

Taiwan, and to provide recommendations for improving the surveillance system.

Methods The reporting system of occupational diseases initiated by Department of Labours was used to retrieve the cases of occupational lung cancer from 2008 to 2014. Descriptive analysis was conducted including identification of exposure to asbestos. We further compared the data with Taiwan Cancer Registry. A review for international comparison of mesothelioma surveillance system was performed.

Results 73 cases of occupational lung cancer were reported, and 42 were suspected to be asbestos-related. 31 cases were confirmed as malignant mesothelioma. Only one of the 42 asbestos-related lung cancer cases was female. Their occupations and industries included construction (36%), work concerning installation and repair of boilers (24%), and shipyard and ship breaking (19%). The year of age at the time of diagnosis is 60.5, while the induction time was 35.2 years. In the same period, 349 mesothelioma cases were identified in the Taiwan Cancer Registry.

Discussion This study showed that very few mesothelioma patients seek compensation in Taiwan. Further review showed that mesothelioma surveillance system was established in many countries to provide information of mesothelioma epidemic and investigate in asbestos exposure. Some have a specific registry and rely on medical doctor, particularly pathologists, to report. Some directly link the data from the pre-existing cancer registry. In Taiwan, all hospitals were mandated to submit cancer data to the central cancer registry. Improving linkage between mesothelioma surveillance and cancer registry should be considered.

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ACCELERATED PNEUMOCONIOSIS BY ALGINATES IN A WORKER IN THE CHEMICAL-PHARMACEUTICAL INDUSTRY. CASE REPORT

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Introduction Pneumoconiosis is a respiratory disease produced by the inhalation of silicon dioxide, in its crystalline and cryptocrystalline forms, it is common to accompany other powders in the working environment. The accelerated form develops within the first ten years of the beginning of exposure to high silica level, presenting symptoms consisting of chronic cough and dyspnea of exertion accompanied by worsening of radiological images; with a national rate in Mexico of 0.48–2.39 cases per 10 000 workers.

Methods 27-year-old female worker, production manager and responsible for the area of alginates in a manufacturing company for the dental industry for 6 years, with inhalation exposure to inorganic powders and alginate vapours whose composition is calcined diatomaceous flow. Begins current disease after entering the alginate area, presenting dry cough, burning sensation in the nose and epistaxis, without going to medical attention. 5 years later she presented dyspnea of great efforts and non-productive cough, evolving at 5 months to dyspnea of moderate efforts and tachycardia; with spirometry that concluded severe restriction. Pneumoconiosis was diagnosed 10 months later by Pneumology, presenting severe dyspnea, tachycardia and nail cyanosis at moderate efforts,

requiring the use of home and ambulatory oxygen and treatment with bronchodilators.

Results Symmetrical thorax, decreased respiratory movements, fine rales in the right hemithorax and upper lobe of the left hemithorax, Plethysmography FVC 47%, TLC 64.4%, six-minute walk test suspended at 2 min by SO₂ <85%, oscillometry: increased resistance in distal airway, bronchoscopy with cytopathologic: negative to malignancy, BAAR (-).

Discussion High exposure and no personal protective equipment suitable for alginates within industrial processes can lead to the accelerated development of pneumoconiosis; in the company visit, the inhalation exposure to composite powders with calcined diatomaceous flow was corroborated, which together with the paraclinical studies and the symptomatology presented demonstrated the cause-effect relationship, work-injury.

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EARLY DETECTION OF ASBESTOS-RELATED LUNG CANCER BY LOW-DOSE MULTISLICE-CT (LOW-DOSE MSCT)

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Introduction Lung cancer is the most common cause of death from cancer worldwide, estimated to be responsible for nearly one in five (18%), or 1.38 million, cancer deaths in 2008. Of all risk factors, smoking has been identified as the major risk factor. Other causes of lung cancer include occupational (e.g. asbestos) and environmental exposures (e.g. radon decay products). Despite the reduction or ban of asbestos use in many countries, the global incidence of asbestos-related lung cancer is still increasing. Nevertheless, asbestos is still produced and exported in some countries in the world. The National Lung Screening Trial (NLST) enrolled persons at high risk for lung cancer to undergo annual screenings with either low-dose CT or single-view posteroanterior chest radiography. In the low CT-group, mortality from lung cancer was reduced by 20.0%. Currently, secondary prevention strategies are extensively discussed to reduce mortality from lung cancer.

Methods In Germany, more than 80% of lung cancers are diagnosed at an advanced disease stage (clinical stages IIIa, IIIb, and IV) where the survival rate is poor. Since lung cancer is only curable at an early stage of the disease, in Germany, formerly asbestos-exposed insured individuals have the statutory right to receive 'follow-up occupational medical examinations' which target the early detection of asbestos-related diseases. Recently, the German Social Accident Insurance (DGUV) founded a working group to establish an annual low-dose MSCT scanning program.

Results The eligibility criteria for participants are: at least 10 years of exposure to asbestos (starting before 1985) or a recognised case of asbestos-induced occupational disease (No. 4103 BKV), between 55 and 74 years of age and a history of cigarette smoking of at least 30 pack years. The participants are contacted by GVS (a joint organisation involving all German social accident insurance institutions) or the specific statutory accident insurance and examinations are offered which are carried out locally by selected physicians. A quit-smoking counselling is provided, and participants are asked to donate blood for biomarker research. For MSCT scanning, at least 16