

CORRESPONDENCE

The priority for recognizing asbestos as a multicentre carcinogen, and problems in categorizing asbestos tumours

To the Editor:

In a letter dealing with the history of mesothelioma [1], Weiss's paper of 1953 was quoted as the first report of two primary respiratory malignancies in one asbestos worker. However, Weiss merely expressed the belief that the extensive malignant pleural disease he observed in asbestos workers was multicentric in origin. It was NORDMANN [2], who seems to have been the first author to consider asbestos as a cause of multicentre malignancy in asbestos workers. Apart from attributing excesses of bronchial carcinoma and of mesothelioma in workers to their asbestos exposure, in an autopsy on an asbestos worker he found carcinomas arising in both right and left lower lobe bronchi. These he deemed to be multicentric in origin rather than representing a metastatic phenomenon. In a subsequent experimental asbestos exposure study, he found areas of hyperplasia, metaplasia and carcinoma coexisting at various sites in individual mice, which he considered support for the hypothesis that asbestos could act as a multicentre carcinogen in humans [3].

These considerations, and observations that can be made at autopsies on asbestos workers, prompt a cautious approach to statistical analyses of their cancer mortality. Some studies of mortality from bronchial carcinoma in asbestos workers, being based on cases compensated for industrial disease [4], will omit those cases where the disease of asbestosis was deemed not to be present, that is to say where the received wisdom was that the profusion of interstitial pulmonary fibrosis was insufficient to give rise to a compensatable malignant tumour. (The asseveration that it is necessary for substantial interstitial pulmonary fibrosis to be present before bronchial carcinoma can be attributed to asbestos is a long time adying).

Most papers presenting analyses of malignant mesothelioma, while discussing the problem of confounding by other tumours, have put them in clear-cut categories of pleural or peritoneal [5]. Mesotheliomas present a spectrum of appearances at postmortem, ranging from the situation where all visible tumour is confined to thorax or

abdomen, to the not uncommon and inconvenient situation where tumour is seen above and below the diaphragm. On death registration, whether the primary site gets designated as pleural or peritoneal is an arbitrary matter.

The coexistence of other primary malignancies (primary carcinoma multiplex) in asbestos workers is not commonly reported, yet if the series were large enough, they are to be found by the assiduous pathologist. In a limited study [6] of 246 cases of malignant mesothelioma, where autopsies were nonstandardized and conducted by a large number of pathologists in England and Wales, and Scotland, three were reported as having coexisting additional primary malignancies. This was not significantly different from the findings in a review of a series of 3,771 general autopsies [7], where the prevalence of primary carcinoma multiplex was 1.2%. This figure would possibly be larger in a meticulously standardized prospective study.

References

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