*Abstracts of current literature on epidemiology, diagnosis, and treatment*

***Series Editor: Jihad Slim, MD***

## SALVAGE THERAPY FOR PNEUMOCYSTIS CARINII PNEUMONIA

A meta-analysis of 27 published clinical studies was conducted to determine the relative efficacies of alternative antipneumocystis agents in HIV-infected patients who had *Pneumocystis carinii* pneumonia that was unresponsive to conventional primary drug treatment with a combination product of trimethoprim and sulfamethoxazole or parenteral pentamidine. Initial antipneumocystis treatment failed in a total of 497 patients with *P. carinii* pneumonia, and the patients required alternative drug therapy. (In 456 of these patients, HIV/AIDS was the major underlying disease.) Efficacies of salvage regimens were as follows: clindamycin-primaquine (42 to 44 of 48 patients, 88% to 92%), atovaquone (4 of 5 patients, 80%), eflornithine hydrochloride (40 of 70 patients, 57%), trimethoprim-sulfamethoxazole (27 of 51 patients, 53%), pentamidine (64 of 164 patients, 39%), and trimetrexate (47 of 159 patients, 30%). The researchers concluded that the combination of clindamycin plus primaquine appears to be the most effective alternative treatment for patients with *P. carinii* pneumonia who are unresponsive to conventional antipneumocystis agents.

*Smego RA, Nagar S, Maloba B, Popara M. A meta-analysis of salvage therapy for* Pneumocystis carinii *pneumonia. Arch Intern Med 2001;161:1529–33.*

## ASYMPTOMATIC BACTERIURIA IN WOMEN WITH DIABETES MELLITUS

A multicenter study was conducted comparing women who had diabetes mellitus (DM) and asymptomatic bacteriuria (ASB) with women who had DM but not ASB. The aim of the study was to compare the 2 groups of women for the development of symptomatic urinary tract infections (UTIs), renal function decline, and secondary complications of DM during an 18-month follow-up period. At least 1 uncontaminated urine culture was available from 636 women (258 with type 1 DM and 378 with type 2 DM). The prevalence of ASB at baseline was 26% (21% for those with type 1 DM and 29% for those with type 2 DM). Of the 589 women for whom follow-up results were available, 115 (14% with type 1 DM and 23% with type 2 DM) developed at least 1 symptomatic UTI. Women with type 2 DM and ASB at baseline had an increased risk for developing a UTI during the 18-month follow-up (19% without ASB vs 34% with ASB). In contrast, there was no difference in the incidence of symptomatic UTI between women with type 1 DM and ASB and those without ASB (15% without ASB vs 12% with ASB). However, women with type 1 DM and ASB had a tendency to have a faster decline in renal function than those without ASB (relative increase in serum creatinine level 4.6% vs 1.5%). The researchers concluded that women with type 2 DM and ASB have an increased risk of developing a symptomatic UTI than women with type 2 DM without ASB.

*Geerlings SE, Stolk RP, Camps MJ, et al. Consequences of asymptomatic bacteriuria in women with diabetes mellitus. Arch Intern Med 2001;161:1421–7.*

## CONDOMS AND THE TRANSMISSION OF HERPES SIMPLEX VIRUS, TYPE 2

A study was conducted to identify the acquisition of herpes simplex virus, type 2 (HSV-2) infection by susceptible partners, compared with those remaining free of HSV-2, with regard to demographic characteristics, sexual activity, and condom use. Data were analyzed from a randomized, double-blind, placebo-controlled efficacy trial of an ineffective candidate HSV-2 vaccine with 18 months of follow-up. A total of 528 monogamous couples discordant for HSV-2 infection (involving an HSV-2–susceptible population of 261 men and 267 women) were studied. Twenty-six women (9.7%) vs 5 men (1.9%) acquired HSV-2, for a rate per 10,000 sex acts (episodes of sexual intercourse) of 8.9 vs 1.5, respectively. In multivariable analysis, younger age, seropositivity for HSV-1 and HSV-2 vs HSV-2 alone in the source partner, and more frequent sexual activity were associated with higher risk of HSV-2 acquisition. Condom use during more than 25% of sex acts was associated with protection against HSV-2 acquisition for women but not for men. Risk of HSV-2 transmission declined from 8.5 per 100 person-years in the initial 150-day interval to 0.9 per 100 person-years in the final 150-day interval, concurrent with a decrease in sexual activity and proportion of sex acts occurring when the source partner had genital lesions. The researchers concluded that condom use offers significant protection against HSV-2 infection in susceptible women. They further concluded that changes in sexual behavior (correlated with counseling about avoiding sex when a partner has lesions) were associated with reduction in HSV-2 acquisition over time and that the identification of discordant couples can reduce transmission of HSV-2, especially for heterosexual couples in which the male partner has HSV-2 infection.

*Wald A, Langenberg AG, Link K, et al. Effect of condoms on reducing the transmission of herpes simplex virus type 2 from men to women. JAMA 2001;285:3100–6.*

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