Recent developments in genital herpes

In this Adult Infectious Disease Notes important observations regarding genital herpes simplex virus (HSV) infections which have been published since 1989 are reviewed.

- The seroprevalence of HSV-2 antibodies reported in adults living in the United States was 16.4%. This figure is remarkably similar to the seroprevalence reported from Toronto, Ontario at a similar time (2). In both studies, seroprevalence rates were approximately 40% higher in women than in men (1.2). In the American study, infection rates were three times higher in blacks than whites (1). The seroprevalence approaches 50% in sexually transmitted diseases clinic attendees (3).

- Most HSV-2 seropositive individuals are unaware of a diagnosis of genital herpes (3-5). However, among women, up to 50% will develop recognizable genital lesions within a period of five months (5).

- Asymptomatic shedding of HSV has been studied repeatedly in pregnant women. It is now clear that such shedding occurs in both men and nonpregnant women (6). Studies from the National Institutes of Health in the United States have found that symptomatic shedding occurs at a rate of eight days per 1000, and this rate does not differ substantially between men and women. However, the rate of asymptomatic shedding may have underestimated because culture swabs were refrigerated for up to three days prior to inoculation of cell cultures in that study.

- Although daily acyclovir therapy markedly reduces the number of recurrences of genital herpes (by about 75%) acyclovir does not reduce asymptomatic shedding of HSV (6).

- Sexual transmission occurs more commonly from an asymptomatic source patient than from a symptomatic patient (7).

- As with other sexually transmitted diseases, HSV-2 is transmitted more effectively from male to female than female to male (7).

- The prior presence of HSV-1 antibodies in serum clearly reduces the chances of sexual transmission of HSV-2 (7), however, HSV-1 antibody does not appear to prevent neonatal transmission of HSV-2 (8).

- Approximately 10% of pregnant women are both HSV-2 seronegative and have HSV-2 seropositive sexual partners (8). These women are clearly at risk of primary HSV-2 infection during pregnancy which is associated with a 40 to 50% rate of neonatal herpes infection.

- Approximately one-third of women who are asymptomatic shedders of HSV at parturition have primary HSV infections and thus are at high risk of neonatal transmission (4).

- After primary genital HSV-2 infection, asymptomatic shedding of virus is common for a period of three months (9).

- Increasing data supporting the safety of acyclovir during pregnancy have now been accrued (10).

These observations add substantially to our understanding of genital herpes and its sexual and neonatal transmission. The high prevalence of HSV-2 infections combined with the recognition of asymptomatic viral shedding as the major route of sexual transmission is yet another reason that safer sex practices must be promoted. Unfortunately, these studies do not significantly change the approach to the diagnosis and management of such infections. Guidelines for prevention of perinatal transmission were revised in 1987, recommending the abandonment of weekly genital cultures in patients with a positive history of genital herpes since: this does not identify the majority of patients with genital HSV infection: this has not been shown to predict viral shedding at labour and the risk of perinatal transmission in recurrent genital herpes is extremely low (11). Similar guidelines have been endorsed in Canada (12). Unfortunately, there is still no reliable strategy to prevent most cases of neonatal herpes infection. However, many need less cesarean deliveries can
be avoided and effective therapy is available for the approximately one in 2000 infants who develop neonatal herpes

REFERENCES
