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Poster Session V
Lower respiratory tract infections

Respiratory system involvement in brucellosis: the results of the Kardelen study

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Objectives: Pulmonary involvement is a rare complication of brucellosis. We describe the largest series to date of patients with pulmonary brucellosis.

Methods: A 10 year retrospective, descriptive study involving 27 centers in Turkey, including all brucellosis patients with confirmed respiratory system involvement.

Results: Of 133 patients (67 males), 123 (92.5%) had acute infection (defined as less than two months) with overall mean (SD) duration of symptoms of 33.9 (8.5) days. The radiological pattern of pulmonary disease was consolidation/lobar pneumonia in 91 (68.4%) and pleural effusion in 41 (30.8%) patients, including 30 (22.5%) with both. Moreover, 23 (17.3%) patients had bronchitis (one with co-existent pneumonia) and 10 (7.5%) had nodular lung lesions (one with co-existent pneumonia and effusion). Blood cultures were positive in 56 of 119 patients and all other cases were serologically confirmed. None of 60 sputum specimens and 2/19 (10.5%) pleural fluid samples were culture positive for brucellosis. Other features of brucellosis such as osteoarticular complications were detected in 61 (45.9%) patients; 59 (44.4%) had raised liver transaminases and 59 (44.4%) had thrombocytopenia. Fifteen patients (11.3%) required management in an intensive care unit for an average of 3.8 (±2.2) days. All patients responded to standard combination antimicrobial therapy for brucellosis with no deaths, although treatment regimens required modification in seven patients.

Conclusions: Brucellosis with pulmonary involvement is rare but has a good prognosis following treatment with appropriate antibiotics. There are many clues in the exposure history, presenting clinical features and baseline blood tests that should alert the clinician to consider brucellosis.