

**BRUCELLA INFECTIONS IN PATIENTS HOSPITALIZED FOR FEVER:
A SEROLOGICAL STUDY AT AL DELENGAT FEVER HOSPITAL,
DAMANHUR, EGYPT**

IBRAHIM M. ABDEL AZIZ

Medicine Department (Gastroenterology division), Salman Bin Abdul Aziz University Hospital,
College of Medicine, Al Kharj, Saudi Arabia

Department of Gastroenterology & Tropical Medicine, Al Azhar University Hospitals, Faculty of Medicine, Cairo, Egypt

ABSTRACT

Background

Human brucellosis is either an acute febrile disease or a persistent disease with a wide variety of symptoms. Brucellosis, one of the world's major zoonoses, is endemic in many parts of Egypt. It is an occupational hazard for veterinary employees, butchers, dairy personnel, and laboratory workers. It is a true zoonosis in that virtually all human infections are acquired from animals. There is no information available on human brucellosis from Al Delengat Fever Hospital, Damanhur, Egypt. Three species (*Br. melitensis*, *Br. abortus*, *Br. suis*), are important human pathogens; *Br. Canis*, is of lesser importance. Portals of entry are the mouth, conjunctivae, respiratory tract and abraded skin (*Centers for Disease Control and Prevention 2000*).

Aim of This Study: To study seroepidemiology of all cases diagnosed as brucellosis admitted to Al Delengat Fever Hospital during period between 2011 to 2012.

Methods and Materials

The total number of cases admitted in Al Delengat Fever Hospital were enrolled in this study during period between 2011 to 2012 was 8896 cases. From this number there were 243 (2.7%), brucella cases of both sexes (138 males (56.8%) and 105 females (43.2%) with ages ranging between 12 years to 70 years. According to this study patients were found to have brucellosis on the basis of slide agglutination method. All brucella positive patients were admitted in the hospital and subjected to detailed medical history, clinical examination, abdominal U/S, chest X-RAY and laboratory investigations (urine analysis, CBC, ESR, liver function tests, kidney function tests, fasting and postprandial blood glucose and serological studies: Malta test (slide agglutination test) and Widal test Results; The number of brucella cases admitted in Al Delengat Fever Hospital during the mentioned period is 243 cases (2.7% from the total number (8896), (138 males & 105 females) with average number of 20 cases monthly. The peak incidence of brucella cases increase during summer months. The predominant type of brucella species is **M** type in districts area. The incidence of brucella cases increases among males patients than females especially in rural area.

Conclusion

Brucellosis is a febrile illness transmitted to man from animal reservoirs, the peak incidence of brucella cases increase during summer months and increase among males than females especially in rural area. Such individuals may need treatment and follow-up.

KEYWORDS: Brucella IgG ELISA, Brucella IgM ELISA, Brucella Serology, Fever