



The Bulletin
of the
Sri Lanka College of Microbiologists

Volume 5 Issue 1 September 2007 Price Rs. 9.00X

Contents

page

Council of the Sri Lanka College of Microbiologists 2006/2007	1
Council photograph	3
Message from the President	4
Annual Scientific Sessions	5
Inauguration of the Annual Scientific Sessions	6
The Scientific Programme	7
List of Guest Speakers	13
Abstracts of the Plenary Lectures	14
Oral Presentations	19
Poster Presentations	32
Residential Sessions	34
Installation of Distinguished Members	42
Articles	43
Dr. Sir Winkremesinghe Memorial Oration - 2007	60
Acknowledgements	74

Conclusion:

As a policy we should develop test methods in Sri Lanka to be compatible to our local conditions. Antigens used for the ELISA test should be comparable to strains in our country and ELISA cut off level should be validated to our population. More extensive studies are recommended to confirm the associations with *H. pylori* infection and to serotype the strains prevalent in Sri Lanka.

Funding by the National Health Research Committee is acknowledged.

OP 13

Identification of Bacteriological Aetiologic Agents Causing Acute Exacerbations in Patients with Chronic Obstructive Pulmonary Disease

Kottahachchi J, Somaratne P

Medical Research Institute, Colombo 8

Introduction:

Chronic obstructive pulmonary disease (COPD) is a slowly progressive chronic disorder characterized by airflow limitation that is not fully reversible. It is a major cause of morbidity and mortality throughout the world.

Some patients with COPD experience acute exacerbations due to various aetiologies, mainly due to the infections, of which about 40-60% are bacterial in origin. Production of beta lactamases and extended spectrum of beta lactamase enzymes by bacteria lead to treatment failure.

Objectives:

1. To identify the common bacterial aetiologic agents causing acute exacerbations in COPD patients by culturing of sputum.
2. To test the antibiotic susceptibility of the isolated organisms.
3. To detect the resistant mechanisms of isolated organisms such as production of beta lactamases, ESBL and penicillin resistance in *Streptococcus pneumoniae*.

Design, Setting and Methods:

Sputum of 100 patients clinically diagnosed as having acute exacerbations of COPD admitted to NHSL, Colombo from August to

October 2004 were collected and analysed.

Suspected bacterial pathogens were identified by biochemical tests manually prepared at the local setting. Beta lactamase production of *Haemophilus influenzae* and *Moraxella catarrhalis* was detected by acidometric method. ESBL production was confirmed by the use of combined antibiotic discs

Results:

55 patients (55%) had bacterial pathogens in their sputum and out of which 11 had dual pathogens. 20 (30.3%) of the isolated organisms were *Klebsiella pneumoniae*, while 19 (28.78%) were *Haemophilus influenzae*, 10 (15.15%) *Moraxella catarrhalis*, 8 (12.12%) *Pseudomonas aeruginosa*, 5 (7.57%) *Streptococcus pneumoniae*, 2 (3.03%) *Staphylococcus aureus* and one each of *Enterobacter aerogenes* and *Morganella morganii* were isolated. Antibiotic sensitivity for the relevant pathogens was carried out.

Conclusion:

The work undertaken was able to enumerate the causative bacterial pathogens in acute exacerbations of COPD, their antibiotic sensitivity patterns and resistant mechanisms. Thus this study will provide useful information for the empirical management of COPD patients with acute exacerbations.

OP 14

A study on methicillin resistant *Staphylococcus aureus* (MRSA) in the Lady Ridgeway Hospital

Karunaratne G.K.D, S. de Silva, G.A.D.Ranjani.

Lady Ridgeway Hospital, Colombo 8.

Objectives:

1. To determine the pattern of occurrence of MRSA in the Lady Ridgeway Hospital
2. To detect the antibiotic susceptibility pattern of the isolates.

Design, setting and methods:

Patients from whom MRSA was isolated in the microbiology laboratory for a period of 4 months from February 2007 were included in the study. Data were obtained using a questionnaire and patients were followed by