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*Short Research Report*

**Presentation of Brucellosis in Northeast of Iran: A 5-year study**

Roghieh Golsha<sup>1</sup>, Amene Hezareh<sup>1</sup>, Elham Golshah<sup>1</sup>, Gohar Golshahi<sup>1</sup>

1:M.D., Golestan Infectious Disease Research Center, Golestan University of medical sciences, Gorgan, Iran.

\* **Corresponding Author:** Roghieh Golsha (MD), third floor, Shahid Nabavi Polyclinic, 4th Azar alley, 5 Azar St, Gorgan city, Golestan province, Iran, Postal code: 4917765181, Telephone: 0098-171-2240835, Mobile: 0911-375-8264, [roghieh\\_golsha@yahoo.com](mailto:roghieh_golsha@yahoo.com)

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Brucellosis is an infectious disease caused by bacteria of the genus *Brucella*, characterized by abortion and infertility in several mammal species, and is considered one of the most important zoonosis worldwide (1). Human brucellosis is a severely debilitating disease that requires prolonged treatment with a combination of antibiotics. The disease can result in permanent and disabling sequel and can create considerable medical expense and loss of income due to loss of working hours (2, 3). It is an occupational hazard for those who either live in close proximity to animals or handle them (4, 5). In this study, we assessed epidemiologic, clinical, and laboratory manifestations of the disease in patients referred to the Academic Central Hospital in the city of Gorgan, northeast of Iran, 2004-2008.

This descriptive cross-sectional study was conducted on all medical records of patients referred to five Azar hospitals from 2004 to 2008 (N=100). Subjects with an underlying disease such as cancer, chemotherapy, collagen vascular disease, and active tuberculosis were excluded (N=13). Data were gathered by a questionnaire including: age, sex, job, education, ethnicity, residency, history of exposure to unpasteurized dairy products, close contact with domestics, history of brucellosis and other diseases,

drug history, clinical manifestations, signs and symptoms, complications, and laboratory tests. All data were entered into SPSS-16 software anonymously and descriptive tests were used to analyze.

Seventy seven (77) patients were recruited with an age range of 14-88 years and a mean hospitalization days of 7.25 (1-43 days). There was a higher rate of male involvement (74%) compared to females (26%). Rural areas had higher rate (72.2%) in comparison to urban areas. A large number of the cases were found in farmers and shepherds (19.5%). A history of consuming unpasteurized dairy products was seen in 53.3% and 27.2% had close contact with domestics. The most common clinical manifestation was fever in 64 (83.1%), then arthralgia, and back pain. Spondilitis was the most common complication of the disease (10.4%). Anemia was reported in 77.2% of males and 40% of females.

Results of the study showed a high rate of brucellosis in our region, especially in males and rural residents. Brucellosis is a zoonosis, so it is very important to implement measures in the veterinary sector, as well as perform public health education activities to avoid human infection. The general population should be educated about the dangers of

contact with infected animals and consumption of raw milk and milk products.

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