

7th Euro Global Summit on

Clinical Microbiology and Mycotoxins

February 27-28, 2017 Amsterdam, Netherlands

Development of PCR-ELISA for specific and sensitive detection of *Mycoplasma genitalium*

Arghavan Mokari Golkhatmi¹, Hadi Farsiani², Lena Goshayeshi², Hoda Radmanesh¹ and Saeid Amel Jamehdar^{1,2}¹Imam Reza Hospital-Mashhad University of Medical Sciences, Iran²Antimicrobial Resistance Research Center-Mashhad University of Medical Sciences, Iran

Mycoplasma genitalium is a pathogenic bacterium that lives on the urinary and genital tracts in humans and can cause significant morbidity in men and women. Related infections are often asymptomatic. There are potentially serious complications that can result from an untreated infection. Routine screening of high-risk individuals would be critical for the detection and treatment of *M. genitalium*. In the absence of adequate and reliable culture and approved commercial assay techniques, most laboratories use in-house nucleic acid amplification tests for detection of this bacterium. This study aimed to develop a sensitive molecular method of PCR-ELISA for detection of *M. genitalium* and alternatively determine the prevalence of infection in women referred to a referral infertility Center in Mashhad, Northeast of Iran. Sampling process was done using vaginal swab from 100 infertile women and 100 fertile women as a control group. Isolation of *M. genitalium* DNA from clinical samples was performed using DNA extraction kit. Primers and biotinylated probe was designed for amplification of MgPa and 16S rRNA genes. For labeling PCR products, we used digoxigenin labeled nucleotides. Hybridization was done in streptavidin coated plate and detection was carried out by ABTS substrate. In this study, prevalence of *M. genitalium* in infertile women and pregnant women was 21% and 3.3%, respectively; which was statistically significant ($p=0.024$). Due to high sensitivity and cost effectiveness of PCR-ELISA method in detection of *M. genitalium* infection, this method can be used as an efficient screening method for diagnosis of this infection routinely.

a_golkhatmi@yahoo.com

Magnitude of disability and associated factors among leprosy patients after multi drug therapy in Boru Meda Hospital, South Wollo zone, Amhara region, Ethiopia

Abraham Agidew

Jimma University Specialized Hospital, Ethiopia

Background: Leprosy is a chronic infectious disease affecting the skin and peripheral nerves. Early diagnosis and full course treatment are critical for preventing lifelong neuropathy and disability to minimize the occurrence of disability. There is not enough study on prevalence of disability and its determinants.

Objective: The objective of this study is to assess the magnitude of disability and associated factors among leprosy patients after treatment in Boru Meda Hospital.

Methods: Facility based cross sectional study was conducted among 128 leprosy patients registered at Boru Meda Hospital from January 1, 2010 to December 31, 2012. Data was collected from charts, entered, cleaned, edited using EPI Info Version 3.53 for windows and analyzed by SPSS.

Results: Five patients (4%) had Grade 2 disability at discharge; 123 (96%) were discharged with either disability grading 0 or disability grading 1, which are considered to be normal disability grading. Males and rural people were more affected by the diseases: 72% and 92% respectively. Sixty percent of disability occurred due to type one reaction. The mean age of patients and treatment duration were 39.3 years and 60 days, respectively. Among the factors, type of reaction was significantly associated with disability grading ($P=0.02$).

Conclusion & Recommendation: Rural people and males are more affected by leprosy and the prevalence of disability is decreasing. Awareness creation on rural people and patients with leprosy to see healthcare providers as early as possible is warranted.

abrishmed7@yahoo.com