PM-ETB: The prognostic significance of mortality in smear positive elderly pulmonary tuberculosis: studies in Surin hospital, Thailand.

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Abstract

Background: Age-related factors not only increase the risk of TB reactivation but also enhance susceptibility to TB infection, abetting outbreaks, high co-morbidity and high mortality. This study aim to evaluated prognostic factors, that effect mortality in elderly smear positive pulmonary tuberculosis.

Methods: A five years retrospective cohort study of smear positive pulmonary tuberculosis patients from January 2013 to December 2018. This study was conducted at Surin hospital, a secondary-care referral center in Thailand. The inclusion criteria were age 15 years, smear positive. The identified patients were divided into two groups. Patients:age 15-69 years and age higher than 69 year. All of the general data and medical records for the enrolled patients were reviewed. Patients who had diabetes, acquired immunodeficiency syndrome (HIV disease), chronic kidney disease, cirrhosis or age more than 70 years were defined as immune-compromised host. Relative risk was used. Significance testing by chi-square, Fisher's exact test and time-to-event curves were generated by the Kaplan-Meier method and compared using the log-rank test. Cox proportional hazards regression analysis was performed to identify prognostic factors for 40-day survival after admission.

Results: In 5844 patients of tuberculosis from 2013 to 2018 have 675 patients identified that smear positive pulmonary tuberculosis, 401 were in control group and 134 were in the elderly group, 140 patients die and 535 patients survived. In the elderly age group, female was higher than male.The elderly group had statistically significant difference higher in acute respiratory failure and chronic kidney disease, but lower in HIV disease. The mortality rate increased continuously with age, risk difference 6.5% per 20 years. In elderly group are increase mortality rate, relative risk 1.55 times.There had statistically significant difference between two groups in mortality by univariable cox's regression analysis (hazards ratio=1.56; 95%confidence interval=1.10-2.20; P=0.012) and by multivariable Cox's regression analysis (hazards ratio=1.76; 95%confidence interval=1.23-2.54; P=0.002) were associated with 40 days survival. The medial survival was 17 and 35 days in elderly and control group, significant in log rank test (P<0.010).

Conclusion:In the elderly age group, female was higher than male.Mortality in the elderly was remarkably higher than in younger, and increased continuously with age.

Key words: Tuberculosis, critical care, acute respiratory failure, mortality, pulmonary tuberculosis, Surin hospital

Biography

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