World Academy of Science, Engineering and Technology
International Journal of Materials and Metallurgical Engineering
Vol:16, No:11, 2022

The Frequency of Q Fever Among Hospitalized Patients with Pyrexia

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Abstract : Background: Q fever is a zoonotic disease characterized by its clinical polymorphism and can present acutely as fever, pneumonia, hepatitis, and chronically as infective endocarditis, arthritis, osteomyelitis, or hepatitis. Objective: The aim of this study is To estimate the prevalence of cases of Q fever in hospitalized febrile patients in Imam Al Hussain Teaching Medical City in Karbala. Methods: One hundred patients with pyrexia were admitted to the medical ward from 1st August to 31st December 2019. Serological procedures fortified by Enzyme-linked Immunosorbent Assay test. Patients were considered to have acute Q fever when the specific antibodies (IgM and IgG) of phase II of Coxiella burnetii were positive. Results: The mean age of the patients was 35.05±12.93 years; females constituted 60% of them. Eighteen patients (18%) showed positive results for IgM, a lower proportion (13% n=13) had positive IgG levels, and 9% showed equivocal results. Statistical analysis revealed a significant association between positive IgM levels of the female gender and in patients consuming unpasteurized milk. One patient (female aged 60 years) died in the hospital, while all other patients were discharged well. Two female patients were pregnant, and one of them had an abortion. Conclusions: Q fever is more common in febrile patients. The study indicates that this disease should not be overlooked in the differential diagnosis of acute fever. Serological testing should be performed in all patients with acute febrile illness with an unsettling diagnosis.

Keywords : antibodies, frequency, immunoglobulin IgM, Q fever
Conference Title : ICAMP 2022 : International Conference on Advanced Materials and Processing
Conference Location : Istanbul, Türkiye
Conference Dates : November 29-30, 2022