

中文題目：Levofloxacin 抗藥 *Stenotrophomonas maltophilia* 的危險因子分析--配對的病例對照研究

英文題目：Risk factors for levofloxacin resistant *stenotrophomonas maltophilia*: A matched case control-control study

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Background: The aim of current study is to identify risk factors for levofloxacin-resistant *stenotrophomonas maltophilia* (LRSM) isolation in hospitalized patients.

Methods: We conducted a matched case-control-control study in Tri-Service General Hospital, Taipei, Taiwan. Patients with LRSM were compared to two controls groups: patients with LSSM (control group A) after matching age, sex and isolation site, and uninfected patients (control group B) after matching age, sex, isolation site and time at risk. Two conditional forward stepwise logistic regression models (cases vs. control group A and cases vs. control group B) were used to find out risk factors for LRSM occurrence.

Results: In the first multivariate analysis (cases vs. control group A), previous use of fluoroquinolone remained in the final models and was considered as a risk factor for levofloxacin resistance acquisition [odds ratio (OR), 7.167; 95% confidence interval (CI), 3.050–16.837; $p < 0.001$]. In the second multivariate analysis (cases vs. control group B), previous use of fluoroquinolone [odds ratio (OR), 3.410; 95% confidence interval (CI), 1.051–11.059; $p = 0.041$], recent ICU admission [odds ratio (OR), 15.251; 95% confidence interval (CI), 3.659–63.565; $p < 0.001$] and No. of different antimicrobials exposure previously [odds ratio (OR), 2.823; 95% confidence interval (CI), 1.577–5.502; $p < 0.001$].

Conclusion: According to our study, fluoroquinolones use was an independent risk factor for LRSM occurrence reflecting selective pressure of levofloxacin.

Keywords: Trimethoprim-sulfamethoxazole, levofloxacin, resistance, *stenotrophomonas maltophilia*