Burn Wound Infections in Medical Hospital Burn Unit in Bursa, Turkey

Neriman Akansel, PhD, RN
Associate Professor in Surgical Nursing, Uludag University School of Health Department of Nursing, Bursa, Turkey

Nurşen Görgeç, LPN
Uludag University Medical Hospital Department of Plastic Reconstructive and Esthetic Surgery, Burn Unit, Gorukle Campus, Bursa, Turkey

Seviç Yılmaz, RN
Uludag University Medical Hospital Department of Plastic Reconstructive and Esthetic Surgery, Burn Unit, Gorukle Campus, Bursa, Turkey

Ramazan Kahveci, PhD, MD
Professor, Uludag University School of Medicine, Uludag University Medical Hospital Department of Plastic Reconstructive and Esthetic Surgery, Burn Unit, Gorukle Campus, Bursa, Turkey

Correspondence: Neriman Akansel, Associate Professor in Surgical Nursing, Uludag University School of Health Department of Nursing, Bursa, Turkey. E-mail: nakansel@uludag.edu.tr

Abstract

Background: Burn wound infection is a leading cause of morbidity and mortality and it remains one of the most challenging concerns in burn patients. The aim of this study was to determine the types of burn wound infections in patients who were hospitalized in burn unit.

Methods: Cross sectional retrospective survey was performed on 257 patients’ swab cultures who were hospitalized in Burn Unit. A period of three years from 2003 to 2005 hospital records of the patients who were admitted in to Burn Unit. The data were collected by using patient records. SPSS 11.0 program was used for data analysis. Results were given in numbers and percentages.

Results: The ages of patients treated in burn unit were ranged between the ages of 0-92 years. More than half of our burn patients were between the ages of 15-64 (57.2%, n=147). Major causes of burn injuries were flame (42.4%), hot liquids (32.7%), and electrical burns. Close to half of the patients (47.9%) had second degree, 38.5% of them had second and third degree burns. 42.4% of the patients had at least one burn wound infection during their hospitalization period. Pseudomonas aeruginosa and staphylococcus aureus were mostly detected microorganisms. Statistically positive correlations were found between the degree of burn injury and burn wound infection (r=.198, p<0.001). TBSA affected was positively correlated with burn wound infections (r=.216, p<0.0001).

Conclusions: Effective hand washing, isolation methods, multidisciplinary care of the burned patient, collaboration among health care staff are important factors in preventing burn wound infections.

Key words: Burn, wound infections