M. genitalium May Cause Cervicitis

BY KATE JOHNSON

MONTREAL — Mycoplasma genitalium is likely an underrecognized cause of some cases of cervicitis, but the role of the physician in screening for and treating this organism remains unclear, according to Dr. Harold Wiesenfeld of Magee-Womens Hospital and the University of Pittsburgh.

Dr. Wiesenfeld outlined his work showing a link between M. genitalium and subclinical pelvic inflammatory disease, as well as more recent findings implicating the organism in the annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology.

“Many cases, perhaps most cases, of cervicitis occur in women who are negative for the traditional pathogens known to cause cervicitis, such as Neisseria gonorrhoeae and Chlamydia trachomatis,” he said in an interview. “Our findings may explain the etiology of cervicitis, and that may reassure clinicians that cervicitis as a diagnostic entity is likely an unrecognized cause of some cases of cervicitis.”

His study of 524 women at risk for lower genital tract infection and undergoing testing for sexually transmitted disease found elevated polymorphonuclear leukocytes (PMNs), a microscopic marker for cervical inflammation, in 22% of the women. M. genitalium was identified in 8% of the overall cohort, but occurred more frequently among those with elevated PMNs compared with those without (37% vs. 21%). In fact, among all women with elevated PMNs, M. genitalium was the most common pathogen “eliminating the more traditionally recognized cervicitis organisms,” Dr. Wiesenfeld said.

In contrast, only 32% of those with elevated PMNs had C. trachomatis, 22% had N. gonorrhoeae, 22% had bacterial vaginosis, and 21% had Chlamydomonas vaginalis. After logistic regression, infection with M. genitalium was independently associated with elevated PMNs, with an odds ratio of 2.5, he said.

“As there is an independent association between M. genitalium and cervical inflammation, it is likely that M. genitalium is the cause of a true cervical infection rather than just a colonizing organism,” Dr. Wiesenfeld said. “I would not expect that an in vivo colonizing organism to cause a cervical inflammatory response.”

In order to rule out confounding STDs, the analysis was then restricted to 345 women who had tested negative for gonorrhoea, chlamydia, and Trichomonas species. Eight percent of this cohort tested positive for M. genitalium, and 46% of this group had elevated PMNs compared with 18 women who had no STD infections.

“After controlling for age, M. genitalium infection was independently associated with elevated PMNs with an odds ratio of 4.7,” he said. Only a minority of women had clinical signs of cervicitis, and there were no clinical differences between those who tested positive or negative for M. genitalium.

The findings shed new light on the contributions of M. genitalium to cervicitis, but “at this point I do not think that these findings will change the routine management of cervicitis,” Dr. Wiesenfeld said.

CA-MRSA Is a Rising Cause of Postpartum Mastitis

BY SHERRY BOSCHERT

SAN FRANCISCO — Postpartum mastitis and breast abscesses are increasingly being traced to community-associated infection with methicillin-resistant Staphylococcus aureus (CA-MRSA), Dr. Natali Aziz said at a conference on antepartum and intrapartum management sponsored by the University of California, San Francisco.

In general, as many as one in three breastfeeding women in the United States develop postpartum mastitis, with approximately 10% of these developing breast abscesses. Studies of breast milk cultures have found S. aureus present in 37%-50% of mastitis cases.

A case-control study of 48 cases of S. aureus-associated postpartum mastitis in 1998-2005 found that 17 (81%) of 21 cases that were resistant to methicillin occurred in 2005 (Emerg. Infect. Dis. 2007;13:298-301).

Genetic analyses also suggested that 20 of the 21 MRSA cases were due to community-acquired MRSA, which may reassure clinicians that mastitis associated with MRSA should be treatable with oral antibiotics, added Dr. Aziz of the university.

What few data exist on postpartum MRSA infection suggest that most cases involve mastitis or soft tissue infection, and that mastitis commonly leads to abscesses, she said.

In the largest study to date of hospitalized women with puerperal mastitis, cultures from 35 women who had both mastitis and breast abscesses found that CA-MRSA was the most common organism in breast abscesses, with MRSA in approximately two-thirds of cases. MRSA was much less likely in 54 women who had mastitis alone, growing in only one culture. As in the smaller study, a majority of women with CA-MRSA did not receive an appropriate antibiotic, but empiric use of an ineffective antibiotic did not adversely affect outcomes (Obstet. Gynecol. 2008;112:533-7).

At San Francisco General Hospital in 2005, S. aureus was cultured in the breast milk of 8 of 15 cases of mastitis; only 2 had MRSA, but these women with breast abscesses all had MRSA, Dr. Aziz said.

The data so far suggest that clinicians can continue to treat routine cases of mastitis with conventional first-line medications, and that it’s reasonable to start treatment for CA-MRSA before cultures are complete.

“In our patients, we do not order cultures or recurrent failure on conventional mastitis therapy. Consider getting cultures for recurrent disease, in areas with a high prevalence of CA-MRSA, or in patients with risk factors for CA-MRSA,” Dr. Aziz advised. “Be aware of your local epidemiology for your antibiotic choice” for CA-MRSA, Dr. Aziz added. “If you’re in a community with CA-MRSA usually will require adjunct drainage or aspiration. Women whose breast milk is colonized with CA-MRSA without mastitis can continue to breastfeed or pump breast milk for term infants, but this may put preterm infants at higher risk of conjunctivitis, sep- sis, or other problems, some case reports suggest.”

It is the least effective to universally screen for MRSA or to decolonize women with MRSA in obstetric populations, a recent decision-analysis study concluded (Obstet. Gynecol. 2009;113:983-91). Dr. Aziz said she has no conflicts of interest.