

中文題目：住院及重症患者的皮膚及軟組織感染之全國性流行病學研究

英文題目：Epidemiology of skin and soft tissue infections in hospitalized and critically ill patients: a nationwide population-based study

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Background: The severity of skin and soft tissue infections (SSTIs) varies and ranges from mild superficial to deeper or potentially fatal necrotizing infections requiring intensive care unit (ICU) admission. Although SSTIs are increasing in hospitalized patients, they are reported to be rare in the ICU. We conducted this nationwide epidemiological study to describe the spectrum, incidences and characteristics of hospitalized SSTIs and to identify factors associated with ICU admission and hospital mortality.

Methods: We identified and analyzed first-episode SSTIs (n=11,390) between January 1, 2005 and December 31, 2007 from the hospitalized claims data of a nationally representative sample of 1,000,000 people, about 5% of the population, enrolled in the Taiwan National Health Insurance program. Definitions of SSTIs (including 19 groups) and bacterial or fungal infections other than SSTIs (non-SSTIs) were based on the *International Classification of Diseases, Ninth Revision, Clinical Modification* codes. Multivariate logistic regression model was applied for the analysis of factors associated with ICU admission and hospital mortality.

Results: The population incidence of hospitalized SSTIs was 345.0 per 100,000 in 2005. Overall, 9.1% of the patients had ICU admission. Rates of SSTIs were 77.6 per

1,000 hospitalizations and 101.0 per 1,000 ICU admissions. The three most common SSTIs, including “other cellulitis or abscess”, “decubitus ulcer” and “post-operation wound infection”, accounted for 76.5% of all hospitalized cases and for 72.9% of ICU ones, respectively. The next three in all hospitalized SSTIs were “anal/rectal abscess”, “gangrene” and “lower limb ulcer except decubitus”, which made up another 14.3% for hospitalized cases. On the other hand, the next three in the ICU were “infection caused by vascular device/implant”, “gangrene” and “necrotizing fasciitis”, which made up of another 24.3% for ICU cases. Overall, non-SSTIs were present in 31.3% of the patients and consistently associated with increased risk of ICU admission (adjusted odds ratios [OR] 3.32, 95% confidence interval [CI] 2.89–3.82) and hospital mortality (adjusted OR 5.93, 95% CI 4.57–7.71) across most common SSTIs. Hospital mortality rates were 0.6%–6.2% in non-ICU patients with SSTIs and 8.9%–28.2% in those with ICU admission.

Conclusions: SSTIs are not uncommon in hospitalized or critically ill patients.

Non-SSTIs were present in nearly one-third of hospitalized SSTIs and were associated with increased risk of ICU admission and hospital mortality.

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