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Hygienic Practices of Anesthetists in the United Kingdom

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Dr. el Mikatti and colleagues from Withington Hospital, United Kingdom, conducted a survey to assess hygienic precautions taken by anesthesiologists. Questionnaires were distributed to all 213 consultant anesthetists in the northwest region of the United Kingdom, with a response rate of 68%.

Face masks and gloves were always used by 35% and 15%, respectively; only 36% washed their hands between cases. A high proportion of anesthetists continue to administer anesthesia despite suffering from respiratory (94%), gastrointestinal (42.9%), or herpes simplex (32.6%) infections. The anesthetic breathing system was changed at the end of each day or following a high-risk case by 33% of the respondents, whereas just over 25%

changed it following a known infected case. Bacterial filters were used by 17% and changed after each case by 7%. The authors concluded that, although anesthetists are well aware of proper hygienic practices, their performance falls short of accepted recommendations.

FROM: el Mikatti N, Dillon P, Healy TE. Hygienic practices of consultant anaesthetists: a survey in the northwest region of the UK. *Anaesthesia* 1999;54:13-18.

Inactivation of *Cryptosporidium parvum* Oocyst

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Cryptosporidium parvum is a common cause of self-limited gastroenteritis in the normal host but may cause severe disease in immunocompromised persons. Person-to-person transmission has been well documented in households, child-care centers, and hospitals. Because contaminated environmental surfaces and medical devices such as endoscopes may play a role in disease transmission, Barbee and coinvestigators from the University of North Carolina studied the susceptibility of *C parvum* to chemical agents commonly used for disinfection of medical devices, as well as the

efficacy of sterilization processes. Seven disinfectants were studied at their use dilution using a suspension test. Antimicrobial activity was assessed with the use of a cell infectivity assay.

All sterilization processes tested (steam, ethylene oxide, hydrogen peroxide gas plasma [Sterrad 100, Advanced Sterilization Products, Irvine, CA]), inactivated 3 logs or greater of *C parvum*. The only liquid disinfectant or sterilant able to inactivate greater than 3 logs of *C parvum* was 6% and 7.5% hydrogen peroxide. Agents that did not completely inactivate *C parvum* included hydrogen peroxide at lower concentrations or exposure times, peracetic acid, sodium hypochlorite, a pheno-

lic, a quaternary ammonium compound, 2% glutaraldehyde, and orthophthalaldehyde.

The authors concluded that most high-level disinfectants used on endoscopes have limited efficacy against *C parvum*. However, the infectivity of *C parvum* on dry surfaces decreases rapidly. Therefore, current cleaning and high-level disinfection guidelines are adequate to prevent nosocomial transmission of *C parvum* by means of endoscopes.

FROM: Barbee SL, Weber DJ, Sobsey MD, Rutala WA. Inactivation of *Cryptosporidium parvum* oocyst infectivity by disinfection and sterilization processes. *Gastrointest Endosc* 1999;49:605-611.