### 7<sup>th</sup> International Conference on

## **Infectious Diseases: Control and Prevention**

May 26-27, 2023 | London, UK

# Clinical and epidemiological characteristics, diagnosis, treatment and prognosis of acute brucellosis

#### **Huseynov Elchin Mammad**

Azerbaijan Medical University, Azerbaijan

#### Abstract:

Scientific data on the epidemiological aspects of the prevalence of acute brucellosis and clinical course of the disease, taking into account the gender, age, occupational and seasonal features of the infectious process are supplemented. The prevalence of IL-4(-6), TLR-2(-4) gene polymorphism was determined depending on the severity of acute brucellosis and the development of complications. Expanded understanding of the prognostic factors for the development of complications from the cardiovascular and hepatobiliary systems in patients with acute brucellosis, depending on the activity of the inflammatory process and polymorphism of the genes IL-(-6), TLR-2 (-4). It was found that among carriers of C / T polymorphic (C-589T) gene IL-4, a significantly increased risk of acute brucellosis was detected ( $\chi$ 2=29.73; p<0.0001; OR=9.63; 95% CI [3.43-27.03], whereas the carrier of the homozygous genotype C/C, on the contrary, had a protective effect on the development of acute brucellosis (OR=0.10, 95% CI [0.04-0.25]). The homozygous G / G genotype of the IL- 6 polymorphic gene (-174 G/C) was found to be significantly more common among patients with acute brucellosis with mild severity compared with patients with severe. Predictors of cardio-vascular and hepatobiliary systems lesions in patients with acute brucellosis were first analyzed and established depending on the polymorphism of IL-4, IL-6 and TLR-4, TLR-2 genes. It was found that among carriers of C/C polymorphic (-174 G/C) gene IL-6, a significantly increased risk of acute brucellosis with liver damage was determined ( $\chi$ 2=12.26; p=0.002; OR=0.97; 95% CI [0.28-3.41]), whereas the carrier of the homozygous genotype G/G, on the contrary, had a protective effect on the development of acute brucellosis with signs of acute hepatitis (OR=0.16, 95% CI [0.05-0.50]).

#### Keywords

acute brucellosis, polymorphism, genotype, interleukin, Toll-like receptor, complications, prognosis, treatment effectiveness.

#### **Biography**

Elcin Huseynov has completed his PhD at the age of 30 years from Azerbaijan Medical University. He is the director of Lokbatan Medical Center. He has published more than 15 papers in reputed journals.

Received: February 23, 2023; Accepted: February 25, 2023; Published: May 26, 2023