

**P1835**

**Poster Session VI**

**Various clinical infections**

**Clinical brucellar hepatitis: the results of the Istanbul-3 study**

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**Objectives:** Although liver is a target for Brucellae, research on hepatobiliary involvement during the course of brucellosis has been limited to common Brucellar case series. This study is the largest case series ever known assessing significant liver involvement in brucellosis patients.

**Methods:** The study included 325 brucellosis patients with significant hepatobiliary involvement from 30 centers between 2000 and 2013. The patients with  $\geq 5$  times of the upper limit of normal for aminotransferases or total bilirubin level  $\geq 2$  mg/dl or local brucellar liver lesions were enrolled.

**Results:** Clinical hepatitis was detected in 284 patients (87.3%) and cholestasis was detected in 215 (66.1%) patients. Blood and bone marrow cultures yielded positive results in 111 and four patients, respectively. Diagnosis was based on the results of serological tests in the remaining patients. Fatigue (91%), fever (86%), sweating (83%), and arthralgia (79%), lack of appetite (79%), were the major presenting symptoms. Laboratory tests showed anemia in 169 (52%), thrombocytopenia in 117 (36%), leukopenia in 81 (25%), pancytopenia in 42 (13%), and leukocytosis in 20 (6%) patients. The duration of ALT normalization differed significantly in three common treatment groups ( $p < 0.001$ ). The use of doxycycline and an aminoglycoside in clinical hepatitis showed better results compared to doxycycline and rifampicin regimen ( $p < 0.001$ ) or rifampicin, aminoglycoside, doxycycline combination ( $p = 0.001$ ). However, the length of hospital stay did not differ significantly between these three combinations ( $p = 0.522$ ). During the follow-up, treatment failure occurred in four patients (1%) and relapse was seen in three patients (0.9%). Mortality was not observed.

**Conclusions:** Patients presenting with clinical signs and symptoms suggestive of hepatobiliary involvement should undergo a detailed investigation for brucellosis particularly in the endemic regions. The disease has a benign course and is easily curable with rational antibiotic combinations. In addition, the use of doxycycline and an aminoglycoside regimen seems a better strategy in select patients and adding rifampicin did not contribute to outcome probably due to hepatotoxic effects.