

# **Chapter 1**

## **DERMATOLOGIC EMERGENCIES AND COMMON DERMATOLOGIC DISEASES SEEN IN EMERGENCY DEPARTMENT**

**Ali Kemal ERENLER<sup>1</sup>**

### **I) INTRODUCTION**

Dermatologic emergencies comprise 15%-20% of ED visits (Freiman, Borsuk & Sasseville, 2005). Dermatologic emergencies is a challenging issue for ED physicians. Recognition of these conditions and early interventions in primary care settings and EDs is essential to decrease mortality and morbidity (Usatine & Santy, 2010).

### **II) METHODS**

After determination of dermatologic emergencies and common dermatologic diseases seen in ED, every disease were entered by their names to PubMed database. Recent studies were selected in order to include current literature data.

### **III) DERMATOLOGIC EMERGENCIES**

#### **III a) Staphylococcal Toxic Shock Syndrome**

Presentation of *Staphylococcus aureus* (*S. aureus*) vary from an infected follicle to life-threatening conditions (Howell & Phillips, 2007). Cutaneous and systemic infections caused by *S. aureus* are known to be staphylococcal scalded skin syndrome (SSSS) and toxic shock syndrome (TSS) (Brewer & Hundley, 2008). *S. aureus* shows its clinical effects via disruption of the epithelial barrier, inhibition of opsonization by antibody and complement, interference with neutrophil chemotaxis, cytolysis of neutrophils, and inactivation of antimicrobial peptides. While exfoliative toxins (ETs) induce the ‘acantholytic’ infection of *S. aureus* due to the disruption of cell-to-cell cohesion, which allows the pathogenic organisms to spread within the epithelium, TSS toxin-1 (TSST-1) causes lethal infection in association with tampon use in women, and neonates (Iwatsuki & et al., 2006).

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<sup>1</sup> MD., Associate Professor in Emergency Medicine, Hıtit University, Department of Emergency Medicine, [akerenler@hotmail.com](mailto:akerenler@hotmail.com)

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