MRSA Present in 2% of Women Entering L&D

BY SHERRY BOSCHERT
San Francisco Bureau
MONTEREY, CALIF.—Two (2%) of 98 pregnant women being admitted for labor or a scheduled C-section were colonized with methicillin-resistant Staphylococcus au-
reus in a pilot study. Dr. Richard H. Beigi reported in a poster presentation at the an-
nual meeting of the Infectious Diseases So-
ciety for Obstetrics and Gynecology.

The results of the study are consistent with a 2%-4% colonization rate for methi-
cillin-resistant S. aureus (MRSA) found in some populations, though higher rates have been seen in select populations. These are among the first data on MRSA in women entering labor and delivery wards, said Dr. Beigi, who performed the study at MetroHealth Medical Center, Cleveland, and now is at Magee-Women’s Hospital, Pittsburgh.

“It emphasizes the fact that we need to have very good hand hygiene,” he said in an interview at the poster session. The study was funded by Steris Corp., which makes a hand hygiene product.

The 2% rate provides a baseline for com-
parisons as the incidence of MRSA is tracked in labor and delivery over time. On-
going surveillance is warranted given the in-
creasing rates of MRSA in other specialties and the limited number of effective drug
treatments for complications of MRSA in-
fection, said Dr. Beigi and his associates.

Of the 96 women, 21 (22%) had S. aureus detected in samples from the anterior
nares. Two (10%) of the 21 with S. aureus had MRSA. One of the women with MRSA
worked in a hospital, and the other had no contact with a hospital or hospital workers as a potential source for her MRSA colon-
ization.

Eight (38%) of the 21 isolates with S. au-
reus demonstrated inducible clindamycin resistance, and one of these was a strain with MRSA. The clinical implications of this are unclear, but MRSA plus clini-
damycin resistance would further narrow choices for therapy.

In a subset of 28 women who also had cultures obtained from the outer third of the vagina, 23 (82%) had concordant find-
ings, meaning that if they were positive or negative for S. aureus in one anatomical site, they had the same result at the other site.

Six postpartum infections potentially were attributable to S. aureus—two cases of mastitis and four wound infections after C-
section. Postpartum infection rates were twice as high in women with S. aureus (10%), compared with uncolonized women (5%), but the difference was not statistical-
ly significant. A larger study might show a significant difference in infection rates, Dr. Beigi suggested.

LMWH During Pregnancy Preserves BMD

BY MITCHEL L. ZOLER
Philadelphia Bureau
LISBON—Long-term treatment with low-
molecular-weight heparin during pregnancy did not cause a drop in spinal bone mineral density in a study with 62 women.

Extended administration of low-molecular-
weight heparin (LMWH) during pregnancy, as prophylaxis for thrombosis, also did not pro-
duce a clinically important frac-
ture risk, Dr. Marc A. Roger said at the third World Congress of the International Society of Obstetric Medicine.

In contrast, long-term treatment with unfractionated heparin during pregnancy often causes a drop in bone mineral density—frequently a clinically significant drop, said Dr. Roger, head of the thrombosis and hemostasis program at Ottawa Hospital. According to prior study results, up to 2.2% of women who have had prolonged exposure to unfractionated heparin during pregnancy develop osteoporotic fractures.

The new findings came from a prespecified subgroup analysis of data collected in the Thrombophilia in Pregnancy Prophylaxis Study (TIPPS), an ongoing, multicenter trial that was designed to compare prophylaxis using LMWH with placebo for pregnancy outcomes in women with or without a thrombophilia. The subanalysis was de-
gined to assess the effect of LMWH on bone mineral density.

Both TIPPS and the bone mineral density subanalysis were sponsored by Pfizer, which markets dalteparin (Fraxiparin), the LMWH used in the studies. Dr. Roger has received research support from and is on a scientific advisory board for Pfizer.

TIPPS enrolled women with confirmed thrombophilia at less than 20 weeks’ gestation who were at risk for thromboembolism or had a history of pregnancy complications. They were random-
ized to placebo or to 5,000 U dal-
teparin daily through week 20, fol-
lowed by a regimen of 5,000 U b.i.d. through delivery. All women in the study received dalteparin post partum for 6 weeks.

In the substudy, which involved 62 women, the primary end point was the absolute lumbar-spine bone mineral density measured at 6 weeks post partum. Because of crossovers, 33 women received dal-
teparin and 29 women received placebo.

The average bone mineral densi-
ty was 1.15 g/cm² in the LMWH

Cefazolin Found Still Effective For Antepartum Pyleohnphritis

BY SHERRY BOSCHERT
San Francisco Bureau
MONTEREY, CALIF.—Cefazolin
remained an effective empiric therapy for antepartum pyleohnphritis over the last 14 years, said Dr. Greer and his associates at the annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology.

A retrospective study compared data on 136 women with antepartum pyleohnphritis who were treated at one institution in two time periods, 1992-
1993 and 2004-2006. Records revealed positive cultures in 76%, and 89% of these were caused by gram-negative isolates, found in 47 women in the ear-
er period and 46 in the later period.

Rates of multidrug resistant organism-
cisms causing antepartum pyleohnphritis were not significantly different between periods but trended upward, from 32% of isolates in 1992-1993 to 45% in 2004-
2006. Multidrug resistance was defined as resistance to at least 3 of an average of 10 antimicrobials tested per isolate.

E. coli caused more than 70% of cases. High rates of ampicillin-resistant E. coli were seen in both time periods—51% of cases in 1992-1993 and 54% of cases in 2004-2006— which confirmed the inability of ampicillin for empiric therapy of antepartum pyleohnphritis, according to Dr. Roberts of Case West-
ern Reserve University, Cleveland, Ohio, and her associates. E. coli resistance to trimethoprim-sul-
famethoxazole increased significantly from 5% of isolates in the earlier years to 23% in the later period, consistent with trends toward greater trimetho-
prim-sulfamethoxazole resistance in lower urinary tract infections over this time period.

Only 5% of E. coli isolates were resistant to cefazolin in 1992-1993 and all isolates in 2004-2006 were sus-
ceptible to cefazolin despite concerns about the emergence of multidrug resis-
tant gram-negative rods over the past two decades, Dr. Roberts said.

The study was 80% powered to detect a 30% increase in multidrug-resistant isolates between the two time periods.

The likelihood of multidrug resis-
tance was not affected by having a his-
tory of antepartum pyleohnphritis.

Clinical outcomes did not differ signif-
ificantly between the two time periods. The average length of hospitalization was 3 days in both periods and did not differ between women with or without multidrug resistant organisms. Antibiotic regimens were changed during hospi-
talization in 13% in the earlier period and 11% in the later period. In 1992-1993, 96% of the women delivered at term, compared with 65% in 2004-2006.

Screening for Thrombophilia In Pregnancy Called Futile

BY SHERRY BOSCHERT
San Francisco Bureau
LISBON—There is absolutely no reason today to universally screen pregnant women for inher-
ted thrombophilias, Dr. Ian A. Greer said at the 15th World Congress of the International So-ciety for the Study of Hyperten-
si on in Pregnancy.

Although easy and accurate tests for inherited thrombophil-
ias are available, the best man-
agement of women who have these disorders remains unclear. A systematic review of the liter-
ature turned up results from just one randomized, controlled tri-
al showing that pregnant women with a thrombophilia—in this case, antiphospholipid syn-
drome—had a modest benefit from treatment with aspirin and heparin, said Dr. Greer.

The top priority today is to run more controlled studies to test various antithrombotic treat-
ments in women with throm-
bophilia rather than starting wide-
spread screening, Dr. Greer said.

Although aspirin, unfractionated heparin, and low-molecular-
weight heparin are all treatment options, alone or in combination, not enough evidence currently exists to recommend any specific regimen over the others.

Dr. Greer and his associates have run a cost-effectiveness analysis of thrombophilia screen-
ing and treatment, using a hypo-
thetical, representative popula-
tion of 10,000 pregnant women. They assumed that treatment with low-molecular-weight he-
parin would have an 80% efficia-
cy for preventing adverse mater-
nal and fetal outcomes, including intrauterine growth restriction, pre-eclampsia, and preeclampsia.

In this analysis, the cost for preventing a single adverse event through universal screening would be about $90,000. The cost to prevent a single adverse event would be about $80,000 using sele-
ctive screening of women with a personal history of thrombophilia or venous throm-
bolism.

—Mitchel L. Zoler