

中文題目: 中區某區域教學醫院 104 至 105 年菌血症病患之預後追蹤與臨床分析
英文題目: The outcome and clinical demographic analysis of bacteremia during 2015 and 2016 in one regional teaching hospital at Mid-Taiwan

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Background:

The most four common infectious sites of our in-patient (IPD) and out-patient department (OPD) at our hospital are blood stream infection (BSI), urinary tract infection (UTI), soft tissue infection (STI) and respiratory tract infection (RTI). We want to investigate the characteristics of our patients with BSI, as the prevalence of BSI, the trend of common pathogens of BSI, the underlying diseases of BSI, the antibiotics prescription, the outcome of BSI and the risk factors of them.

Method:

1. We will draw the trend curve of BSI/UTI/STI/RTI incidence between 2015 and 2016. Then we divide the eighteen months to three periods (group A/B/C: Jan, 2015~Jun, 2015/Jul, 2015~Dec, 2015/Jan, 2016~Jun, 2016).
2. By way of Tamis computer systems from Laboratory and Information Department, we get the information of IPD patient-days, the pathogens of four common sites infection and other characteristics (diabetes, chronic liver disease, central venous catheter c site, foley catheter, operation or wound, etc) of three cohorts.
3. Student t test and regression analysis are prepared for analyzing the difference and positive or negative relationship of three periods.

Result:

1. The primary results of three cohorts are as follows:
 - (1) Patient-days: A/B/C 87,984/87,895/84,580 & events of BSI: A/B/C 743/660/645
 - (2) Prevalence of BSI: A/B/C 8,445/7,509/7,626 per million patients-days
 - (3) The percentile of BSI: A/B/C 34.7%/30.6%/32.8%
 - (4) The distribution of age: elderly (larger than seventy years old), then middle age (thirty to seventy years old) and last was younger ones (small than thirty years old).
 - (5) The origin of all cultures from which department: more from Emergency Room, then General Surgery, Chest Medicine, GastroEnterology, Chest Medicine, later are Infectious Disease, Haematology, CardioVascular, Rheumatology and etc..

- (6) The five common pathogens of BSI are *E. coli* (25.9%), CoNS (17.5%), *S. aureus* (10.8%), *K. pneumonia* (9.8%) and GPB (5.1%). The second and fifth ones may be contaminated pathogens.
2. The outcome of BSI patients, adequate or inadequate of antibiotics prescription, the trend of common pathogens of BSI, the underlying condition and statistic analysis of all risk factors are under way and will be presented later.

Conclusion:

1. Bacteremia, sepsis, severe sepsis, and septic shock are four stages of severe infectious process. Morbidity and mortality are progress in session. The primary foci of bacteremia are UTI, STI, RTI or other sites infection, but the unknown origin ones are many still undetectable.
2. Adequate or inadequate of antibiotics prescription will decide the outcome of BSI.
3. So, we want to establish the data bank of our patients about demography, underlying diseases, risk factors of BSI, antibiotics prescription and set up the flowchart of BSI.