MALIGNANT MESOTHELIOMA OF THE PLEURA AND OTHER MALIGNANCIES IN THE SAME PATIENT

Claudio Bianchi, Tommaso Bianchi, and Lucia Ramani

Center for the Study of Environmental Cancer, Italian League against Cancer, Monfalcone (Gorizia), Italy

Aims and background: The co-existence of mesothelioma, mostly asbestos-related, and other primary malignancies has repeatedly been reported. The present study evaluated the frequency of such an occurrence.

Methods: In the period October 1979-June 2002, 215 cases of malignant pleural mesothelioma were diagnosed at the Hospital of Monfalcone, Italy. All the cases of the above series, examined at necropsy (169), were included in the study. Occupational histories had been obtained from the patients or from their relatives by personal or telephone interviews. In 132 cases, asbestos bodies were isolated after chemical digestion of lung samples. The thoracic cavities were examined for pleural plaques.

Results: Additional malignancies were observed in 32 cases (18.9%). Multiple tumors were synchronous in 22 cases, metachronous in 8 cases, and synchronous and metachronous in 2. Four different tumors were found in 2 cases, 3 malignancies were detected in 6 patients, and 2 malignancies in

the remaining 24. The most frequent additional malignancies were prostate adenocarcinoma (7 cases), non-Hodgkin lymphoma or chronic lymphocytic leukaemia (5 cases), bladder carcinoma (4 cases), kidney carcinoma (4 cases), large bowel carcinoma (4 cases), and liver cell carcinoma (4 cases). All the patients had histories of exposure to asbestos, mostly in shipbuilding. Lung asbestos body burdens ranged between 60 and 230,000 per gram of dried tissue. Pleural plaques were found in 26 cases.

Conclusions: In contrast with other series of the literature, in the present cases the co-existence of mesothelioma and other malignancies appeared as a relatively frequent event. The lack of a control group does not allow definite conclusions about the meaning of the occurrence. However, the co-existence of certain tumors with asbestos-related mesothelioma suggests that mesothelioma and associated malignancies might share some etiologic factors (asbestos and others).

Key words: asbestos, mesothelioma, multiple malignancies, pleura.