

BOOK OF ABSTRACTS

Published on the Occasion of a International Conference on
Cutting-Edge Strategies in Epidemiology and
Diagnostics of Infectious Diseases (CESEDID - 2025)

Organizers

Department of Microbiology, Centre for Infectious Diseases (CID),
Saveetha Dental College and Hospitals, SIMATS, Chennai

Editors: Rajesh Kanna Gopal, A.S. Smiline Girija, R.V. Geetha,
Sathish Sankar, J. Vijayashree Priyadharsini,
Pitchaipillai Sankar Ganesh & Priya Devi K.

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Title of the Book:

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account of Hp, its pathogenesis and its therapy. 2.effect of Hp on gastric and gut microbiomes. 3.effect of Hp eradication therapy on gut microbiomes 4.effect of probiotics supplementation on gut microbiomes. 5.an overall review for future studies. Antibiotic resistance continues to be a major challenge molecular targets against essential bacterial proteins could be key to resolving antibiotic resistance.

Case Studies of Organophosphate Pesticide Poisoning due to Occupational and Environmental Exposure: An Indian Perspective

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Over the past decades, pesticide poisoning has drawn serious attention from the public, as it accounts for a significant number of deaths occurring each year. Organophosphate pesticides leading to the current trend and these are less frequently investigated. This review focusing on highly hazardous and widely used organophosphate pesticides in India such as phorate, monocrotophos, methylparathion, dichlorvos and triazophos. The extent of contamination has been found by the mortality rate of occupational poisoning, self-poisoning and food poisoning. This is the first case report of the above five highly hazardous organophosphate pesticide poisoning pertaining to India. This review emphasized the organophosphate pesticide exposure and appropriate poisoning cases in several part of India.

Keywords: Agricultural farmers; Human Exposure; Pesticide Poisoning; Case Studies; Health Effects

Molecular Characterization of β -lactamase Resistance Genes Among Gram-Negative Isolates from Cancer Patients

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Background: Antimicrobial resistance (AMR), particularly β -lactamase-mediated resistance in Gram-negative bacteria (GNB), poses a significant threat to immunocompromised cancer patients. This study aimed to characterize β -lactamase resistance genes (*bla*TEM, *bla*SHV, *bla*CTX-M, *bla*OXA) in clinically significant GNB isolates from cancer patients and correlate genotypic findings with phenotypic resistance profiles.

Methods: A prospective cross-sectional study was conducted at Malabar Cancer Centre, India, over four months (April–June 2025). Non-duplicate isolates of *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa*, and *Acinetobacter baumannii* (n=101) from clinical specimens (urine, blood, exudates, respiratory, stool) were analyzed. Bacterial identification used MALDI-TOF MS, and antibiotic susceptibility