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Results: Injection of Bap subunit resulted in high antibody titers. Survival rate of immunize and unimmunized mice challenged with different doses of bacteria, shows the protective property of Bap subunit. Also moderate inflammation was observed in liver tissue of immunized mice, in comparison to slight inflammation of unimmunized group. Antibodies against Bap subunit reacted with several strains, suggesting the conservativity and similarity in epitope presentation of Bap subunit among *A. baumannii* clinical isolates.
Conclusion: It is demonstrated that immunodominant region of Bap possess target sites for a protective humoral immune response to *A. baumannii*. This region seems to be conserved. Hence, Bap stands out as an appropriate vaccine candidate. This is the first report of immunization with cell wall-localized biofilm-associated protein.

PP-016 Clinical spectrum and prognostic indicators of leptospirosis in an rural endemic tertiary center

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Background: Leptospirosis is a common zoonosis worldwide. Infection is endemic and is common in tropical and subtropical regions. In India since last two decades, leptospirosis cases have been reported with increasing frequency. We studied sixty-six patients with leptospirosis for clinical presentation and prognostic factors.
Aim:
1. To study the clinical profile of patients presenting with leptospirosis.
2. To determine the prognostic indicators for leptospirosis.

Settings and Design: This was a retrospective study of leptospira positive patients who were admitted to Sri Devaraj Urs Medical College, Kolar, Karnataka, India.
Materials and Methods: All patients presenting from 1st October to 28th February who tested IgM positive for leptospirosis were taken into the study. Their presenting complaints, clinical findings and lab findings were recorded and analyzed based on the modified Faine's criteria and all variables between patients who died and those who survived were compared.
Results: Out of total 66 patients, 32 were males and 34 females, with a mean age of 31. Predominant complaints were fever (98.5) jaundice (31.8%) myalgia (60.6%) and headache (86.6%). All were IgM positive for leptospira.12.8% patients expired and 87.8% recovered. Age >36yrs, temp > 38, myalgia, conjuctival suffusion and jaundice were more in the expired patients. On muti-variable analysis, serum bilirubin (>15 mg), hyperkalemia (>5.4), A/G ratio reversal, renal, neurological, respiratory dysfunction were found to be significant predictors of mortality ($p = 0.001$).
Conclusion: The presence of dyspnoea, oliguria, hyperkalemia, hypotension, reversed A/G ratio and high serum bilirubin on admission in patients with leptospirosis indicated high risk of death. Intensive care and early intervention should be provided for patients who present with these risk factors.

PP-017 A diagnostic multiplex polymerase chain reaction assay for the simultaneous detection of typhoidal *Salmonella* and quinolone resistance from the patient's blood

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Background: Typhoid remains an important public health problem in developing countries. The problem of typhoid fever has been exacerbated by the appearance of multiple drug resistant strains. Nalidixic acid-resistant (NAR) *S. typhi* and *S. paratyphi A* are endemic in many Asian countries. NAR isolates have reduced susceptibility to fluoroquinolones, which is associated with higher rates of morbidity and mortality. Early detection of the disease is very important for its control, effective treatment and reduced carrier state and transmission. The available diagnostic modalities are not very effective in prompt and correct diagnosis. We set out to design a diagnostic multiplex Polymerase Chain Reaction assay that could reliably detect the presence of *Salmonella* from patient's blood sample and also check for the presence of quinolone resistance gene in the bacteria for early and effective treatment.
Method: Eighty six nalidixic acid resistant typhoidal *Salmonella* strains collected from routine clinical samples were artificially inoculated in 3 ml of blood collected from healthy donors with EDTA by adding various amounts of bacteria from serially diluted cultures of 0.3 O.D (600 nm). Five nalidix acid sensitive *Salmonella* isolates and five non-*Salmonella* isolates were also run as controls.
Results: The multiplex PCR correctly detected the presence of typhoidal *Salmonella* in all the tested samples and was able to amplify the quinolone resistance gene in all of them. One round of PCR amplification with 35 cycles was able to detect as low as $\geqslant 6$ bacteria/ml of blood.
Conclusion: Typhoid fever is a very debilitating disease and hence demands very accurate and prompt diagnosis. To our knowledge, a multiplex PCR for the diagnosis and drug resistance detection for typhoidal *Salmonella* directly from the patient's blood in a single PCR round has so far not been done anywhere in the world.

PP-018 Detection of metallo-beta-lactamase producing *Pseudomonas aeruginosa* isolated from burn patients in Tehran, Iran

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Objectives: Production of metallo-beta-lactamases (MBLs) is one of resistance mechanism in *Pseudomonas aeruginosa*. There is not enough information regarding prevalence of MBL-producing *P. aeruginosa* and type of involved genes in Iran. In this study, prevalence of MBL-producing strains was determined among 100 *P. aeruginosa* isolated from infections in burn patients in Tehran, Iran.
Methods: Production of MBL were determined by an increase of $\geqslant 7$ mm in inhibition zone diameter of EDTA (930 μg) containing imipenem disk compare to imipenem disk. The PCR test was used for detection of four genes encoding MBLs (IMP-1, IMP-2, VIM-1 and VIM-2). Also, resistance to various antibiotics was determined by disk diffusion test.
Results: A high rate of resistance to antibiotics was seen in the 100 strains. Among these, MBL activity was detected in 65 of 69 imipenem-resistant strains. However, only 13 of these phenotypically-positive strains contained the MBL gene VIM-2. No other MBL genes were detected.