoa. Expenditures within the United States for the treatment of STDs are estimated at \$7 billion annually in direct costs (which exclude HIV).<sup>1</sup> A clear understanding of these infections (including their microbiology, presentation, diagnosis, and treatment) is critical in any primary care specialty. Physicians and other health care providers play an integral role in treating and preventing the spread of STDs. Because the primary care physician has access to diverse populations, he or she may be in a position to provide early care to many patients. The ability to screen, diagnose, and treat STDs early in their clinical course is invaluable.

In general, STDs can be characterized as infections that cause cervicitis, urethritis, or vaginitis or that result in genital lesions or ulcers. The organisms classified as causing STDs are typically successful pathogens. They are able to spread widely throughout the population, usually causing only mild disease manifestations. Sexually transmitted infections initially infiltrate the lower genital tract, producing mild symptoms or, often, no symptoms at all.

Although the primary manifestations of STDs may be mild, many of these organisms can spread locally or disseminate within the body and cause serious compli-

cations to the host. In addition, various STDs may be transmitted to the infants of infected mothers, with devastating consequences. In some patients, the upper genital tract (which comprises the uterine corpus and fallopian tubes) may become involved, resulting in endometritis, salpingitis, oophoritis, or classic pelvic inflammatory disease (PID). On rare occasions, STDs progress beyond the female genital tract and cause generalized intraperitoneal and systemic disease. Early diagnosis and aggressive treatment are imperative to prevent these serious and costly complications.

Classically described “venereal diseases” include chlamydia, gonorrhea, syphilis, herpes simplex virus, condyloma acuminatum, chancroid, lymphogranuloma venereum, granuloma inguinale, and molluscum contagiosum. *Trichomonas vaginalis* infection, an STD and a common cause of vaginitis, is not reviewed in detail in this manual. Although HIV and viral hepatitis are considered sexually transmissible, a complete discussion of these conditions is beyond the scope of this text. However, it is important to recognize that the prevalence of HIV and AIDS continues to increase. HIV-infected patients may have, or have a risk for developing, concomitant STDs. As such, screening for HIV should be offered to any person found to have an STD or considered to be at high risk.<sup>2</sup>

Prevention is the best treatment for STDs. Clinical prevention guidelines have been established by the