

A Short Note on Nosocomial Infection

Travis Truong*

Department of Medicine, Emory University, USA

A hospital-acquired infection is also known as a nosocomial infection. Infection that acquires in hospitals or by other health care facility [1]. To emphasize both hospital and nonhospital settings, it is sometimes called as healthcare-associated infection. Such infection can be acquired in hospital, nursing home, rehabilitation facility, outpatient clinic, diagnostic laboratory or other clinical areas. Infection spreads to susceptible individual in clinical setting in numerous ways. Health care staff may also spread the infection by contaminated equipment, air droplets, bed linens, etc.

The infections originate from the external environment, or by infected patient, or staff may be infected, the source of the infection is not easy to determine. In few cases the organism originates from the patient's own skin microbiota, becomes as an opportunistic after the surgery or other procedures that compromise as the protective skin barrier. Though the patient may have contracted with the infection from their own skin, even though it is considered as a nosocomial infection since it develops in the health care setting. To understand in an easy way the infection tends to lack evidence that it is incubating, or present when the patient entered the healthcare setting, thus meaning it was acquired post-admission [2].

About 1.7 million Healthcare-Associated infections, from all types of microorganisms, including bacteria and fungi may cause 99,000 deaths every year in U.S. In Europe, hospital surveys have been conducted, the categories of gram-negative infections are about two-thirds of the 25,000 deaths every year. Nosocomial infections may cause severe pneumonia, bloodstream infections, and urinary tract infections, and also occurs infection to other parts of the body. Many types display antimicrobial resistance, which are complicate in the treatment [3].

To deal with this, complication procedures are used, which are called as intravascular antimicrobial lock therapy that reduces infections which are not exposed to blood-borne antibiotics. Introducing to antibiotics, including ethanol, into the catheter reduces the formation of biofilms.

Sterilization goes further than sanitizing. It kills all kind of microorganisms on surface of the equipment's and surfaces through the exposure to dry heat, chemicals, ionizing radiation, or steam under pressure.

Handwashing is also called as the most important measure to reduce the risks of transmitting microorganisms from one person to other or from one site to another on the same patient.

Addition to hand wash, gloves plays an important role in reducing the risks of transmission of microorganisms. Gloves are worn for three reasons in hospitals. Firstly, they had worn to provide as a protective barrier for personnel, preventing large scale contamination when touching blood, body fluids, secretions, excretions, mucous membranes, and non-intact skin. Second, gloves are worn to reduce the microorganisms which are on the hands of personnel will be transmitted to patients during invasive or other procedures which involve touching patient's mucous membranes and nonintact skin. Third, they are worn to reduce contaminated hands of the personnel with microorganisms from a patient or a fomite can transmit those micro-organisms to the other patient. In this situation, gloves must be changed between patient contacts, and hands must be washed after removal of gloves.

References

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*Address for Correspondence: Truong, T, Department of Medicine, Emory University, USA; E-mail: dr.truongt@emory.edu

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