Medical News

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JCAHO Lists Infection Control Indicators for Beta Testing

The Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) Task Force on Clinical Indicators has released a description of the eight infection control indicators that will be beta tested in approximately 400 hospitals over two years. The indicators are as follows.

K-1 Surgical Wound Infection

Indicator (Numerator) : Selected inpatient and outpatient surgical procedures complicated by a wound infection during hospitalization or postdischarge.

IC-2 Postoperative Pneumonia

Indicator (Numerator) : Selected inpatient surgical procedures complicated by the onset of pneumonia during hospitalization but not beyond ten postoperative days.

IC-3 Urinary Catheter Usage

Indicator (Numerator): Selected surgical procedures on inpatients who are catheterized during the perioperative period.

IC-4 Ventilator Pneumonia

Indicator (Numerator) : Ventilated inpatients who develop pneumonia.

IC-5 Postpartum Endometritis

Indicator (Numerator): Inpatients who develop endometritis following Cesarean section, followed until discharge.

IC-6 Concurrent Surveillance of Primary Bloodstream Infection

Indicator (Numerator): Inpatients with a central or umbilical line who develop primary bloodstream infection.

IC- 7 Medical Record Abstraction of ***Primary*** Bloodstream Infection

Indicator (Numerator): Inpatients with a central or umbilical line and primary bloodstream infection, analyzed by method of identification.

IC-8 Employee Health Program

Hospital staff who have been immunized for measles (rubeola) or are known to be immune.

New Study Indicates Atypical Types of Pneumonia May Actually Be Commonplace

New data released during the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) indicate that microbes once believed to be rare or atypical are in fact common causes of pneumonia. This observation is crucial because some antibiotics traditionally used to treat the disease are ineffective against so-called "rare" microbes such as *Legionella* bacteria. These bacteria cause Legionnaires' disease, a pneumonia that results in death in about 25% of cases.

Data on *Legionella* were among the preliminary findings of a cooperative study on community-acquired pneumonia conducted in Ohio by the Centers for Disease Control (CDC), Ohio State University, and Akron City Hospital.

In the first 5.5 months of the study, 246 of 330 adult study patients hospitalized with community-acquired pneumonia were tested for each of three atypical microbes. Evidence of acute infection with either ***Legionella, Chlamydia pneumoniae,*** or ***Mycoplasma pneumoniae*** was present in 26% of these patients. All 330 patients were tested for *Mycoplasma,* and this infection was found in 14.5%; ***Chlamydia*** infection was present in 7.7% of 299 patients tested; and *Legionella* occurred in 3.8% of specimens from the 330 patients. Seven patients had dual infections.

"Increasing recognition of these atypical pneumonias is important because the cause of pneumonia is unknown in nearly half of all cases," said Joseph F. Plouffe, MD, from Ohio State University, Columbus, Ohio. Numerous organisms cause pneumonia, and laboratory tests to identify the less-common microbes are not widely available. Therefore, physicians often must treat patients empirically, basing the choice of treatment on less-than-optimal evidence.

β-lactam antibiotics often are used in therapy for

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pneumonia. These agents are effective against pneumococci, the most common cause of pneumonia, but not against the rarer microbes. The present study suggests that physicians need to be more aware of the prevalence of atypical infections in order to administer prompt effective treatment for these infections, which in the case of *Legionella* may be life threatening.

The continuation of this study is expected to help associate specific types of pneumonia with particular patient populations, enabling physicians to be more accurate in their empiric therapy.

'The goal is to establish age-specitic rates for a variety of pneumonias and to identify clinical features associated with specific causes. This information should help guide physicians in choosing effective antibiotics," said Plouffe.

Oropharyngeal Decontamination Decreases Incidence of Ventilator-Associated Pneumonia

The results of a double-blind, placebo-controlled trial, published in the May 22, 1991, issue of *JAMA,* indicate that a topical oropharyngeal antibiotic applied to patients requiring mechanical ventilation lowered the rate of ventilator-associated pneumonia by a factor of five, and decreased the requirements for intravenous antibiotics.

In the study, conducted by researchers at the University Hospital of Geneva, Geneva, Switzerland, 52 patients requiring mechanical ventilation during a three- to 34-day period (mean, ten days) received either polymyxin B sulfate, neomycin sulfate, and vancomycin hydrochloride (PNV) or placebo six times daily in the oropharynx. During the first 12 days of intubation, tracheobronchial colonization by gram-negative bacteria and ***Staphylococcus aureus,*** as well as pneumonia, occurred less frequently in the PNV group than in the placebo group (16% versus 78%, $p<.0001$).

Hospital mortality was not diierent, but systemic antibiotics were prescribed less often in the PNV group, and no resistant microorganisms emerged.

Quinolones Active Against Causative Pathogens of Travelers' Diarrhea

Temafloxacin, a new fluoroquinolone, and norfloxacin were found to be consistently active in vitro against bacterial strains that commonly cause travelers' diarrhea and persistent infantile diarrhea, according to a report from the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC).

The study also confirmed that strains of enteroadherent ***Escherichia coli*** show a high rate of resistance to antimicrobials, which may explain some of the antibiotic treatment failures for travelers' diarrhea. One hundred enteroadherent ***E coli*** isolates from American students who acquired diarrhea in Guadalajara, Mexico, in the past five years were evaluated. The study determined the minimum inhibitory concentration (MIC) of these strains and compared their patterns of susceptibility with those of other enteropathogens from the same population.

From the same population and over the same period of time, 100 isolates of enterotoxigenic ***E coli,*** 51 ***Shigella, 50 Salmonella,*** and ***47 Campylobacter*** were evaluated along with enteroadherent ***E coli*** for their susceptibility to amipicillin, doxycycline, trimethoprim, norfloxacin, and the new temafloxacin. MICs of norfloxacin and temafloxacin were less than 0.5 for enteroadherent ***E coli,*** enterotoxigenic ***E coli, Shigella,*** and ***Salmonella.*** The MIC of temafloxacin for ***Campylobacter*** also was less than 0.5.

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