

DOI: 10.5152/TurkThoracJ.2019.368

[Abstract:0507] PP-278 [Accepted:Poster Presentation] [Occupational Lung Diseases]

A Case of Malignant Pleural Mesothelioma with a History of Asbestos Contact at Work Abroad

Mümine Yüksel¹, Abdulsamet Sandal¹, Lütfi Çöplü²

¹Department of Occupational Diseases, Hacettepe University School of Medicine, Ankara, Turkey

²Department of Chest Diseases, Hacettepe University School of Medicine, Ankara, Turkey

Introduction: Malignant pleural mesothelioma (MPM) is a malignancy with poor prognosis arising from mesothelial cells of the pleura. The most common cause of MPM is asbestos exposure. The risk of MPM is higher in people who live in geographical areas with environmental asbestos and who have been worked in industrial fields that use asbestos. While MPM occurs as an occupational disease in industrialized countries, it has been more commonly seen as a result of environmental asbestos exposure in Turkey. Asbestos is used in various fields of industry, particularly in the sectors of construction, ship, automobile and textile. Although commercial use was prohibited in 2010 in Turkey, new cases of MPM due to occupational asbestos exposure will continue to be seen because of the continued risk of asbestos exposure (demolition, ship demolition) and the latent period between asbestos exposure and mesothelioma development which may be extended up to 40 years.

Case Presentation: A 76-year old male who was diagnosed with pleural effusion containing atypical mesothelial cell proliferation in cytological analysis in another center applied to our hospital. The patient with history of 60 pack-years of smoking had no history of environmental asbestos exposure. Epithelioid type malignant mesothelioma was diagnosed with the findings of Thorax CT, cytology, tru-cut biopsy and fine needle aspiration biopsy. The chemotherapy has been planned by the medical oncology department. Detailed work history revealed that the patient worked in a concrete pipe producing factory in Germany for one year in 1964 and his duty was opening and transferring the sacks of asbestos cement. The patient declared any use of personal protective equipment and he did not receive any occupational health and safety services at the workplace. Afterwards, he has worked in the sectors of material handling, ticket sale, governmental document tracking and farming. The occupational disease notification of MPM was done after association of the disease with history of occupational exposure.

Conclusion: In addition to environmental asbestos exposure in Turkey, it should be kept in mind occupational asbestos exposure related diseases can be seen in the coming years at Turkish workers who have a work history abroad similar to our case and at workers working in urban transformation and ship demolition in Turkey. Although it couldn't be performed due to hypoxemia in our case, it may be useful to determine the asbestos type by mineralogical investigation of bronchoalveolar lavage fluid in differentiation of occupational and environmental asbestos exposure.

Keywords: Asbestos, malignant pleural mesothelioma, occupational disease