



Study of characteristics and behavior of patients with malignant pleural mesothelioma in Cairo and Fayoum University Hospitals

By

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Abstract

Background: Malignant pleural mesothelioma (MPM) is a challenging disease regarding diagnosis and treatment; early diagnosis is important. MPM develops after a long latency period of asbestos exposure. **Objectives:** To study the behavior and characteristics of MPM in Cairo and Fayoum University Hospitals. **Patients and methods:** A total of 90 patients with MPM were examined from December 2015 to May 2017 and were subjected to history taking, clinical and radiological assessment, biopsy of the pleura for histopathological assessment, and immunohistochemical staining whenever needed. **Results:** Mean age of the studied patients was 60.57, and males were 65.6%. Occupational asbestos exposure was present in 13.3%. Radiological pleural affection was in the form of pleural effusion (93.3%), pleural thickening (52.2%), pleural nodules (1.1%) and pleural plaques (1.1%). Overall, 80% of the cases were diagnosed by thoracoscopic pleural biopsy, 18.9% by ultrasound-guided biopsy, and 1.1% by surgery. The main histopathological subtype was epithelial mesothelioma (86.7%). Immunohistochemical marker staining was done for 25 cases. Calretinin was positive in 83.3%, cytokeratin (CK7) was positive in 88.9%, CK5/6 was positive in 62.5%, and D2-40 was positive in 50% of cases. **Conclusion:** MPM had a male predominance (65.6%) and occupational hazards of exposure to asbestos. Thoracoscopic pleural biopsy is a good option for diagnosis. The main histopathological subtype was epithelial mesothelioma. Immunohistochemical markers that were frequently associated with the diagnosis of mesothelioma were calretinin (83.3%) and CK7 (88.9%).