

mesothelioma in Korea is smaller than that of some developed countries. However, mesothelioma has increased greatly in recent years in Korea, and it is expected to increase continuously considering asbestos consumption, as it happened in other countries which used large amounts of asbestos. It is important to investigate the epidemiologic characteristics and prognostic factors of malignant mesothelioma in Korea.

Methods A total of 728 patients who received asbestos-related relief from malignant mesothelioma by 2014 were included in the study. In 2015, 150 (20.6%) out of 728 people were surveyed. Interviews were conducted with structured questionnaires for patients with malignant mesothelioma and their families. The age, sex, surgical status, route of exposure, and age at diagnosis of malignant mesothelioma patients were analysed using the proportional hazard model of Cox.

Results Ninety eight (65.3%) males and 52 females (34.7%) had malignant mesothelioma according to sex. In the case of mesothelioma according to age, 49 cases (32.7%) were the highest in above 70 s, 42 cases (28.0%) in the 60 s, 40 cases (26.7%) in the 50 s, Followed by below 49 to 19 (12.7%). In this study, asbestos exposure source of subjects was 40.7% for occupational factors and 56.0% for environmental factors, which was higher than 59% of Kim, *et al.*'s (2009) study.

The latent period was 35.0 ± 15.8 years, which was mostly latent period of 30 years or more. And 39.1 ± 15.1 years in the occupational asbestos exposure group and 32.2 ± 15.7 years in the non occupational asbestos exposure group. The mean survival duration after diagnosis of mesothelioma was 19.9 ± 27.2 months. Mean occupational exposure was 15.8 ± 21.3 months in occupational asbestos exposure group and 22.8 ± 30.5 months in non occupational asbestos exposure group. Gender, exposure type, and age at diagnosis did not significantly affect the risk of malignant mesothelioma death. The risk of death was 2.20 times (95% CI: 1.15~3.56) higher in the pleura than in the other sites of malignant mesothelioma. Also, according to the received surgery, the number of patients who underwent surgery was lower by 0.52 times (95% CI: 0.33~0.81) than those without surgery.

Conclusion This study revealed that the site of onset and surgical treatment had an effect on the risk of death in patients with malignant mesothelioma. It is necessary to develop a new treatment and compensation method for malignant mesothelioma which is expected to increase rapidly in the future and to plan ways to minimise exposure to future asbestos.

1382 SURVIVAL ANALYSIS OF MALIGNANT PLEURAL MESOTHELIOMA IN MEXICAN WORKERS

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10.1136/oemed-2018-ICOHabstracts.1294

Introduction Malignant Pleural Mesothelioma (MMP) is a neoplasm with high mortality caused by exposure to asbestos. Patients with MMP have a short survival with a median of 9 months (4–18 months); the worldwide increase in MMP incidence and mortality is more than 120, 000 cases. In Mexico, it is estimated 500 cases of MMP per year; however, there

are no survival studies for this cancer. The aim of this study was to perform a case survival analysis with MMP and to identify the factors related to it.

Methods From a case study (MMP) and controls conducted from 2011–2016 in 3 hospitals in Mexico City, performed a survival analysis with the Cox model to obtain the Hazard Ratio (HR) with MMP, tumour stage, age, sex and history of occupational exposure.

Results Of the 187 cases of MMP incorporated, there was a median survival of 480 days (IQR: 239–750). A Cox model was performed obtaining an Hazard Ratio by age of 1.02 (95% CI: 1.006 to 1.04), by asbestos occupational exposure of 1.84 (95% CI: 0.95 to 3.59) and stage IV of 1.95 (95% CI: 1.34 to 2.85) adjusted by sex.

Discussion We observed that survival results are similar to those reported in the literature, that the risk of dying from MMP increases with age, occupational exposure to asbestos and tumour stage. MMP is diagnosed in advanced stages, thus survival is short, so that it is fundamental to continue the research of molecular markers for early diagnosis and to offer a timely treatment to increase survival and quality of life of patients.

1432 TUBERCULOSIS AND SILICOSIS DIAGNOSTIC CRISIS – A ZIMBABWE CASE SERIES REPORT

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10.1136/oemed-2018-ICOHabstracts.1295

Introduction Zimbabwe has a long history of extensive hard rock mining and it is likely that the occupational lung disease (OLD) burden, for conditions such as silicosis and silico-tuberculosis, is huge. Poor access by miners to occupational health and safety services and lack of occupational health (OH) diagnostic skills against a background of a high tuberculosis burden in developing countries such as Zimbabwe presents a significant challenge in the diagnosis of pulmonary tuberculosis (PTB) and or silicosis amongst miners and ex miners.

Methods This is a case series study of five ex- gold and quarry miners who worked in different mines in Zimbabwe. This study reviewed the diagnosis and management of tuberculosis and silicosis among the five ex-miners.

Results Despite a typical clinical presentation and radiological findings of silicosis, all the cases were misdiagnosed and treated for PTB. They had all been treated for PTB with two of them having been treated twice. In all the five cases, sputum for alcohol and acid fast bacilli (AAFBs) was negative with two of the cases having tested AAFBs negative on two different occasions. All the cases had had chest x rays that revealed a reticulonodular pattern. The mean occupational exposure period to silica containing dust was 9.4 years with a range of 3 months to 15 years. The mean period from clinical presentation to diagnosis of silicosis was 18 months.

Conclusions Silicosis and tuberculosis have similar presentation and lack of OH diagnostic skills can lead to unnecessary PTB treatment and delayed diagnosis of silicosis and an increased risk of tuberculosis disease. Poor OH diagnostic skills among clinicians in developing countries such as Zimbabwe can lead to delayed diagnosis of OLDs. Clinicians should be equipped with fundamental OH training and diagnostic skills in order to be able to diagnose OLDs and PTB.