LETTER TO THE EDITOR

(J Bangladesh Coll Phys Surg 2016; 34: 231-132)

To

Editor-in-chief

Journal of Bangladesh College of Physicians and surgeons.

Subject: Letter to editor on the original article "Clinical Presentation of Bacterial Etiology of Adult Community Acquired Pneumonia.

Dear Sir,

We would like to thank Dr. Md. Abdus Salam, Dr. Md. Robed Amin and Prof. Quazi Tarikul Islam through you for choosing an excellent topic for primary research work on Clinical Presentation of Bacterial Etiology of Adult Community Acquired Pneumonia. Community acquired pneumonia (CAP), the sixth most common cause of death worldwide, represents a significant disease burden for the community, particularly in the elderly. From this study we came to know the bacterial etiology, pattern of antibiotic sensitivity in CAP in our context. It is known that the role of empiric therapy in the management of CAP is tremendous, as overall clinical outcomes are the same for both pathogen directed treatment and empiric antibiotic treatment. It is praiseworthy that the researchers defined representative sputum sample which should contain > 25 granulocytes and < 10 epithelial cells per low power field microscopic view. We would be obliged if some of my quarries are addressed. From this study we could not correlate between the clinical presentation and bacterial etiology. For admission of a patient with CAP CURB-65 should have a score of 2 or more. In this study more than 90% of study subjects were in CURB-65 score 1, which essentially can be treated at the community level without admission. The study also failed to show the resistant pattern of antibiotics in CAP. For empirical treatment of the CAP in the community the knowledge of both sensitivity and resistant pattern of antibiotics are essential. Last but not the least this study was conducted between January 2010 to December 2010 therefore may be well out of context from recent pattern of antibiotic sensitivity. We would like to draw the attention of the editor-in-chief in this regard.

We do agree with the limitations of the study as well as the recommendations made by the authors.

Never the less such studies are encouraging for the future physicians to develop an antibiogram for CAP.

Thanking You

Prof. (Dr.) S.M Hafiz
Professor of Medicine
Dhaka Medical College
&
Dr. Syed Zakir Hossain
Assistant Professor of Medicine
Dhaka Medical College

Dear Sir

Thank you very much for your attention and critical analysis of our original article "Clinical Presentation of Bacterial Etiology of Adult Community Acquired Pneumonia which was published in june 2016 in JBCPS.

In this observational study, we did not found any correlation between the symptoms and signs of pneumonia with specific bacterial organism. This observation was also seen in different studies in and around Bangladesh in Asia[1,2,3]. This indicates that the prototype presentation of Pnuemonia cannot be differentiated as per bacterial etiology through clinical presentation.

Your observation is correct that the cases admitted in hospital with low CURB 65 may be indeed treated in community setting. But in our study we selected cases of pneumonia (Clinical and radiological consolidation proven) to identify the sensitivity pattern and not just selected cases who actually needed hospitalization for treatment. This selection is also to see the pattern of sensitivity and resistant of antibiotics in community cases as well as few hospital needed pneumonia cases.

The study found around 53% cases of confirmed bacterial aetiology of CAP cases where *Strep Pneumonia* is the commonest organism. If you follow the discussion, you will find the resistant pattern has been mentioned. It was observed from this study that

isolated *Klebsiella* strain was mostly resistant to commonly used antibiotics for CAP. Other isolated organisms like *Pseudomonas, Escherichia coli*, were also resistant to B -lactamase inhibitor, Macrolides and third generation cephalosporin. The good news is that the commonest organism of *strep pneumonia* is still having sensitivity to commonly used antibiotics use in community (3rd generation cephalosporin and clarithromycin).But for gram negative cases, the study showed sensitivity mostly to meropenam which is not included in the empirical treatment modality. So the gram negative cases of pneumonia may need separate groups of drugs (including meropenam) if empirical treatment is chosen in community.

We are also concerned like you that the study showed data of 2010 and in meanwhile the sensitivity and resistant pattern may changes already. This observation actually seeks regular monitoring of aetiology and sensitivity of antibiotics in Institution based antibiogram which need to be established as quickly as possible. Otherwise the empirical based selection would stimulate drug resistant pneumonia to develop in our country especially for Gram negative organism and may also involve the commonest organism of *Strep Pneumonia.*

We again appreciate your critical analysis on this important paper and suggestions. We hope this observational study would stimulate other researchers to do study on CAP including clinical trial for evidence based practice to develop in Bangladesh.

Thanking you

Dr. Md. Robed Amin
Associate Professor
Dhaka Medical College

References:

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