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PS-010. Antimicrobial Gloves

Musa Şahin, Mehmet Gökdeniz, Muhsin Akbaba
Cukurova University Medicine Faculty, Public Health Department, Adana

Transmission of organisms by contact of gloves with surfaces following contact with a pathogen source has been recognized as an important vector for pathogenesis of health care-associated infections.On the other hand perforations of surgical gloves are common and increase with the duration of glove wear. Percutaneous injuries associated with cutting instruments, needles, and other sharps (eg, metallic meshes, bone fragments, etc) occur commonly during surgical procedures, exposing members of surgical teams to the risk for contamination by blood-borne pathogens. The CDC has estimated that more than 1,000 injuries involving sharp objects occur daily in US hospitals, placing health care workers at risk for blood-borne pathogens, including HIV, HBV, and HCV. In attempt to reduce the transmission of organisms by gloves and protect health workers from the risks of glove perforation, recent studies have focused on antimicrobial gloves. There are different types of gloves whether the external surface,the middle layer or both external and internal surface is antimicrobial-coated. Charles E. Edmiston, Jr et al suggest that antimicrobial glove was effective at significantly reducing the risk for blood-borne virus(HIV) transfer in a model of simulated glove perforation. M. Kahar Bador et al showed that use of antibacterial medical gloves significantly reduced bacterial contamination. Georg Daeschlein et al showed in an experimental research with Staphylococcus aureus and Brevundimonas diminuta species that microbial passage across surgical gloves can be reduced significantly using antimicrobial glove technology. Ruth Reitzel et al showed that antimicrobial gloves potentially provide an additional means of protection against horizontal transmission of common pathogens in a hospital setting. Ojan Assadian et al suggest that the use of antimicrobial gloves decreases the risk of surgical site infection. These findings supports that the use of antibacterial medical gloves can reduce the cross-contamination in hospitals

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