The profile of severe burn injury patients with sepsis at General Hospital Hasan Sadikin Bandung

Jessica Nadia Tobing and Hardisiswo Soedjana
Padjadjaran University, Indonesia

**Statement of the Problem:** Burn injury remains a major global health issue. An estimate number of 180,000 people died due to burn injury and most cases occurred in the low-middle income countries, including Indonesia. Several complications of burns may lead to mortality and sepsis is one of the major threats with the risk of developing multi organ dysfunction syndrome.

**Methodology & Theoretical Orientation:** This study applied descriptive-retrospective method on three year-medical records of severe burn injury patients. The data was classified according to age, etiology, outcome, antibiotic resistance and pathogens of sepsis.

**Findings:** There were 99 medical records of severe burn injury and 55% of them was accompanied by sepsis. The highest number of sepsis was found in the age category of 40-50 years old. Nearly 80% of the cases were fire-related burns. The blood and burn wound culture of recovered patients showed 55% contamination of Gram-positive bacteria and 50% of them were *Staphylococcus hominis*. The contamination of blood and burn wound culture of deceased patient with Gram-negative bacteria was 100% and 60% of them was *Pseudomonas aeruginosa*. The highest antibiotic resistance of the sample was to ampicillin (92.9%) followed by ceftriaxone and ampicillin sulbactam (each was 81.8%). *Pseudomonas aeruginosa* was resistant to all tested antibiotics, *Acinetobacter baumannii* had 50% sensibility to meropenem and amikacin, *Klebsiella pneumoniae* was very sensitive against amikacin and *Enterobacter cloacae* was sensible towards piperacillin/tazobactam, amikacin, ciprofloxacin and tigecycline.

**Conclusion & Significance:** There is more than 50% chance of severe burn patients to fall into septic condition. In the culture of burn sepsis, *Staphylococcus hominis* and *Pseudomonas aeruginosa* were the most identified pathogens of burn sepsis in recovered and deceased patients respectively. The pathogens were mostly resistant to ampicillin and sensitive to levofloxacin and tigecycline.

**Biography**
Jessica Nadia Tobing is a resident of plastic and reconstructive surgery from Padjajaran University Bandung, Indonesia. She gained her interest in reconstructive surgery during the 1,5 year clinical rotation at the same university. She also earned her Master's of Developmental and Reproductive Biology from Imperial College London. Soon after finishing the degree, she continued her career as ICU physician assistant for two years. This experience has sharpened her will to pursue the residency in plastic surgery.

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