**CT scan Characteristics in Patients Referred with Pleural Effusion: Discriminating between Tuberculosis and Malignancy in A Middle East Country**

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**Abstract**

**Objectives:** The current study decided to assess CT scan findings in patients with any kind of pleural effusion to obtain any diagnostic value of this modality of imaging to discriminate malignant conditions from benign ones, especially pleural or pulmonary tuberculosis.

**Methods:** Through a cross-sectional design, patients with pleural effusion enrolled this study when their diagnosis was known as malignancy or tuberculosis. The findings of chest CT-scan were compared between the two conditions and the frequency and statistically different variables were reported as discriminating factors between malignancy and tuberculosis.

**Results:** Among our findings, the male sex was prone to tuberculosis but pleural thickening > 10 mm, lung collapse and lung mass in CT-scan, were the most findings in malignancy absent in tuberculosis cases. No significant differences were observed in the free or loculated effusion, air-fluid level and gas, Hounsfield score and loculation involvement between groups.

**Conclusion:** CT scan, despite its unconfirmed diagnostic values, could be considered as a very useful part of diagnosing malignancies against benign or infective causes of pleural effusion, especially in terms of pleural thickening more than 10 mm, lung collapse and lung mass disregarding transudative or exudative as well as uni- or bilateral; free or loculated; mild or severe; or other kind of it. CT scan scoring system may be the next topic to work on by authors.

**Keywords: Pleural effusion, Tuberculosis, Malignancy, CT-scan, Diagnosis, Discrimination**