Outcome and Characteristics of Lung Cancer Patients That Non-Received Treatment in Maharaj Nakorn Chiangmai Hospital

Anantaporn Pooprasert, M.D. and Chaiyut Charoentum, M.D.

The Thai Cancer, 2016, 31.59.016

**Background:** Lung cancer is the leading cause of cancer death in northern Thailand. Recent advances in diagnosis and treatment have progressively increased outcome of patients. The universal health care program in Thailand has reduced barriers to access treatment of this disease. However, some patients with this cancer did not receive the local standard treatment. The objective of this study is to explore the rate of and factor associated with untreated patient with this disease and compared the survival between treated and untreated patients.

**Method:** This retrospective study collected data of patients diagnosed with lung cancer between January 2010 to December 2012 from medical records at Maharaj Nakorn Chiang Mai Hospital. The rate of untreated with oncologic treatment after diagnosed with lung cancer was the primary outcome measure. Baseline patients’ characteristics were obtained and multivariable logistic regression was used to analyze factor associated with untreated. The impact of non-received treatment on survival outcome was analyzed.

**Results:** A total of 731 newly diagnosed of lung cancer patients was collected and 110 of 731 patients (15%) did not receive oncologic treatment after diagnosis of lung cancer. Patients who did not receive treatment were found to be older, poor ECOG performance status, locally-advanced stage or metastatic stage of lung cancer, high pre-cancer Charlson Comorbidity Index (CCI) score and impaired renal function. (P<0.05) The median survival time was 10.7 months in patients who were treated compared with survival time of 1.87 months in the untreated patients. (P<0.05, HR 2.38) Among the un-treated lung cancer patients, female, locally-advanced stage or metastatic stage of cancer and had abnormal hepatic function were significantly associated with shorter survival.

**Conclusion:** The study indicated that factors associated with decision not to receive treatment of patients with lung cancer were older age, poor ECOG performance status and abnormal renal function. The survival rate was significantly much lower than expected in patients with lung cancer who did not receive specific oncologic treatment.