Editorial Overview: Medical Microbiology And Diagnosis

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Editorial Note

Journal of Medical Microbiology and Diagnosis commemorates its decade long service to the scientific community by consistently publishing peer-reviewed articles and tracking the progress and significant advancements in the field of Microbiology. Ever since its inception in the year 2012, in addition to regular issue releases on a quarterly basis, this transdisciplinary journal is also releasing special issues and conference proceedings from time to time, thus comprehensively covering a wide range of topics and emerging challenges in Bacteriology, Clinical and Medical Diagnostics, Parasitology, Bacterial Infections. The journal focuses on application oriented research on Bacteriology, Clinical and Medical Diagnostics, Parasitology, Bacterial Infections. In this issue some of the recent and impactful research articles that were published by the journal will be discussed.

Sexually transmitted infections (STI) are a group of bacterial, viral, parasite and fungal diseases of high public health concern worldwide, affecting both men and women. The aim of the present study was to establish the prevalence of a set of STI causative microorganisms in urine samples from a sexually active population presenting urological symptoms and attending a public hospital network in Bogotá, Colombia. The presence of Chlamydia trachomatis, Neisseria gonorrhoeae, Mycoplasma genitalium, Ureaplasma urealyticum, Ureaplasma parvum, Trichomonas vaginalis, Mycoplasma hominis, HPV 6/11 and Herpes simplex virus types 1 and 2, was determined using a molecular approach. Overall, positivity for any of the studied STI was 60 and 10% for women and men, respectively. The presence of urinary symptoms was associated with the highest percentage (61.1 and 75% in women and men, respectively). These results provide insights into the movement and behavior of microorganisms causing STI in the sexually active population and their possible association with urinary problems.

Dengue is a mosquito borne viral fever transmitted by Aedes aegypti and albopictus mosquito. The globally estimated burden of symptomatic cases ranges to 96 million and 58.4 million cases/year). The estimated mortality amounts 2.5% and the endemicity is spread around 128 countries of the world. The aim of our study is to identify the prevalence of dengue to the patients reporting to our tertiary care hospital in Puducherry. A prospective cross sectional study was conducted at our tertiary care hospital in Puducherry. The study was conducted over a period of 4 years from January 2013 to December 2016. The serum samples were tested by Rapid immunochromatography test. Around 272 (12.3%) cases of both primary and secondary dengue were identified. The age wise distribution of cases showed more cases in 21 to 30 age group (38.6%). The seasonal distribution shows more cases were present from September to January. There was a gradual increase in the positive cases from 2013 onwards with a peak during 2016. Being a persistent viral infection a proper vector control measure, concomitant monitoring on the Seroprevalence of dengue among the population is needed.

Leptospirosis is endemic in Peru, posing a medical threat to US Forces military personnel currently deployed in Peru. There are no reports of leptospirosis available for Peru in recent years. This study is aimed to identify the trend of prevalence for Leptospira-specific antibodies among the acute febrile patients in Peru using serological assays. The hypothesis is that the

presence of detectable Leptospira-specific antibodies in these acute febrile patients should suggest an active or recent Leptospira infection. Seven hundred and fifty samples (two hundred and fifty samples each for the year 2005, 2010 and 2015) were arbitrarily selected from individuals enrolled in an acute febrile illness surveillance study in Peru that were negative for malaria and arbovirus isolation. The overall positive for Leptospira-specific antibodies among those acute febrile patients which were negative for malaria and arbovirus isolation was 32%, 24% and 16% for years 2005, 2010 and 2015 respectively. Although, there was a decreasing trend of prevalence for Leptospira-specific antibodies among acute febrile patients which were negative for malaria and arbovirus isolation during the past 10 years, the 16% prevalence Leptospira-specific antibodies in 2015 was still quite high, indicating the potential high level of risk due to Leptospira-infection.

References

- Vargas H, Gutiérreza JE, Rojasa E, Rodriguez D, Gómeza SL, et al. "High Prevalence of Common Sexually Transmitted Diseases in Patients with Urological Symptoms Attending the Public Hospital Network from the City of Bogotá, Colombia." J Med Microb Diagn 7: 278.
- Charles MVP, Kalaivani R, Kali A, Seetha KS. "Seroprevalence of Dengue from a Tertiary Care Hospital in South India." J Med Microb Diagn (2018) 7: 279.
- Chen HW, Zhang Z, Belinskaya T, Williams M, Ching WM, et al. "The Trend of Prevalence for Leptospira Specific Antibodies among the Acute Febrile Patients in Peru." J Med Microb Diagn (2018) 7: 280