Medical News

EDITED BY ELAINE LARSON ,RN, PHD

The Second Annual SHEA Meeting

The Second Annual SHEA Meeting took place in Baltimore, Maryland, on April 12-14, with approximately 400 attendees. There were 23 invited speakers, 24 oral presentations in scientific session, 40 posters, and 13 exhibitors. Below are reports of several of the presentations.

VALIDATION OF NOSOCOMIAL INFECTION SURVEILLANCE

The increased attention to outcome measure ment raises appropriate questions regarding the reliability and validity of infection rates as reported. One recent national survey reported an overall sensitivity of about 80% among infection control practitioners for defining nosocomial infections in a series of case studies.' Two additional papers presented at the SHEA meeting focused on the validation of surgical wound classification in the operating room and on the surgical would infection surveillance system. Cardo et al[2] reported that accuracy of classifications made by the operating room circulating nurse, as compared with the hospital epidemiologist, was 88% overall. Accuracy in trauma surgery was increased from 52.9% to 90.0% with education, and was higher for all types of surgery when only two classifications were necessary (i.e., National Nosocomial Infection Surveillance [NNIS] risk index). A second study by this same group compared sensitivity of three nurse epidemiologists with that of the hospital epidemiologist for surgical wound infection surveillance. Overall, sensitivity was 87%, and this increased to 100% with an eight-month learning curve. Because of the importance of obtaining accurate rates in order to make practice and policy decisions, such studies are useful. It appears that in general, infection rates are fairly accurate and that the accuracy can be increased substantially by a standardized educational effort.

EFFICACY OF UNIVERSAL PRECAUTIONS

Edward S. Wong, MD, VA Medical Center, Richmond, Virginia, reviewed issues surrounding the Centers for Disease Control recommendation for Universal Precautions (UP) and discussed two recent studies regarding the important question of efficacy. The first study[3] involved two self-report surveys of healthcare workers' estimates of the number of cutaneous exposures to blood over the previous 12 months. Surveys were conducted before and after the implementation of UP Prior to UP more than 20,000 exposures were reported (about 36/year/healthcare worker). The investigators concluded that UP were effective, although the study was limited by recall bias and a low participation rate.

In a second study, daily questionnaires to physicians were distributed for five months to get a more accurate picture of the frequency of exposures to blood as well as to record the use of barrier devices.[4] This prospective monitoring was also done pre- and post-implementation of UP There were significant reductions in actual exposures and significant increases in reported use of barrier precautions and reports of averted exposures. More than 80% of exposures occurred during procedures related to intravenous insertion or venipuncture, and 99% of the exposures occurred on the hands, indicating that gloves are clearly the most important barrier device. Lastly, there was a 60% reduction in the rate of needlesticks post-UP.

These two studies taken together represent some of the first evidence of the effectiveness of UP in reducing healthcare worker risk of occupational exposure to blood.

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