



Asbestosis in the Era of COVID-19 Pandemic

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Asbestos-fiber inhalation, a known cause of fibrogenic and neoplastic pulmonary injury, such as asbestosis [1,2] that triggers the development of this lung disease after more than 15 years of exposure [3-6]. These various serum biomarkers, such as 1B, interleukin (IL)-18, RANTES, tumor-necrosis-factor (TNF)-alpha [7] with sustained inflammation in non-ill-exposed-asbestos persons [3], including immune-system dysregulation, chronic inflammation, and carcinogenesis [8]. In 2020, a study was conducted in Italy compared to the period 2015-2019 demonstrated decreased

deaths of asbestosis and COVID-19 among people below 80 years of age, whereas demonstrating increasing trend in persons with 80 and above with a relative mortality risks of 1.17 for asbestosis and 1.10 for malignant pleural mesothelioma (MPM) (Figure 1) [9]. A recent study revealed no difference of the various follow-up variables, such as DLCO diffusion, the 6-minute walk test, computed tomography (CT) changes, and spirometry [10]. In multivariate analysis, asbestos is not related to the COVID-19 severity, but in univariate analysis, it was related [10].

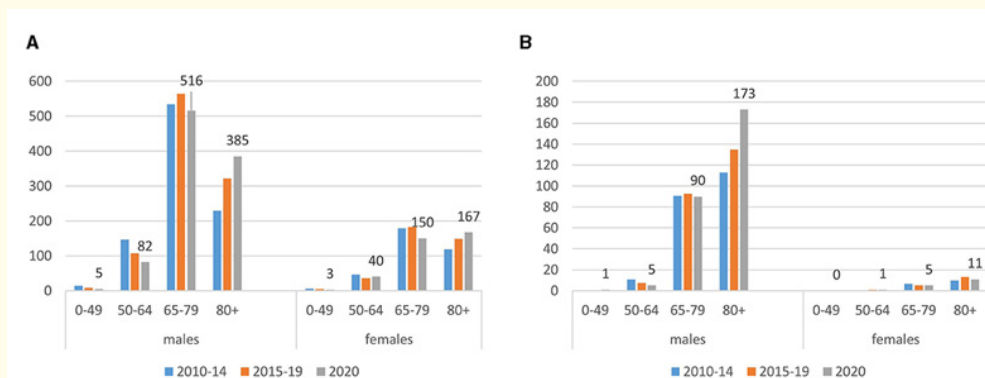


Figure 1: Number of deaths involving malignant pleural mesothelioma [MPM: (A)] and asbestosis (B), by sex and age group. Italy, 2020. Deaths and the average annual number of deaths observed in 2010–2014 and 2015–2019 [9].

In conclusion, nevertheless, independent relationship between asbestos exposure and COVID-19 severity is still to be defined.

Bibliography

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