268. Management of pneumonia due to hospital pathogens

P2553
The role of inflammatory parameters in the diagnosis and management of patients with community-acquired pneumonia

Irena Kondova Topuzovska[1], Sanja Petrusevska Marinkovic[1], Goran Kondov[2], Sonja Alabakovska[3], Ankica Anastasovska[1]. [1]Respiratory Department, University Clinic of Infectious Diseases, Skopje, Macedonia, The Former Yugoslav Republic of; [2]Thoracocardiovascular Surgery, University Clinic, Skopje, Macedonia, The Former Yugoslav Republic of; [3]Institute for Biochemistry, Medical Faculty, Skopje, Macedonia, The Former Yugoslav Republic of

The aim of this study was to determine whether there is a significant difference between the values of C-reactive protein (CRP) and white blood cells (WBC), in patients with serological proved atypical pneumonia and in serological negative atypical pneumonia.
Materials and methods: A total of 403 adult hospitalized patients with clinical and radiographic findings of pneumonia. Diagnosis of acute atypical pneumonia was established by serological confirmation of IgM and IgG antibody against Mycoplasma pn., Coxiella burneti, Chlamydia pn. and Legionella pn. There were compared the values of the age, sedimentation, WBC, lymphocytes, neutrophils, CRP and aminotranspherases in patients with pneumonia with atypical infection (n=145) and in serological negative for atypical pathogen (n=248).
Results: The mean age of patients was 49,86 years, 209 (51,86%) were male and 194 (48,14%) female. Atypical acute infection there was in 145 (35,98%), in 10 (2,48%) mixed etiology and 248 (61,54%) were negative for atypical pathogen. The main value of the age in patients with positive result for atypical pathogen was statistical significance lower (t=-4,39, p<0,05). The concentration of CRP was statistical higher in the group with negative result for atypical pathogen (146,7mg/l) then in atypical positive group (71,1mg/l) (t=-4,46, p< 0,05), while there was not statistical significance in value of WBC between the two groups (t=-1,09, p= 0,28).
Conclusion: Although nonspecific C-reactive protein as a parameter of inflammation, within the whole diagnostic protocol in patients with pneumonia, can be useful in their initial differentiation on atypical of not atypical.

P2554
Comparison of laparoscopic sleeve gastrectomy pulmonary complications comparing to laparoscopic adjustable gastric banding

Olga Talkar, David Shitrit. Pulmonology, Meir Medical Center, Kfar Sava, Israel

Introduction/rationale: Major changes in gastric anatomy and physiology following Laparoscopic adjustable gastric banding (LAGB) and laparoscopic sleeve gastrectomy (LSG) may increase the risk of esophageal regurgitation, increasing possibility of long-term pulmonary complications.
Methods: A retrospective case-control study was performed including all patients undergoing bariatric surgery, LAGB or LSG, over a 10-year period (2000-2010) at Meir Medical Center, Israel. Two groups were defined: patients who underwent LAGB or LSG. Data included all perioperative management and were recorded in hospital computer database. All patients were thoroughly examined and questioned about pulmonary complaints, such as: shortness of breath, persistent cough, pneumonias, infected bronchiectasis.The data were analyzed using Mann Whitney test for independent samples and Chi square test, with p< 0.05 considered significant.
Results: The patients underwent either LAGB (n=193, mean age 43.1 yrs., +-12.3 yrs., 144 (76.6%) females, 21(10.9%) with previous lung disease) or LSG (n=114, mean age 45.5, ±11.3 yrs., 83 (73%) females, 12(10.5%) with previous lung disease). The LSG patients had significantly lower rates of morning cough and postprandial cough than did the LAGB patients: 14(12.3%) vs. 115(59.6%), p< 0.001, 12(10.5%) vs. 112(58.0%), p< 0.001, respectively, similar rate of pneumonia(2 cases in each group) was noted follow the surgery. Mortality was zero.
Conclusions: Follow-up data demonstrated relatively less postoperative pulmonary complications after LSG comparing to LAGB. Additional follow-up is required to define long-term safety.

P2555

A resistor infection in intensive care unit: Enterococci

Muhammed Emin Akkoyunlu[1], Yasemin Akkoyunlu[2], Turan Aslan[2], Mehmet Bayram[1], Hatice Özçelik[1], Fatmanur Karaköse[1], Ersan Atahan[1], Murat Sezer[1], Levent Kart[1]. [1]Department of Chest Disease, Bezmialem Vakif University, Istanbul, Turkey; [2]Department of Infectious Disease and Clinical Microbiology, Bezmialem Vakif University, Istanbul, Turkey

Aim: Nosocomial infections at intensive care units are serious problems because of antibiotic resistance and negative affect on mortality. The aim of our study is to evaluate intensive care unit (ICU) acquired infections due to Enterococcus spp.
Method: Three hundred sixty-three patients who stayed more than 48 hours in ICU between 1 January-31 December 2011 were evaluated retrospectively.
Results: Twenty patients developed 31 infection attacks due to Enterococcus spp. During this 1 year period. The mean age of patients was 73.5 ± 10.9. Enterococcus spp. yielded at patients' blood (n:22,%71), catheter (n:6,%19.4), tracheal aspiration material (n:2, % 6.5) and urine (n:1, % 3.2) culture. Among these causative agents 20 of them (% 64.5) had penicilinle resistance and 2 of them (n:%6.5) had vancomycine resistance. Overall mortality rate was %37 (n: 135), whereas the mortality rate of patients infected with Enterococcus spp. was %70.4 (n:19). Two cases who were infected with vancomycine resistant Enterococcus (VRE) died
Conclusion: Infection with enterococcus spp. increases mortality rates. Especially presence of vancomycine resitance, antibiotherapy choices get narrowed and leads to increases in mortality rates.

P2556

Determinants of hospital costs in community acquired pneumonia

Burcu Karaboga[1], Ugur Bilge[2], Aykut Cilli[1]. [1]Chest Diseases, Akdeniz University Medical School, Antalya, Konyaalti, Turkey; [2]Biostatistics and Master of Science Branch of Medical Informatics, Akdeniz University Medical School, Antalya, Konyaalti, Turkey

Community-acquired pneumonia (CAP) is a prevalent disease and constitutes a substantial socio-economic burden. On the other hand, there is limited data about the cost of CAP in Turkey.
This study investigated direct costs and related factors for hospitalised CAP patients. Direct hospitalisation costs and possible associated factors (age, sex, comorbidity, clinical and laboratory findings, smoking history, antibiotic usage within 3 months, length of hospital stay, ICU stay, PSI, CURB65, treatment success and medication groups such as antibiotics, steroids, immunosupressives) were assessed in a retrospective study of 106 patients admitted to a hospital ward due to CAP.The mean patient age was 60.4 yrs and 35.8% were female. Comorbidities were found in 87% and the most significiant comorbidities were DM, CAD and COPD. Eight (7.5%) patients needed ICU care. Overall CAP treatment success rate was 89.6%. Length of hospital stay (p=0.001, r= 0.78), use of antipseudomonal antibiotic combination (p=0.001), use of antibiotic within 3 months (p=0.001) and two or more hospitalisation days within 3 months (p=0.031) increased the costs but age, comorbidity, treatment success, ICU requirement, PSI and CURB65 scores did not increase the costs. In conclusion, this study provides cost estimates for the treatment of patients hospitalised with CAP. Major determinants of costs were length of hospital stay, use of antipseudomonal antibiotic combination, use of antibiotic within 3 months and two or more hospitalisation days within 3 months.

P2557

Comparison of invitro antimicrobial susceptibility tests of patients admitted in a tertiary respiratory center intensive care unit with their clinical symptoms related to ventilator associated pneumonia (in vivo results)

Majid Malekmohammad[1], Mohammadreza Hashemian[1], Parisa Adimi Naghan[2], Helenaz Fazlalizadeh[1], Makan Sadr[2], Hamidreza Jamaati[1]. [1]Pulmonology and Critical Care, National Research Institute of Tuberculosis and Lung Diseases, Tehran, Islamic Republic of Iran; [2]Pulmonology, National Research Institute of Tuberculosis and Lung Diseases, Tehran, Islamic Republic of Iran

Background: Ventilator associated pneumonia (VAP),is the most common nosocomial infection in ICU admitted patients.There is no study about comparison of clinical response to routine VAP treatment and susceptibility of microorganism to antibiotics in VAP suspected patients.
Methods: In this cross-sectional retrospective study, the files of 99 mechanically ventilated patients in a respiratory center ICU were assessed. Patients demographic data, underlying diseases, Clinical Pulmonary Infection Score (CPIS), in vitro (culture) results, antibiogram and antibiotic regimen were recorded.The change in CPIS was considered as positive in vivo. The result of culture of secretions (especially tracheal secretion) was considerd as in vitro result.
Results: From 99 patients, 59 (60%) were male with a mean age of 42 years.14 patients (14%) had positive in vivo result and 19 patients (19%) had positive

Comparison of in vivo versus in vitro results in ICU patients

		In vitro Positive	Inv itro Negative
In vivo	Positive	10 (71%)	4 (29%)
In vivo	Negative	9 (11%)	76 (89%)

P<0.001.

in vitro result. 60% of patients had given VAP antibiotic regimen. Comparison between results are seen in. 56% of patients with both positive results of in vivo and in vitro had resistant antibiotic susceptibility test in antibiogram. Near to half of patient with both negative results of in vivo and in vitro had given antibiotic regimen for VAP.
Conclusion: More attention to clinical condition of patients (CPIS) than laboratory results is necessary for beginning of VAP antibiotic treatment.

P2558

Hospitalizations for pneumonia caused by gram-negative agents

Catarina Ferreira, Catarina Dias, Teresa Costa, Fernando Barata. Pulmonology Department, Hospital Geral, Centro Hospitalar e Universitário de Coimbra, Portugal

Pneumonia by Gram-negative bacteria responds for 40-45% of nosocomial pneumonia (NP) and less than 10% of community-acquired pneumonia (CAP). In recent years more aggressive Gram-negative agents have emerged.
Objective: Characterize hospitalizations for pneumonia by Gram-negative agents.
Methods: Retrospective analysis of pneumonia with Gram-negative bacilli isolation, from January 2010 to December 2011. Evaluated demographics, co-morbidities, microbiological, radiological, treatment and outcomes.
Results: Included 80 patients, 69% male, mean age 74.5 ($\pm$13.8) yrs, 74% admitted from home, 98% with comorbidities, the most common being chronic pulmonary disease (63%). Regarding the classification of pneumonia, 58% were NP, 23% related to health care and 19% CAP. Chest radiography showed multifocal involvement in 68% and bilateral in 40%. Identified 111 Gram-negative, 83% in sputum culture, the most frequent Klebsiella pneumoniae (27%), followed by Pseudomonas aeruginosa (18%) and Acinetobacter baumannii (17%). K. pneumoniae predominated in NP (28%) and associated with health care (27%), while in CAP was P. aeruginosa (26%). Gram-positive concomitant infection in 48%, 90% of these by Staphylococcus aureus methicillin-resistant. Initial antibiotics were empirically changed in 10% and adjusted according to the identified isolate in 58%. Respiratory failure requiring invasive ventilation in 4%, pleural effusion in 11% and atelectasis in 6%. The average hospital stay was 23.6 ($\pm$16.9) days. The mortality rate was 26%.
Conclusion: Pneumonia by Gram-negative was nosocomial in most, occurred in individuals with advanced age and comorbidities, including chronic respiratory disease, with prolonged hospital stay and high mortality rates.

P2559

Pseudomonas infection risk in bronchiectasis: A retrospective cohort analysis of longitudinal microbiology in 174 patients

Hannah Jary[1], Jim MacFarlane[1], Katy Hester[1], Paul McAlinden[2], Therese Small[2], John Perry[3], Kathy Walton[3], Anthony De Soyza[1]. [1]Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, South Yorkshire, United Kingdom; [2]Sir William Leech Centre for Respiratory Research, Freeman Hospital, Newcastle upon Tyne, South Yorkshire, United Kingdom; [3]Department of Medical Microbiology, Freeman Hospital, Newcastle upon Tyne, South Yorkshire, United Kingdom

Background: Pseudomonas aeruginosa (PA) is a key pathogen in bronchiectasis, a disease characterised by recurrent infections. However, little is known of the infection risk in bronchiectasis stratified by levels of airflow impairment.
Aims: To explore the relationship between longitudinal airway microbiology in bronchiectasis and clinical markers of disease severity.
Methods: A retrospective database review of consecutive adult patients attending a UK bronchiectasis clinic from 2007 and 2010. We stratified patients by lung function (FEV1% predicted: severe $\leq$40%; moderate 41-79%; mild $\geq$ 80%).
Results: 174 patients were identified with mean microbiological data for 6 years. Mean exacerbation frequency in 152 patients was 4.17/year; 70% reported 3+ exacerbations per year. Patients had a mean FEV1% predicted of 65.7 ($\pm$30.1), with minimal, moderate and severe airflow limitation found in 27.0%, 50.0% 21.8% of patients respectively (2 patients had missing data). Aetiology of bronchiectasis was found to be idiopathic or post-infectious in 58.8% and COPD in 9.2%. Isolation of Haemophilus influenzae (HI) was more common than of PA (52.9% vs 47.1%), but persistent colonisation was more common with PA. Of patients with minimal airflow limitation, 31.9% isolated PA compared to 71.1% of those with severe airflow limitation. Hospital admissions but not self reported exacerbations were more common in the PA infected group.
Conclusions: PA is associated with greater persistence rates and more hospital admissions than HI. PA infection occurs across all strata of lung function impairment. Careful microbiology follow up is required even in those with preserved lung function.

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P2560
Microbial contamination of single- and multiple-dose vials after opening in a pulmonary teaching hospital

Shadi Baniasadi[1], Atosa Dorudinia[2], Mandana Mobarhan[2], Fanak Fahimi[3]. [1]Virology Research Center, Natonal Research Institute of Tuberculosis and Lung Disease, Tehran, Islamic Republic of Iran; [2]Pathology Department, Natonal Research Institute of Tuberculosis and Lung Disease, Tehran, Islamic Republic of Iran; [3]Chronic Respiratory Disease Research Center, Natonal Research Institute of Tuberculosis and Lung Disease, Tehran, Islamic Republic of Iran

Introduction: Intravenous therapy is a complex procedure usually requiring the preparation of the medication in the clinical area before administration to the patient. Breaches in aseptic technique may result in microbial contaminations of vials which is a potential cause of different avoidable infections.

Aims: We aimed to investigate the prevalence and pattern of microbial contamination of single- and multiple-dose vials (SDVs and MDVs) in the largest pulmonary teaching hospital in Iran.

Methods: In a period of 2 month, opened SDVs and MDVs from different wards were collected by a pharmacist. The name of the medication, ward, labeling of the vials, the date of opening, and storing temperature were recorded for each vial. Remained contents of each vial were cultured using appropriate bacterial and fungal growth media.

Results: Microbial contamination was identified in 11 of 205 (5%) of vials. The highest contamination rate was 14.29% for vials used in interventional bronchoscopy unit. The most frequent contaminated medications were Insulin and potassium chloride. Gram-positive bacteria (81.82%) were more significantly involved than gram-negative ones (9.09%) and fungi (9.09%), with the highest frequency for Staphylococcus epidermidis.

Conclusions: Use of safe injection practice is critical to prevent microbial contamination of products administered to patients. A training program for health care workers in aseptic techniques and written guidelines for aseptic handling of intravenous solutions are required.

P2561
Comparison of scoring systems use for estimation of severity of community acquired pneumonia

Marina Roksandic Milenkovic[1], Marija Mitic Milikic[1], Mihailo Stjepanovic[1], Vladislav Milenkovic[2]. [1]Clinic for Pulmology, Clinical Center of Serbia, Belgrade, Serbia; [2]General Practice, Hospital Komnenus, Belgrade, Serbia

Introduction: Estimation of Communty acquired pneumonia (CAP) severity is important for patient management. Some scoring systems for estimation are: Pneumonia severity index-PSI, CURB, CURB-65 and CRB-65 index and A-DROP system.

Aim: Aim of this study was to compare predictive values of these scoring systems regarding to severity of CAP.

Method: Study was done at Clinic for pulmology, Belgrade, in 100 hospitalized patients with an admission diagnosis of CAP, which were categorized into PSI, CURB, CURB-65, CRB-65 and A-DROP risk classis.

Results: The study included 100 patients (men 65, women 35), age range 23-87 years. The patients rates with PSI risk classis I, II, III, IV and V were 15%, 16%, 27%, 28%, 14% respectively. Using CURB index rates were 34%, 49%, 9%, 6% and 2% for scores 0, 1, 2, 3, 4 respectively. CURB-65 shows 26%, 31%, 34%, 6%, 2% and 1% with score 0, 1, 2, 3, 4 and 5 respectively. Patients rates for CRB-65 scores 0, 1, 2, 3 and 4 were 44%, 43%, 9%, 3%, 1% respectively. The patients rates for A-DROP system were 24%, 30%, 30%, 13%, 2%, 1% for scores 0, 1, 2, 3, 4, 5 respectively. 9% of patients were died. 28% of patients had chronic obstructive pulmonary disease (COPD).

Conclusions: Patients were hospitalized more common then that was indicated by scoring systems (some were hospitalized for social reasons). PSI is more adjective for estimation of CAP severity, but CURB, CURB-65, A-DROP and especially CRP-65 have the benefit of being easy to calculate and simple to use. CURB-65 and A-DROP show similar results for estimation of degree of the disease. Neither of these scoring systems use COPD as category for assessment (PSI and A-DROP only include arterial blood gas analyses).

P2562
Community acquired pneumonia: Can physiotherapists and occupational therapists help reduce the length of stay?

Arun Khanna, Abrar Almulla. Respiratory Medicine, Great Westren Hospital, Swindon, United Kingdom

Introduction: Community Acquired Pneumonia (CAP) places a significant burden on healthcare budget[1]. With an increasingly ageing population, an unmet need for measures to cut down on length of stay (LOS) from this diagnosis exists.

Methods: We retrospectively analysed all cases of CAP admitted to our hospital for a period of six months. After adjusting for co-morbidities with charlson index, 40 cases of LOS over and above the expected LOS were identified. Their case notes were analysed in detail to identify potential remediable factors to help reduce overall LOS.

Results: All of the 40 cases received timely diagnosis, review by senior clinicians and appropriate treatment in keeping with national guidelines. The average age was 79 years. Higher Charlson index correlated well with increased LOS. Overall,

42% (n=17) developed complications of pneumonia resulting in increased LOS. Out of these, 23% (n=4) continually deteriorated resulting in an overall mortality of 10%. Unmet occupational and physiotherapist needs resulted in an increased LOS in 45% (n=18) after time to clinical stability (TCS).In 10% (n=4) increased LOS was attributable to ongoing social needs whilst no documented cause could be ascertained in the last remaining case.

Conclusions: Early institution of physiotherapy and occupational therapy interventions can potentially help reduce LOS from CAP and reduce economic burden on healthcare budget. A multi-disciplinary team approach to CAP, especially in elderly patients, should be considered.

Reference:
[1] Welte T et al. Thorax 2012 Jan;67(1):71-9.

P2563
Smoking, haemophilus influenzae and hospital readmission

Rajesh Kumar Yadavilli, Rosalind Benson, Elijah Matovu, Madhur Vardhan, Sanjeev Agarwal. Respiratory Medicine and Microbiology Depts, Whiston Hospital, Prescot, Merseyside, United Kingdom

Background: Patients with chronic lung diseases are well known to have colonisation of lower respiratory tract with Haemophilus Influenza (HI). D Roberts et al have demonstrated increased growth of HI invitro in the presence of nicotine[1]. However, it is not known if that leads to increased risk of clinical infection requiring hospital readmission.

Hypothesis: Smoking increases the risk of acute clinical infections and hospital readmission due to HI.

Methods: Retrospective study of adult patients admitted with acute HI infection over a 2 year period in an acute teaching hospital setting.

Results: N=133, mean age 70 yrs., male 57%, Smokers 89%; Respiratory co-morbidities 83% (COPD 79%, Bronchiectasis 7%, Asthma 7% and Combined 7%).

Current smokers had increased risk of recurrent admissions 17/29(59%) compared to Ex-smokers 33/89(37%). P = 0.05 Fisher's exact test.

Patients with >40 pack years smoking history had increased risk of recurrent admissions 34/63(54%) compared to <40 pack year group 15/50(30%). P=0.01 Fisher's exact test.

Smokers with background chronic lung disease had a tendency to have a higher number of recurrent admissions (46% vs 25%), but this was not statistically significant. P=0.09 Fisher's exact test.

Conclusions: This study shows a significant association with smoking and increased HI related hospital readmissions. Smokers should be informed of this risk and strongly advised to quit smoking.

Reference:
[1] Effect of tobacco and nicotine on growth of Haemophilus influenzae in vitro; J Clin Pathol. 1979 July; 32(7): 728–731.

P2564
Community-acquired complicated parapneumonic effusions in adults without associated comorbidity – A study from India

B.N.B. Mahaveera Prasad, C.A. Tukaram. Medicine, MH Wellington, The Nilgiris District, Tamilnadu, India Medicine, MH Wellington, The Nilgiris District, Tamilnadu, India

Methods: Retrospective analysis of clinical, radiological, bacteriological, pleural fluid characteristics and treatment out come of cases managed at a multispeciality hospital in rural India.

Results: 17 cases in this study had 15 males and 2 females between 21 to 53 years of age. All presented with acute onset of fever, chest pain, pulmonary consolidation and leucocytosis. Mean duration of symptoms averaged 6 days prior to hospitalisation. 2 had mild effusion while moderate effusions was observed in the remaining with 3 among them having multiloculation. Pleural fluid grew streptococcus pneumoniae in 5 and staphylococcus aureus in 2 cases. Blood and sputum grew streptococcus pneumoniae in 2 cases. Pleural pus was present in 11 cases and in the remaining pleural fluid revealed polymorphonuclear leucocytosis with glucose below 50 mg/dl. Pleural fluid gram stain was positive in 8 cases. All cases recieved appropriate antibiotics. Pleural drainage with 24 F chest tube was instituted in 11 cases while in the remaining with 12 F pigtail catheter. 3 cases with multiloculation required instillation of intrapleural streptokinase and placement of pigtail catheters at two different sites for an effective pleural drainage. Amount of pleural fluid drained varied from 450 ml to 2400 ml with mean chest tube dwell time of 6.5 days. All patients responded well to therapy. 2 cases had residual pleural thickening without functional abnormality.

Conclusions: ACCP category 4 effusion was the commonest with infection by streptococcus pneumoniae predominating among them. Early institution of pleural drainage along with appropriate antibiotic therapy resulted in excellent outcome.

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P2565
Multilobar x-ray shadowing is an independent predictor of community-acquired pneumonia severity and mortality

Carly L. Griffin, Joanne M. Sloan, Janet R. Wilson, James D. Chalmers, Morven E.M. Wilkie, Stuart Schembri. *Ninewells Hospital, NHS Tayside, Dundee, United Kingdom*

Introduction: National guidelines for community-acquired pneumonia (CAP) recommend the CURB65 score to assess severity and determine antibiotic therapy. CURB65 does not factor the radiographic extent of consolidation on chest x-ray. The aim of this study was to determine the prognostic value of classifying CAP into unilobar and multilobar consolidation.
Methods: A retrospective study of patients admitted with CAP was performed over 6 months. CAP was confirmed as a new radiographic infiltrate. The primary outcome of the study was 30-day mortality.
Results: 210 patients (52% male) were included. Median age was 76 years. 62%(no=131) were classified as unilobar pneumonia compared to 38% (no=80) with multilobar CAP. A positive correlation was observed between multilobar consolidation and mortality by Kaplain meier analysis (p=0.01 by log rank test).
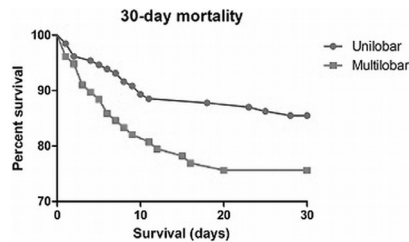
Multivariable analysis, after adjusting for confounders, revealed that multilobar consolidation was independently associated with 30-day mortality (odds ratio 2.25 95% CI 1.03-4.92, p=0.02). This relationship persisted for 90-day mortality (odds ratio 1.99 95% CI 1.01-4.02, p=0.04).
Conclusion: Multilobar pneumonia was associated with increased 30-day mortality rate when compared to unilobar pneumonia. This confirms that multilobar pneumonia is an indicator of poor prognosis and that these patients, irrespective of CURB65 score, should be treated more aggressively.

P2566
Nitric oxide (NO) in exhaled breath helps to distinguish the origin of lung infiltrate

Natalja Voskresenska[1], Julia Voicehovska[2], Grigorij Orlikovs[3].
[1]*Allergology/Pulmonology Department, Paul Stradins Clinical University Hospital, Riga, Latvia;* [2]*Internal Diseases Department, Riga Stradins University, Riga, Latvia;* [3]*Internal Diseases Department, Riga Stradins University, Riga, Latvia*

Introduction: Determination of pulmonary infiltrates is necessary not only to evaluate the general condition of a patient, but also to determine needs and duration of antibiotic therapy. Well-recognized methods of diagnosis (physical examination, blood tests and x-rays) are not enough helpful in determination of the pulmonary infiltrate's origin.
Objective: To distinguish the origin of lung infiltrate using NO in the exhaled breath.
Materials and methods: Prospective non-randomized study was carried out in the Centre of pulmonology and allergology, Paul Stradins Clinical University Hospital, Riga, Latvia. The study is approved by Riga Stradins University Ethics Committee. Patients with lung infiltrate of inflammatory (due to pneumonia) and congestion (heart failure) origin were involved into the study. Community-acquired Pneumonia(CAP) was confirmed in 6 (from 10) patients. Heart failure (HF) with small blood circuit congestion and lung infiltration was confirmed in 4 patients. Exhaled NO, X-Ray, clinical pattern were processed. The NO level was measured by chemiluminescence's analyzer (Aerocrine). The data were processed under SPSS 20.0 for Mac.
Results: CAP patients (n=6) demonstrated 24,67 ppb. HF patients (n=4) demonstrated 3,65 ppb (p<0.05). Normal range for exhaled NO is less than 4 ppb.
Conclusion: The data show that there is increased NO production in pneumonia patient. The lung infiltrate origin might be evaluated using NO in the exhaled breath.

P2567
Community acquired and health-care associated pneumonia: Should we own follow guidelines?

Maria Carrabba, Marina Zarantonello, Cinzia Hu, Giovanna Fabio. *Internal Medicine, Università degli Studi & Fondazione IRCCS Cà Granda Ospedale Maggiore Policlinico, Milano, Italy*

Treatment of healthcare-associated pneumonia (HCAP) according to published guidelines recommend initial broad-spectrum antibiotics and de-escalation based on culture results.

This study aims to investigate the in-hospital and 30-day mortality and LOS in both CAP and HCAP non-immunocompromised (NIC) and HCAP immunocompromised (IC) related to the empirical antibiotic therapy started at admission, before microbiological data availability.
All patients admitted to a university tertiary care hospital in Milan with a diagnosis of pneumonia from 2005 to 2011 were prospectival enrolled. CAP, HCAP and immunocompromised were identified on the basis of the existing criteria. Therapies of two periods (T1: 2005-2007 and T2: 2010-2011) have been compared.
Ongoing Results
A total of 275 patients, 135 HCAP, were included in the analysis. T1 accounted for 240 CAP, 40 HCAP-NIC and 80 HCAP-IC. T2 (partial results) accounted for 20 CAP, 4 HCAP-NIC, 11 CAP-IC.
During T1, culture positive were 23.3% and culture negative 55%. The majority of CAP was started with monotherapy (51.7%), while the most of HCAP with dual-therapy (NIC 45%, IC 41.3%). Triple-therapy was addressed for 9.2% of CAP, 12.5% of HCAP-NIC and 25.0% of HCAP-IC.
During T2, culture positive were 17.1% and culture negative 80%. The majority of CAP and HCAP-IC started a dual-therapy (55% and 54.5%), while 50% of HCAP-NIC had a monotherapy. Triple-therapy was started in 5% of CAP, 25% of HCAP-NIC and 18.2% of HCAP-IC.
In CAP of both periods none of the patients treated with triple-therapy died, and there were no differences for mortality between mono and dual-therapy. HCAP with dual therapy had less mortality than both monotherapy and triple-therapy.

P2568
Bacterial multidrug-resistance profile in a respiratory insufficiency unit – Analysis of 17 months

Marisa Anciães, Susana Carreira, Cecília Nunes, Fernanda Oliveira. *Pulmonology II - Respiratory Insufficiency Unit, Hospital Pulido Valente, Lisbon, Portugal*

Introduction: Multidrug-resistant bacteria (MRB) are a seriously growing public health threat.
Objectives: Characterize patients with MRB isolations, namely their risk factors. Evaluate frequency of MRB species. Assess influence of antibiotic (AB) therapy towards length of hospital stay (LOS) and mortality.
Methods: Retrospective identification of patients with MRB isolations admitted to Respiratory Insufficiency Unit (RIU) from Feb/10 to Jun/11, followed by medical records' analysis.
Results: MRB were isolated from 32 patients: male sex – 56.3%; mean age – 74.5 years; chronic respiratory disease – 81.3%; comorbidities – 93.8%, of which 65.6% were immunodepressions. Some (37.5%) were transferred to RIU with an average previous LOS of 42.3 days. At RIU admission 96.9% were/had been on AB and 40.6% had been discharged, in the previous month. 71.9% underwent invasive techniques.There were 44 MRB isolations: MRSA – 45.5%; *Acinetobacter baumannii* – 29.5%; *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* and *Enterococcus faecium* – ≤ 9.1% each. Pathogen directed-AB was introduced in 29 isolates (65.9%), but only 11 (37.9%) underwent post-AB control and only 3 of these (27.3%) became negative.There were 14 (43.8%) deaths, 78.6% due to infectious causes, of which 54.5% were attributed to MRB. We found no statistically significant differences between death and survival groups, however LOS was significantly longer in patients who had >1 isolation and whose post-AB control remained positive.
Conclusions: Every patient had at least 1 risk factor for infection. MRSA predominated. MRB were difficult to eradicate and responsible for a high mortality rate.

P2569
Implementation of IDSA/ATS and national guidelines for community acquired pneumonia by Greek chest phycisians

Charalampos Triantafyllidis[1], Vasilios Kapordelis[1], Georgios Papaetis[1], Dora Orfanidou[1], Maria Apostolidou[1], Ioannis Nikolopoulos[2], Elissavet-Christina Filippidou[3], Angelos Pefanis[1]. [1]*3rd Department of Internal Medicine, National and Kapodestrian University of Athens, Medical School, "Sotiria" General Regional Hospital for Thoracic Diseases, Athens, Attica, Greece;* [2]*Centre for Respiratory Failure and Intensive Care Unit, "Sotiria" General Hospital for Thoracic Diseases, Athens, Attica, Greece;* [3]*1st Department of Respiratory Medicine, Kavala General Hospital, Kavala, Greece*

Background: The implementation of practice guidelines for CAP by Greek physicians and its impact on cost and patients' outcome remain unknown.
Material & methods: A prospective observational study incorporating 350 immunocompetent hospitalized pts with CAP. The aim was to investigate whether the 2007 IDSA/ATS and the Greek national guidelines for CAP are implemented by chest physicians in "Sotiria" General hospital in Athens, Greece. We: a) assessed whether the decision of hospital admission was correct or not and b) evaluated whether the administered antimicrobial regimen was in accordance to guidelines. Fine score (PSI) was applied by the authors to determine the severity of CAP.
Results: The mean age was 56.3±22.2years and the duration of hospitalization 10.9±11.8days. 218 (62.29%) pts were male and 132 (37.71%) female. The mortality rate was 12.29%. 167 (47.71%) pts were admitted to the hospital, despite they were classified as risk class I or II and therefore could be treated as outpatients. Implementation of CAP guidelines as far as the initial antimicrobial regimen is concerned was poor (211pts, 60.29%). Patients treated with an initial antimicrobial in accordance to guidelines performed statistically signifigant lower mortality and

a trend towards shorter length of hospitalization compared to pts receiving initial regimen in discordance to guidelines (p=0.04 & p=0.066 respectively).

Conclusion: The implementation of CAP guidelines by chest physicians in the major Greek hospital for thoracic diseases is poor. Improvement of adherence may improve patients' outcome, shorten the length of hospitalization and reduce the financial burden for the national health system.

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WITHDRAWN

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The clinical evaluation of patients with Pseudomonas aeruginosa detected in respiratory specimens

Kei Nakashima[1], Yoshihito Ostuka[2], Haruki Kobayashi[1], Naoko Kastsurada[1], Nobihiro Asai[1], Hideki Makino[1], Masafumi Misawa[1], Yoshihiro Ohkuni[1], Norihiro Kaneko[1], Masahiro Aoshima[1]. [1]Department of Pulmonology, Kameda Medical Center, Kamogawa, Chiba, Japan; [2]Department of Laboratory Medicine, Kameda Medical Center, Kamogawa, Chiba, Japan

Introduction: The present study aims to clarify the clinical picture of patients with Pseudomonas aeruginosa detected in respiratory specimens.

Methods: Medical records of patients with Pseudomonas aerguinosa detected in respiratory specimens from April 2010 to March 2011 at Kameda Medical Center were reviewed retrospectively. The following variables were reviewed: patient background, duration of hospitalization, drug susceptibility, outcomes.

Results: One hundred patients were detected with P. aeruginosa in respiratory specimens totally. Mean age was 75.0 y.o. Sixty seven patients were male, 33 were female. Twenty eight patients have chronic respiratory disease. Fifty three patients were detected through microbial substitution. Period from admission to detection of P. aeruginosa was 53.6 days. Period from antimicrobial initiation to detection was 40.6 days. The numbers of antimicrobial agents were 3.5 on average. MDRP were detected in 6 patients with hematological disorders. Sixty three patients have polymicrobial detection. S.marcescens, MRSA, MSSA, K.pneumoniae were detected in 12, 12, 11, 11 patients frequently. Fifty nine were judged as colonization. Forty one were causative organism of pneumonia. Three were CAP, 7 were NHCAP (Nursing and healthcare associated pneumonia) and 31 were HAP. Duration of hospitalization was 81.5 days on average, 14 patients were died.

Conclusions: P.aeruginosa were detected in patients with chronic respiratory disease and long hospitalization. More than half of detections were bacterial colonization. HAP were frequent and P.aeruginosa caused the prolonged hospitalization and poor prognosis.

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Clinical presentation and evolution of community acquired pneumonia in older patients

Adamantia Liapikou[1], Ioanna Malliou[1], Panagiotis Petras[1], Maria Kasiola[1], Andreas Anastasopoulos[1], Michalis Volonakis[1], Dimitra Chaimala[1], Katerina Dimakou[2]. [1]1st Respiratory Department, Sotiria Chest Hospital, Athens, Greece; [2]2nd Respiratory Department, Sotiria Chest Hospital, Athens, Greece

Introduction: Community-acquired pneumonia (CAP) is an important threat to the health of older adults with almost 40% of them requiring hospitalization. CAP in the elderly has a different clinical presentation and evolution than CAP in other age groups.

Aim: Comparing the characteristics, severity and outcomes of CAP in elderly and younger patients (control group).

Methods: An observational, retrospective study of consecutive CAP patients >65 years old was performed during two years in two respiratory clinics. Exclusion criteria were immunosuppression and suspicion of aspiration.

Results: Of 180 cases of CAP, 116 patients were>65 years old, with a mean age 75±10.3 years. Most elderly patients (76%) had comorbid conditions, including cardiac (55%), COPD(42%), diabetes mellitus (27%) and neurologic diseases(17%). Two-thirds (68%) of elderly patients belong to CURB65 III –IV classes comparing to 12% of the controls. An acute altered mental status was established in 30% of elderly patients comparing to 11% of the others and 80.5% requiring oxygen assessment, with 47% having PAFI<250. They stay longer in the hospital(11.43 vs 8.46, p=0.02),have more often complications. 12 elderly patients admitted to ICU and a total of 11 patients died (9.5%). The multivariate analysis showed the following factors of bad prognosis: CURB65 score, neurological disease and PAFI<250. Guidelines adherence was the same between the 2 groups and did not correlate with mortality.

Conclusions: The elderly patients with CAP presented with higher CURB score, had more complications and mortality associated with the underline comorbitidies and the severity of CAP.