Abstraction Book

1st Iranian Congress of Clinical Microbiology
Results: Of 105 shigellosis species were isolated from patient with shigellosis. S. flexneri was the predominant serogroup (49.4%) followed by S. dysenteriae (30.9%), S. boydii (12.4%) and S. sonnei (8.6%).

Of shigellosis isolates, 100% were resistant to one or more antimicrobial agent and 98% were multi-drug-resistant.

Most strains were resistant to ampicillin (82.8%), chloramphenicol (81.9%), tetracycline (80.9%) and cotrimoxazole (75.2%). Resistance to nalidixic acid, ceftriaxon, amikacin and ciprofloxacin was observed in 41.9%, 16.2%, 16.2% and 7.6% of the isolates, respectively.

Conclusion: We suggest that shigellosis species could be an important etiological agent of diarrhea in this area, and the drugs of choice for the treatment of shigellosis should be ciprofloxacin and ceftriaxon.

Because of highly resistance to nalidixic acid, it is not recommended for treatment of shigellosis.

Tu101 Detection of species of brucella in aborted fetuses in sheep herds of Mashhad

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Background: Brucellosis is a zoonosis and causes abortion in farm animals. The disease is prevalent in many parts of Iran and is responsible for economic losses. Detection and control of the disease in animals have economic benefits and also will control mal fever in human.

Material and Methods: In a survey, 30 samples of aborted lamb fetuses were tested in microbiology Department, School of Veterinary Medicine. Samples were taken from abomasums and cultured in Blood agar and Mac Conkey agar. A blood agar culture was placed in an anaerobic jar containing CO2, and then, both cultures were incubated for 48 h at 37 °C. The grown bacteria were tested microscopically and macroscopically. Gram stain, Catalase, Oxidase, TSA and Urease tests were conducted. Also the bacteria were cultured on plates containing tunican and fusion.

Results: Of 30 samples, 3, 1 and 12 samples were detected as Brucella melitensis (%10), Brucella abortus (%33) and E. coli (%40) respectively. 14 samples were found to be negative. B. melitensis and B. abortus were observed to be the main pathogen. E. coli, opportunistic bacteria cannot be considered as important.

Discussion: B. melitensis and B. abortus cause abortion in sheep as pathogen. Regular testing and intense health care decrease the disease in animals. Vaccination is one of the best ways to control this disease in animals and thereafter in human.

Tu102 Study on the incidence of leptospirosis in Rasht, Guilan, Iran, from 2003 - 2005

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Background: Leptospirosis is a major global zoonosis mainly representing as an occupational hazard. Large outbreaks have occurred in (sub) tropical regions. The flat area of Guilan province has climatological, environmental and socio-economic conditions that are highly favorable for leptospirosis, i.e. a subtropical and humid climate, abundance of rodents and wild animals and many surface waters. Rice farming is the main activity of villagers and keeping domestic animal (cattle, horses and dogs) is very common in rural regions. Rasht is the capital of Guilan province with lots of villages and high population.

Objectives: We performed IgM-ELISA and MAT for 788 patients with clinical symptoms of leptospirosis, from 2003 to 2005, to establish leptospirosis and to explore demographic and epidemiological features of the disease in the area.

Methods: 788 blood samples were collected from patients attending Razi hospitals with clinical symptoms consistent with leptospirosis. IgM-ELISA was performed by using a commercial kit (quantitative, serion ELISA classic leptospira IgM, made in Germany) and MAT was performed by using 6 pathogenic servers (Icterohaemorrhagiae, Grippotyphosa, Hardjo, Pomona, Canicola, Ballum). All sera with 160 against at least one pathogenic strain in MAT and with titer ≥ 160 in IgM-ELISA were scored positive.

Results: Leptospirosis was confirmed in a total of 327 cases (41.5%). 71.4% of the cases were male and 28.6% were female. About 67.0% of patients were aged between 20 to 60 years. 97.0% of cases had a history of working in rice field and 78.0 of them were farmer, 11.5% of patients were housekeeper villager who had high activity in rice fields and other cases were urban resident people but all of them had history of contact with surface waters and most of them worked in a rice field for a short time 1.2% of positive cases had a history of swimming in local river. Icterohaemorrhagiae, Grippotyphosa, Hardjo, Pomona, Canicola, Ballum had highest titers in MAT, respectively.

Conclusion: Diagnosis of leptospirosis was confirmed in the laboratory for 327 of 788 cases. This suggests a high incidence of human leptospirosis. Part of the leptospirosis cases can be attributed to the intensive contact with domestic animals but rice farming seems to be the main cause of leptospirosis.