Medical News

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Enterovirus and Diabetes Mellitus

Because of the abrupt dependence on insulin among juvenile-onset diabetics, researchers have attempted to link juvenile diabetes with an infectious agent. Circumstantial evidence exists that the etiology might be an enterovirus, such as coxsackievirus or echovirus.

Researchers recently studied 128 young patients with recent onset of insulin-dependent diabetes who were admitted to the Children's Hospital in Pittsburgh, Pennsylvania. The sera from the 128 affected children were studied for IgM positivity to three enteroviruses and compared with the sera of a control group. For age groups 1 to 8 years, only enterovirus 41 serology was significantly different between the study and control cases. It was noted that the IgM positivity was unlikely to represent persistent infection because of the lack of clinical symptoms in affected children. The biggest differences were found in the 13- to 18 year age group, with IgM responses to six types of coxsackie and three types of echovirus significantly more often positive in cases than in controls.

FROM: Helfand RF Serologic evidence of an association between enterovirus and the onset of type I diabetes mellitus. *J Infect Dis* 1995;172:1206-1211.

Joint Commission to Streamline Surveys

Five national groups have agreed to work with the Joint Commission on Accreditation of Healthcare Organizations to streamline the hospital accreditation process. The goal of the initiative is to reduce the amount of survey duplication in accredited facilities.

Resolving the problem was high on the list of issues cited last year by the board of the American Hospital Association, which expressed a concern for the Joint Commission's overall performance in accrediting hospitals. The accreditors who will work with the Joint Commission to reduce survey duplication are the American Association for Ambulatory Healthcare (medical groups and ambulatory surgery centers); American Society of Histocompatibility and Immunogenetics (tissue-matching labs for organ transplants); Commission on Accreditation of Rehabilitation Facilities (rehabilitation and mental health facilities); Community Health Accreditation Program (home care programs); and the Commission on Office Laboratory Accreditation (laboratories).

By joining this effort, the accreditors' survey results are being accepted in lieu of the Joint Commission as part of the commission's accreditation of healthcare networks. Following a review and approval of the accreditors program, the Joint Commission will begin to accept other groups' survey results in lieu of its own for specific areas and programs of hospitals.

The Joint Commission is at different stages with each participant in comparing standards, survey decisions and processes, qualifications, training, and supervision of surveyors. Accrediting groups still weighing a decision to participate in the collaborative effort include the American Osteopathic Association and the Unified Medical Quality Commission (capitated HMOs, medical groups, and independent practice associations). Only one group, the National Committee for Quality Assurance, which accredits HMOs, has declined to participate.

FROM: JCAHO joins project to streamline surveys. *Health Facilities Management.* 1995;8:7-8.

EPA Would Close Many Incinerators

The Environmental Protection Agency (EPA) proposed incinerator regulations that could have a devastating effect on how hospitals treat medical waste and dramatically increase their compliance cost, with little benefit to public health or the environment. Opponents to these regulations, to be issued in final form in April 1996, estimate that hospitals could spend up to $1 billion to comply. The regulations would in effect signal the end of on-site medical waste incineration, causing all waste to be shipped to landfills.

Healthcare officials say the average cost to upgrade one hospital-based incinerator could run as high as $1 million. The EPA also estimates that there are 3,700 existing incinerators, and approximately 700 new ones are expected to be built by 2000. The number of hospital-based incinerators is 2,200. The proposed regulations broadly define medical waste so that it would include virtually all waste generated in hospitals, healthcare, and research facilities. The rule also would require compliance testing every year for 3 years.

The recently installed state-of-the-art incinerator at the Mayo Clinic in Rochester, Minnesota, at a cost of $14 million, would have to be shut down if the EPA implements its proposed rules. In addition, under the current EPA pro posal, the one million pounds of noninfectious materials, such as office waste, that the clinic recycles each year would be treated as medical waste.

EPA officials have said they currently are reviewing some of the concerns raised by hospitals in preparation for the final regulations, which are due to be released in early 1996.

FROM: Incinerator plan provokes complaints. *Health Facilities Management.* 1995;8(10):11-12.

Infection Control Indicators in 1996

The Joint Commission has announced that the infection control indicators approved by the Joint Commission's Board of Commissioners in 1995 will become available to Indicator Measurement System (IMSystem) participants in 1996. The three infection control indicators focus on surgical site infections, pneumonia in ventilator patients, and bloodstream infections in patients with central or umbilical

lines. In addition, eight medication-use indicators will be available in 1996.

The IMSystem is an indicator-based performance measurement system designed to help healthcare organizations measure and improve their performance. Performance measurement systems, such as the IMSystem, are expected to be integrated into the future accreditation process. Participating hospitals collect specified indicator data elements and submit them periodically to the Joint Commission's national data repository. The hospital also can use an electronic bulletin board to transmit indicator data by modem. The Joint Commission then aggregates and analyzes the data to create individualized comparative reports.

To date, hospitals have been collecting data on five obstetrical indicators and five perioperative indicators, The IMSystem also is now ready to receive data for the new cardiovascular, oncology, and trauma indicators.

More than 80 hospitals were expected have submitted data on indicators by the end of 1995. Participating hospitals that have submitted data are receiving quarterly reports, which portray the individual hospital's performance in relation to aggregate data for other participating hospitals. The report's charts and tables also contrast the hospital's actual performance with its expected performance. The IMSystem has been designed to include a unique electronic feature for reviewing the quality of submitted data via an electronic review of every record in the IMSystem database. For more details on indicators, call the Joint Commission's Department of Indicator Measurement at (708) 916-5220, and press 1 to speak with an IMSystem associate.

FROM: Comparative charts available to IMSystem participants. *Joint Commission Perspectives.* September/October 1995;15(5):6.

Hepatitis B Vaccination of Infants is Cost-Effective

Dr. Harold Margolis and colleagues from the CDC recently completed an economic analysis of current recommendations for immunization for hepatitis B. A decision model was used to determine the incremental effects of the following strategies: (1) prevention of perinatal HBV infection; (2) routine infant vaccination; and (3) routine adolescent vaccination.

The results of the analysis indicated that prevention of perinatal infection and routine infant vaccination would lower the 4.8% lifetime risk of HBV by at least 68%, compared with a 45% reduction for adolescent vaccination. The estimated cost per year of lives saved was $164 to prevent perinatal HBV infection, $1,522 for infant vaccination, and $3,730 for adolescent vaccination.

The authors concluded that routine vaccination of infants in successive birth cohorts to prevent HBV transmission is cost-effective. While economically less attractive than infant vaccination, adolescent vaccination could serve to protect those children who were not vaccinated as infants.

In an accompanying editorial, Dr. Donald Francis challenges physicians as the leaders for elimination of HBV to take an active role, recognizing that this is difficult when often overwhelmed with the daily needs of curative medicine. However, when HBV is eliminated, Dr. Francis notes, the physicians can lead the chorus in celebration and then push for an attack on the next miserable affliction.

FROM: Margolis HS, Coleman PJ, Brown RE, et al. Prevention of hepatitis B virus transmission by immunization. *JAMA* 1995;274:1201-1208.

Francis DP. The public's health unprotected: reversing a decade of underutilization of hepatitis B vaccine. *JAMA* 1995;274:1242-1243.