Volume 63 | Supplement 2 | 2017

ACTA MEDICA MARISIENSIS

OFFICIAL PUBLICATION OF THE

UNIVERSITY OF MEDICINE AND PHARMACY OF TÂRGU MUREŞ

The VIIth Tobacco Control Conference of the Romanian Society of Pneumology in cooperation with the European Network for Smoking and Tobacco Prevention ENSP and National Postgraduate Course with the theme "Chest ultrasound - a non-invasive investigation in thoracic pathology"

Tîrgu Mureș, Romania
28-30 September

VOLUME OF ABSTRACTS

ISSN: 2068 – 3324 • Online ISSN: 2247-6113 • www.actamedicamarisiensis.ro

UNIVERSITY PRESS 19 99 TÂRGU-MUREŞ

Acta Medica Marisiensis

Volume 63 | Supplement 2 | 2017

The VIIth Tobacco Control Conference of the Romanian Society of Pneumology in cooperation with the European Network for Smoking and Tobacco Prevention ENSP and National Postgraduate Course with the theme "Chest ultrasound - a non-invasive investigation in thoracic pathology"

Tîrgu Mureș, Romania
28-30 September

BOOK OF ABSTRACTS

Acta Medica Marisiensis

Acta Medica Marisiensis (ISSN: 2068-3324) is the official publication of the University of Medicine and Pharmacy of Tirgu-Mures, being published by University Press, Tîrgu Mureş.

The journal publishes high-quality articles on various subjects related to research and medical practice from the all the medical and pharmaceutical fields, ranging from basic to clinical research and corresponding to different article types such as: reviews, original articles, case reports, case series, letter to editor or brief reports. The journal also publishes short information or editorial notes in relation to different aspects of the medical and academic life.

Information for contributors

Manuscripts must be submitted via editorial manager system, available online at **www.editorialmanager.com/amma**

Correspondence

All correspondence should be addressed to the Editorial Office:

Acta Medica Marisiensis

University of Medicine and Pharmacy of Tîrgu Mureş

38, Gh. Marinescu St, 540139 Tîrgu Mureş, Romania

Managing Editor Associate Professor Adrian Man

or sent by e-mail to ammjournal@umftgm.ro

Acta Medica Marisiensis is indexed in the following international databases:

· Celdes
· CNKI Scholar
· CNPIEC
· EBSCO Discovery Service (since 01 July 2010, first indexed number - no.4/2010)
· Google Scholar
· J-Gate
· Primo Central (ExLibris)
· ReadCube
· Summon (Serials Solutions/ProQuest)
· TDOne (TDNet)
· WorldCat (OCLC)

DTP and Website Management
Editura Prisma

This journal is printed on environmentally-friendly ECF (elemental chlorine free) woodfree paper.

University of Medicine and Pharmacy from Tîrgu Mureș
Romanian Society of Pneumology Bucharest

Coordinators:

Prof. Dr. Gabriela Jimborean

Prof. Dr. Ruxandra Ulmeanu

Prof. Dr. Florin Mihălțan

Șef Lucrări Dr. Edith Simona Ianosi

Dr. Corina Mărginean

Ing. Cornel Radu Loghin

Conf. Dr. Antigona Trofor

Prof. Dr. Doina Todea

Prof. Dr. Zeno Spârchez

Prof. Dr. Pál Kikely

Dr. Tudor Toma

Dr. Ioana Munteanu

Asist. Univ. Dr. Lavinia Davidescu

Șef Lucrări Dr. Mirela Gliga

Scientific Committee:

Prof. Dr. Gabriela Jimborean, Prof. Dr. Ruxandra Ulmeanu, Prof. Dr. Florin Mihălțan, Prof. Dr. Zeno Spârchez, Dr. Tudor Toma, Prof. Dr. Doina Todea, Prof. Dr. Mimi Nițu, Prof. Dr. Horatiu Suciu, Prof. Dr. Oana Mărginean, Conf. Dr. Antigona Trofor, Conf. Dr Elena Dantes, Conf. Dr. Paraschiva Postolache, Conf. Dr. Milena Man, Conf. Dr. Oana Arghir, Prof. Dr. Pal Kikely, Șef lucrări Dr. Mirela Gliga, Șef lucrări Dr. Ruxandra Râjnoveanu, Asist. Univ. Dr. Lavinia Davidescu, Dr. Monica Marc, Șef lucrări Dr. Edith Ianosi, Dr. Corina Mărginean, Conf. Dr. Ștefan Mihăicuță, Dr. Claudia Dorobăț, Dr. Ioana Munteanu, Dr. Magda Ciobanu.

Organizing Committee:

Prof. dr. Ruxandra Ulmeanu, Prof. dr. Florin Mihălțan, Dr. Corina Mărginean, Prof. dr. Gabriela Jimborean, Șef lucrări Dr. Edith Ianoși, European Network for Smoking and Tobacco Prevention (ENSP), ing. Cornel Radu Loghin, Dr. Corina Budin, Dr. Dana Morar, Dr. Gabriel Grigorescu, Dr. Paul Bunuș, Dr. Alexandra Comes, Dr. Emese Aberle, Dr. Ioan Pribac, Dr. Ioan Grinea, Dr. Mihaela Patraulea, Dr. Marius Tontea, Dr. Marinela Gabor, Dr.Szasz Carmen, Dr. Lucian Belean, Dr. Nagy Edit, Dr. Petru Muntean, Dr. Istvan Dombi, Dr. Mioara Szathmáry, Asist. Adela Cristea, Asist. Cristina Szabo, Asociația Eldad Mureș.

THE MAIN CANCER IN ROMANIA : THE LUNG CANCER. WHERE ARE WE AND WHERE WE NEED TO BE ?

Ruxandra Ulmeanu[1,2,3], Andreea Vlădău[2,3],Emilia Crișan[2], Mihai Alexe[2], Camelia Bădescu[2]

1. President of Romanian Society of Pneumology,Bucharest,Romania
2. National Institute of Pneumology "Marius Nasta",Bucharest,Romania
3. University of Medicine and Pharmacy,Oradea,Romania

Objective: Lung cancer is a worldwide concern. Thought highly related to smoking, lung cancer is the seventh cause of cancer deaths in never smokers. We aim to define overall lung cancer characteristics in Romania.

Methods: Data were obtained from the Romanian largest center of pneumology with large addressability of lung cancer patients.

Results: Incidence of new cases in Romania is 1.8 million/year and 1.6 million of deaths/year, with 73% urban incidence.Incidence is gender differentiated: 1 of 18 in men and 1 of 51 in women, with mortality rate placed first in men and third in women. Chronic obstructive pulmonary disease has 6 fold higher risk of lung cancer than smoking alone.Only 19% of Romanians has access to diagnostic bronchoscopy. Over 10000 bronchoscopies are performed yearly in the largest Romanian center, 49% for lung cancer suspicions, with 5000 disease confirmation. Third quarters of patients have advanced disease at first diagnosis, with 26% surgical eligibility. Adenocarcinoma is significantly higher in nonsmokers, small-cell carcinoma in smokers. Complicated advanced disease is managed by interventional bronchoscopy multidisciplinary teams in high performance centers.

Conclusions: In Romania lung cancer is diagnosed by bronchoscopy mainly at late stages. High level performance centers caries a medical stuff "overload".Initiatives for awareness of lung cancer risk started with population prevention campaign. Romanian Society of Pneumology activities support professional training. Needed objectives were attaint: National Congress of Lung Cancer, first Romanian expert publication. Resuming facts underline the importance of early diagnostic, a specialized multidisciplinary team, a continuous medical training.

Keywords: lung cancer, characteristics, incidence, bronchoscopy.

THE IMPACT OF SMOKING ON CHILDREN

Cristina Oana Mărginean, Lorena Meliț, Alina Grama

Pediatrics Clinic I, University of Medicine and Pharmacy Tîrgu Mureș

Introduction: Smoking is a real health problem with major social, economic and health involvements. Both active and passive smoking presents almost the same negative impacts on the human health.

Material and method:"The negative effects of parental smoking on child's health are variate and affect multiple functions of the organism.

Results: Lung function is one of the most frequently affected in children exposed to passive smoking. It was proven that both forced and quiet parameters of lung function are impaired in these children in comparison to those who were not exposed to passive smoking. Recent data support the fact that tobacco smoke exposure increases the risk of colonization by potentially pathogenic bacteria in both respiratory and digestive tracts. Also, it is well-known the negative effect of maternal smoking during pregnancy on the fetal development, especial birth weight. In addition, a recent study proved that prenatal smoking may prolong its negative effect on child's growth up to 3 years of age. The late negative effects of maternal smoking during pregnancy have also been noticed regarding offspring antisocial behavior. Even more severe is the increased risk of developing cancer yielded by cigarette smoke exposure. Thus, it was proved that prenatal and early-life exposure to this risk factor increases not only the risk of developing leukemia of children, but worsens also its prognosis.

Conclusions: The negative impact of smoking on children begins from the intrauterine life and lasts during the entire childhood, and later in adult life.

Keywords:passive smoking impact,children.

EVOLUTION OF TOBACCO CONTROL-ROMANIAN PRACTICE AND PERSPECTIVES

Florin Mihălțan

National Institute of Pneumology M. Nasta-Bucharest,Romania

Objectives: I describe in my presentation how we improved in the last 10 years the strategy of tobacco control in Romania

Main results: Tobacco control in Romania has his own history. It's a history of development of partnerships of NGO with the Romanian Society of Pneumology which is the only medical association having an anti- tobacco section in my country. I describe here all the steps made together with our partners in organising activities and meetings with the authorities, government, population at risk and mass media to prepare changing of view of the opinion leaders and Ministers of Health. In the same time I am underlining the impact of our activities in educating our young's, teenagers and journalists. In my presentation I give a bird eye view of the consequences in changes of tobacco control initiatives. Another chapter covered in this topic will be concerning the economic, health benefits of the new law –one year after implementation,in march

2016. I will define also the future strategies for a smoke free generation in 2035.

Conclusions: Partnership remains the secret of best practices in tobacco control in Romania

Key words: tobacco control,law.

COMPARATIVE ANALYSIS BETWEEN PHYSIOPATHOLOGICAL MECHANISMS AND MORPHOPATHOLOGICAL LESIONS DISEASES IN SMOKERS PATIENTS

Ovidiu S. Cotoi[1,2], Bartha Robert[2], Emmanuel Becica[1]

1. Department of Pathophysiology, UMF Tîrgu Mureș
2. Department of Pathology, County Clinical Hospital Tîrgu Mureș

The "social" component of smoking is unfortunately accompanied by numerous acute or chronic injuries to smokers. These injuries affect all organ systems of the body and cause malignant or non-malignant conditions. These diseases can also affect passive smokers, especially children who are forced to live in a polluted household environment.

This paper compares the pathophysiological mechanisms involved in the occurrence of these lesions and the morphological, macroscopic and microscopic aspects of organ systems in the human body.

Non-tumoral diseases in the cardiovascular system are described by increased cardiovascular risk for atherosclerosis and its complications: chronic ischemic cardiopathy with angina pectoris and risk of acute myocardial infarction. At the peripheral level, there is a major risk of chronic obliterative arteriopathy. The main pathophysiological mechanisms are the reduction of oxygen intake and the consequences of acute or chronic hypoxia. To these is added the pro-coagulant and pro-inflammatory status of smoking patients.

Non-tumoral diseases in the respiratory system are translated by chronic inflammation, mucociliary clearance disturbances and numerous genetic mutations in the tracheo-bronchial epithelium. For passive smokers, especially children, there is an increased risk for asthma. Morphopathologically, these lesions are characterized by chronic bronchitis, pulmonary emphysema and bronchial remodeling phenomena.

Non-tumoral diseases in the digestive system are described by increased gastric acidity, dyspepsia and increased risk of gastritis, peptic ulcer and inflammatory bowel diseases. In the urinary system increases the risk of inflammation and urinary tract infection. Injury to the male reproductive system is manifested by erectile dysfunction and infertility, and female infertility, menstrual disorders and embryo-fetal damage. The main pathophysiological mechanism is chronic hypoxia.

Tumor affections include various types of cancers that can affect all organ systems, but especially the respiratory, digestive and urinary system. Lung cancer is the disease with the highest morbidity and mortality in smokers, among all types of cancer, regardless of age or gender. If in the early 1900s, the risk of bronchial-lung cancer and death by bronchial-pulmonary cancer, was 16: 1, men / women, in the last century, this risk equalized for the two genders. Histopathological, squamous cell carcinoma and small cell carcinoma are most commonly associated with smoking. At the digestive level is associated with pancreatic cancer, liver cancer or gallbladder cancer. The combination of tobacco and alcohol consumption increases the risk of oral or pharyngeal cancer. In the urinary system, bladder cancer is the most common type of cancer.

Keywords: physiopathological,morphopathological lesions,smokers.

SMOKING AT WORK-BENEFITS AND ETHICAL ISSUES

Florin Mihălțan, Valentin Coșei

National Institute of Pneumology „Marius Nasta"-Bucharest

Introduction: Passive smoking has been shown to be a risk factor for cardiovascular disease, pulmonary emphysema and various cancers. A ban on smoking at work creates a safer environment for employees, customers or visitors, avoiding the effects of secondhand smoke.

Results: Among the first countries to adopt such a policy is England, which has banned the smoking of any smokable substance in the workplace, including manufactured cigarettes or manual products, pipe, cigar or herbal cigarettes. More than a health problem, workplace smoking is also a safety issue (up to 20% of the workplace fires are secondary to smoking). In Romania, starting 17 March , 2106, employees no longer have permission to smoke in enclosed spaces at work. In our presentation we will analyze the benefits of introducing these smoking-free employment policies, the ethical issues created at workplacess , the progress made in several countries. At the same time, we will present the existing and remarked effects from the point of view of the employer and the employee with all his reverberations.

Conclusions: Policies in the area of smoke-free workplaces will allow the creation of the necessary framework to reach the "no smoking" environment

Keywords: smoking,workplaces.

SARCOIDOSIS-CLINICAL, BIOLOGICAL AND FUNCTIONAL DIAGNOSIS (EXPERIENCE OF THE PULMONOLOGY CLINIC TG. MURES)

Gabriela Jimborean[1], Alpar Csipor[2], Mioara Szathmary[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: Analysis of the clinical, functional aspects and histological confirmation of sarcoidosis.

Method: Retrospective file analysis of the study group.

Result: We analyzed a group of 50 patients with sarcoidosis. Women were predominant (66%). The majority of the patients were in the young and medium group of age (76% between 20-50-year-old). 70% of patients came from rural areas. Chest x-ray allowed disease staging: st. I 40%, st.II 46%, st.III 14%. Notable associations: 34% ASLO positive, 68% tonsillitis, 50% overweight/obesity. General symptoms were absent in 80%. Cough and dyspnea were the main symptoms, 2 cases with glaucoma, 4 uveitis, and 10 erythema nodosum. Spirometry revealed in 44% distal obstructions, in 36% restriction and 32% had normal parameters. Transfer factor between alveolocapillary membrane for CO (TLCO) was decreased in 15 cases and was concordant with the vital capacity. Spirometry and TLCO determined the severity and monitored the disease evolution. Disease confirmation was performed in 46% of cases by bronchial biopsy/peripheral lymphnode biopsy or thoracoscopy (noncaseating granuloma). Angiotensin-converting enzyme (ACE) was a valuable diagnostic tool and monitored the evolution under treatment. Corticoids were the main recommended treatment.

Conclusion: Diagnosis in sarcoidosis was difficult (corroboration of the clinical aspect, increased ACE, bronchoscopy, biopsy with specific aspect). Spirometry, TLCO and ACE were indispensable for monitoring the treatment. Improvement of histological confirmation can be achieved by increasing patients' acceptance of thoracoscopy and transbronchial biopsy.

Key words: sarcoidosis, noncaseating granuloma, ACE.

LUNG ADENOCARCINOMA DIAGNOSED BY ULTRASOUND GUIDED PLEURAL BIOPSY AND IMMUNOHISTOCHEMISTRY

Gabriela Jimborean[1], Alpar Csipor[2], Alexandra Ciociu[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures,Discipline of Pulmonology,Tirgu Mures, Romania
2. Clinic of Pulmonology,Clinic County Hospital Mures,Tirgu Mures, Romania

Objective: Emphasis the importance of the precise histological confirmation in lung tumors for targeted treatment

Method: Case report

Result: Thoracic ultrasound (TUS) allowed pleural percutaneous biopsy punction in a 68-year-old male, heavy smoker (50 pack-years) with thoracic pain, fever, sweating, weight loss and exertional dyspnea. Thoracic CT suggests a picture of mesothelioma with pleural effusion. We sampled several pleural biopsies and performed fluid aspiration under TUS guidance. Percutaneous biopsy allowed the differentiation between mesothelioma and other peripheral lung tumor. We used for biopsy a modified Cope needle and local anesthesia with lidocain. Pleural biopsy confirmed lung adenocarcinoma (group of cells with nuclear atypia, hypercromatic nuclei, irregular contour and increased volume, increased nucleus/cytoplasm ratio, anisocytosis, pleomorphic cells with a pseudoglandular/trabecular architecture). Additional immunohistochemistry (IHC) stated the tumor cell profile: cytokeratin 7 positive, calretinine negative, epithelial membrane-antigen positive, cytokeratin 5/6 negative, vimentine positive, carcinoembryonar antigen negative, mesothelium-antigen negative, CD34 negative, cytokeratin AE1/AE3 positive, p63 negative, thyroid transcription-factor 1 negative. This particular profile excluded mesothelioma and established the diagnosis of adenocarcinoma. Accurate histological confirmation allowed targeted chemotherapy.

Conclusion: Percutaneous pleural biopsy is an affordable investigation that allows the precise diagnostic in the tumoral processes of the pleura and makes the diagnostic differential with mesothelioma. Pleural biopsy was completed with IHC examination. Guidance by TUS prevented complications of the biopsy (pain, pneumothorax or hemothorax).

Key words: thoracic ultrasound, pleural biopsy, immunohistochemistry.

THE IMPORTANCE OF GUIDELINES FOR SMOKING CESSATION IN CLINICAL SETTINGS - THE " STORY" OF GREFA GUIDELINE

Antigona Trofor[1], Florin Mihălțan[2], Doina Todea[3], Monica Pop[3], Ștefan Mihăicuță[4], Ioana Buculei[5]

1. "GrigoreT.Popa" University of Medicine and Pharmacy - Pulmonology Dept., Clinical Hospital of Pulmonary Diseases Iasi, Romania
2. "Carol Davila" University of Medicine and Pharmacy, București, Romania
3. "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj Napoca, Romania
4. "Victor Babes" University of Medicine and Pharmacy, Timișoara, Romania
5. Clinical Hospital of Pulmonary Diseases Iasi, Romania

The Romanian Society of Pneumologists (RSP) has developed its first guideline, "the Smoking Cessation and Smoker's Assistance Guidelines" (GREFA), in 2008, along with the pocket version as a quick work tool for nurses and practitioners from clinical settings, but also with an introductory supplement, meant to initiate specialists who assist smoking patients in the basic notions of approaching tobacco use and dependence.

The GREFA Guideline was updated and revised in 2010 and later served as the background for the European Smoking Cessation guideline developed in 2012, in collaboration with experts from Greece, Turkey, Sweden, Ireland, France and Russia, from the European Network for Smoking And Tobacco Prevention (ENSP). The ENSP 2012 Guideline was translated into Romanian, and this version was launched at the Conference of the Tabacology Section of the RSP in November 2013, in Pitesti.

In the next years, under ENSP umbrella, educational projects have been possible and have allowed the ENSP 2012 Guideline to be upgraded in a newer and more accessible version in several European countries benefiting from these projects with the support of ENSP and Global Bridges USA. From these educational projects (EPACTT 1 and EPACTT 2), the 2015 and 2017 editions of the ENSP smoking cessation guidelines were published on the ENSP website (www.ensp.org) in English, Romanian, Armenian, Russian, Ukrainian, Turkish, Georgian, etc.

The collaboration between the members of the tabacology section of RSP and ENSP on the development of guidelines in this field has moved into a new phase through the ongoing European projects. We refer here to the TOB G project dedicated to guidelines for high risk patients: pregnancy, adolescents, cardiovascular disease, type 2 diabetes, COPD, and to the international tobacco control project in 6 European countries (EUREST PLUS).

Keywords: smoking cessation, guidelines, clinical settings.

DRUG TREATMENT OF TOBACCO ADDICTION

Corina Mărginean

Clinic of Pulmonology,County Hospital,Tîrgu-Mureș,Romania

Objective: Smoking, a chronic recurrent disease requires complex therapeutic interventions, drug therapy being the first intention. The aim of this presentation is to present the drug therapy and its efficacy in the treatment of cigarette smoking.

Results: The treatment of tobacco addiction is made up of two components: pharmacotherapy and cognitive-behavioral therapy. Pharmacotherapy includes first-line drugs and reserve medication. First-line medication has proven effective, with a high level of safety being the first option in treating nicotine addiction. Reserve medication has a lower efficacy, more serious side effects and is recommended when first-line medication can not be used. First line medication is nicotine replacement therapy, bupropion (Zyban), varenicline (Champix). Nicotine replacement therapy (TSN) with different forms of presentation: Chewing gum, sublingual tablets, is used in smokers with low and moderate smoking, or for those with high tobacco dependence but with contraindications to other drugs. Effective combination like combined nicotine patches and chewing gum showed a 34% abstinence rate versus 24% for monotherapy for 12 weeks. Bupropion (Zyban), the first drug in the non-nicotinic treatment series, reduces the desire for smoking and attenuating weight gain secondary to smoking cessation. The rate of abstinence is 28% at 6 months after treatment and the combination with nicotine patches achieved a 12 month abstinence rate of 35.5% vs. 30.3%. Only for bupropion and 16.4% for nicotine patches. Varenicline (Champix) has increased efficacy, with 71% of patients receiving treatment for 24 weeks remaining abstinent and at 52 weeks follow-up. 44% were abstinent. In patients with COPD, the continued abstinence rate at week 9-12 was 42.3%.

Conclusions: Drug treatment of tobacco use, in particular combined drug therapy, leads to higher rates of abstinence, leading to a decrease in the tobacco pandemic.

Keywords: drug treatment,tobacco,addiction.

"TRAINING THE TRAINERS"- INTENSIFYING ANTI-SMOKING EDUCATION FOR A BETTER COMMUNITY HEALTH

Gabriela Jimborean[1], Edith Simona Ianosi[1], Alpar Csipor[2], Mioara Szathmary[2], Paraschiva Postolache[3]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania
3. University of Medicine and Pharmacy "Grigore T. Popa"-Iasi, Faculty of Medicine,Ist Medical Department, Respiratory Rehabilitation Clinic, Iasi, Romania

Objectives: To assess knowledge about harmful effects of smoking/alcohol consumption among medicine students; exploring the smoking prevalence in students; training the future trainers in antismoking activity.

Methods: Questionnaire study in 260 medicine-students (80 males, 180 females from general-medicine, college and kinesitherapy specialty) before and after antismoking training.

Results: Smoking is intensively spread among students (actives smokers 33.84%, 15.38% ex-smokers). Smoking was much higher among males compared to women (75% vs 37.7%). 72.65% were moderate-consumers (10 cigarettes/day) and 9.37% were heavy-smokers. 56% began smoking between 13-18 year-old and 25% before 16. 89.8% had at least 1 parent-smoker in their family, 45.4% had a partner/close friend who smoked. 89.2% were eager to accumulate information for a future antismoking activity. We found 43% alcohol users. Initially medicine-students' knowledge concerning the side effects of smoking were insufficient (20% correct answers, only 9.6 knew the secondhand smoke, only 4.2% heard about thirdhand smoke). We repeated the test after the course + stage in Pulmonology Clinic and the amount of knowledge increased impressively (88.4% correct answers). We used modern study technique: case based learning and case simulation. 31.8% of trained students stopped smoking after our course.

Conclusions: The medicine students represent a crucial segment in the antismoking activity. Information acquired at the pulmonology stage/ course had a huge contribution for the smoking cessation and future antismoking fight. Training the future health-promoters is a priority in the antismoking education and may be an issue for a smoke-free behavior in general population.

Key words: antismoking education,health promoters.

THE IMPLICATIONS OF PASSIVE SMOKING IN SOCIO-ECONOMIC LIFE

Ioana Munteanu

Institute of Pneumology"Marius Nasta" Bucharest

Passive smoking is the involuntary inhalation of tobacco smoke produced by a smoker. Tobacco smoke consists of the main stream (the smoke coming out of the filter end when the person smokes) and the side stream (the smoke coming out of the burning end of the cigarette). According to OMS data 600.000 nonsmokers die annually because of passive smoking diseases. The importance of the effects of passive smoking results from the fact that a large number of people are involved, there is no safety level of exposure to carcinogens and increases the risk of disease in the general population

Costs result from summarizing several aspects that are sometimes overlooked: medical issues (induced illnesses), declining work productivity (absenteeism , medical leave, premature retirement) and premature deaths.

According to WHO, smokers who die prematurely induce a reduction in family incomes, an increase in health spending and, implicitly, a slow-down in the country's economic development.

If more and more countries are adopting restrictive legislation on smoking in public places, home contact remains a problem of education that needs to be addressed at all levels.

Keywords:passive smoking,socio-economic implications.

FROM CLINICAL PRACTICE TO LEGISLATION IN PREVENTING THE CONSEQUENCES OF PASSIVE SMOKING IN THE POPULATION

Doina Adina Todea

University of Medicine and Farmacy" Iuliu Hateganu",Department of Pneumology,Cluj Napoca, Romania

Passive smoking in modern society is a controversial topic through studies that have shown the implications of exposure to passive smoking on health, as well as the current legislative context at EU level and implicitly Romania, which limits smoking in public spaces. This legal context has been applied in the European countries long ago, starting with Ireland in 2004, which a real success in the smoker population behavior, compared to the non-smoker.

In Romania, this recent implemented law, from February 2016, had a questionable impact on smoker concepts and on the development of a network where smoking is banned in public places, so that legislative disputes are at the stage of the project.

It is to be clarified in the future the legislative situation regarding the smoking ban in public spaces at national level. Since the non-smoker exposed to passive smoking is exposed to the development of pathologies (cardiovascular, pulmonary obstruction, neoplasia, aesthetic, obstetrical low birth weight, and general health impairment) as a smoker, these legislative frameworks are imminent to implicitly reduce the risk of illness in the general population.

The National Occupational Health Institute labeled passive smoking as occupational carcinogen. The serious side effects of passive smoking on health are a strong and rational motivation to ban smoking in any workplace or public space.

Keywords: passive smoking, legislation, European Union, Romania, disease.

TUBERCULOUS OSTEOARTHRITIS OF THE WRIST - CASE PRESENTATION

Alpar Csipor[1] , Gabriela Jimborean[2], Timea Gal[1], Edith Simona Ianosi[2]

1. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania
2. University of Medicine and Pharmacy, Discipline of Pulmonology, Tg. Mures, Romania

Objectives: Presentation of a rare location of a tuberculous osteoartritis (wrist) associated with lung tuberculosis (TB).

Method: Case report

Result: A 56 year-old male (smoker and alcohol user) was admitted in Orthopaedics Clinic with slow onset of symptoms: left radiocarpal joint pain, functional impairment, skin fistula with purulent secretions, weakness, weight loss (7kg/3 month). The patient was sent in consult in Pulmonology Clinic Tg. Mures where we performed a chest-x-ray and an osteoarticular wrist CT scan due to the suspicion of mixt TB (pulmonary and osteoarticular TB).The wrist CT showed large areas of necrosis, joint collections, osifluent skin fistula, soft tissues edema. Bacteriological examination of fistular secretion confirmed osteo-articular TB with acid fast bacilli in microscopy. Sputum microscopy was positive for Koch bacili and the associated lung tuberculosis was confirmed. The patient received complex treatment by an interdisciplinary team: prolongued standard antibiotic treatment (Isoniazid, Rifampicin, Pirazinamid, Streptomycin in the attack phase), orthopedic wrist contention with surgical radiocarpal curettage of the purulent areas and physiotherapy in the rehabilitation periode. Arthrodesis of the wrist raised the need of joint prostesis.

Conclusions: Large necrotic osteoarthritis will be suspected to have TB etiology and this cases always will need mycobacterial exam and bone biopsy (for confirmation and antibiogramm). Chest x-ray is mandatory to evaluate a concomitent lung TB. Advanced osteoarticular TB with severe structural/functional complication (arthrodesis, fractures, vicious positions) requires orthopedic/surgical treatment, prolonged specific medication and physiotherapy for functional recovery.

Key words: wrist TB, microscopy for acid fast bacilli, lung TB.

LUNG ULTRASOUND IN THE DIAGNOSIS OF PNEUMONIA

Lavinia Davidescu[1,2,3] , Gheorghe Dragnea[4] , Emese Kiss[2,3]

1. Faculty of Medicine and Pharmacy, Oradea
2. NewMedics Hospital, Oradea
3. Davidescu Health Clinique,Oradea
4. Municipal Hospital,Oradea

Guidelines do not currently recommend the use of lung ultrasound as an alternative to chest X-ray or chest computerized tomography scan for the diagnosis of pneumonia. The limitation of chest x-ray in the emergency unit like the patient condition, time factor and the quality of the interpretation which is variable is well known.

Lung ultrasound imaging for the detection of pneumonia is highly accurate, carries no risk of irradiation, quickly performed, easily repeated and with a high sensitivity of 93,4% and a specificity of 97%.

The main sonographic changes seen in pneumonia are: consolidation with air bronchogram, fluid bronchogram, reverberation at the margins, abscess formation, regular vascularization Consolidation and dynamic air bronchograms have the highest specificity for pneumonia.

Being a non-invasive technique surely is a big advantage, recommending lung ultrasound, in particular in the diagnosis of pneumonia in children, pregnant women and for the monitoring of pulmonary lesions.

Conclusion: Pulmonary ultrasound method in the diagnosis of pneumonia is an rapid, safe and accurate tool for diagnosis of pneumonia, which could replace even the Chest X-ray, especially in pneumonia in children, pregnant woman and for lung lesions follow-up.

Keywords: lung ultrasound, Chest X-ray, pneumonia.

EXTRARESPIRATORY TUBERCULOSIS IN MURES COUNTY BETWEEN 2013 -2017

Gabriela Jimborean[1], Sova Rares[2], Alpar Csipor[3], Dombi Istvan[3], Mioara Szathmary[3], Timea Gal[3], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy, Discipline of Pulmonology,Tg. Mures, Romania.
2. Student at the University of Medicine and Pharmacy,Tg. Mures, Romania
3. Clinic of Pulmonology, Clinic County Hospital Mures,Tg. Mures, Romania

Objective: Study of 90 cases of extrarespiratory tuberculosis (ETB).

Methods: Retrospective analysis of the ETB from evidence of the Pulmonology Clinic (2013 – 2017).

Results:The main locations of ETB: bone and joint TB 34.4% (77.4% Pott's Disease), 25.5% lymph node TB, 10% meningeal TB, 11.1% urogenital TB and intestinal/peritoneal TB, 5.5% laryngeal TB, 2.2% pericardial TB, skin TB 1.1%. ETB was more frequent in men comparing with women (exception: genital and lymph node TB). 80% of cases were under 60yo and 32% under 35 (most active group of age). Bacteriological confirmation in ETB was difficult and covered only 30% of cases. Histological confirmation was possible in other 30%. Diagnosis was done by associated working of pulmonologist, orthopedists, neurologists, surgeons, radiologists and general medicine specialists. Treatment was laborious, ≥8 months and included antibiotics, surgery in 34.4% and corticoids in 35.5% of cases. 22.2% have concomitant pulmonary TB. Compliance to treatment was only 78.8% despite the severity of the cases. HIV infection contributed with 5.5%.

Conclusion: ETB is a continuous presence in pathology despite the significative dicrease of TB endemic. ETB has to be on the list for differential diagnostic in the areas with high TB prevalence. Diagnosis included a multidisciplinary approach. Confirmation by surgical biopsy remains the best way for an accurate etiology and a correct treatment. Bacteriology assures confirmation when fistula are present or by aspiration punction. Compliance to investigation has to be improved to raise the diagnosis performance.

Key words: extrarespiratory TB, histological and bacteriological confirmation, multidisciplinary team.

DIAGNOSIS AND TREATMENT IN CHRONIC OBSTRUCTIVE PULMONARY DISEASES PATIENTS WITH SEVERE RESPIRATORY FAILURE AND HYPERCAPNIC ENCEPHALOPATHY (EXPERIENCE OF THE PULMONOLOGY CLINIC 2015 -2017)

Gabriela Jimborean[1], Mirela Bar[2], Alpar Csipor[2], Mioara Szathmary[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Student in the sixth-year at University of Medicine and Pharmacy, Tg. Mures, Romania
3. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: Assessment of chronic obstructive pulmonary diseases (COPD) patients with respiratory failure and hypercapnic encephalopathy.

Methods: Study upon 120 patients with complicated COPD exacerbations who needed ICU hospitalization

Results: Within 120 patients, 10.8% are between 41-50 year-old, 20.4% between 51-60year-old, and 61.7% over 61year-old. The gender ration - males: females 2.75:1. Most of the patients came from urban areas (58.3%). We found multiple risk factors for COPD exacerbations: active smoking 26.6% (+58.3 ex-smokers), environmental exposure 27,5%, bacterial infection 57.5%, flu-like syndrome 25%, medication discontinuation 43.3%. COPD exacerbation intervened in all stages: st-IV 60%, st-III 35% and st-II 5% of cases. Symptoms connected with hypercapnic encephalopathy were common: dyspnea, obnubilation, cyanosis, orthopnea, tachycardia, agitation. Comorbidities of COPD: 20% diabetes mellitus, 56.6% hypertension, 20.8% obesity, 12.5% lung cancer, 37.5% ischemic cardiopathy, 49% congestive cardiac failure, 21.6% sleep apnea. Treatment included maximal bronchodilation, oxygentherapy, antibiotics, corticoids, anticoagulants, mechanical ventilation (66.6% endotracheal intubation 33.4% non-invasive ventilation by masque). Mortality was extremely huge 50%.

Conclusion: Hypercapnic respiratory failure within COPD is a severe complication that requires hospital admission and extended treatment measures in ICU. Infection and smoking continuation are the most frequent risk factors for exacerbations. Smoking remains the main risk factor for the COPD occurrence in the study group. Advanced stages of COPD were involved in the most exacerbations and required the largest health-care cover due to excessive hospitalization, medication, absenteeism and high mortality rates. Increasing compliance to treatment in stable COPD could diminish the severe complications.

Keywords: COPD, exacerbation, hypercapnic encephalopathy.

ROLE OF THORACIC ULTRASOUND IN EMERGENCIES

Gabriela Jimborean[1], Alpar Csipor[2], Mioara Szathmary[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: To underline the valuable role of the thoracic ultrasound (TUS) in emergencies and ICU.

Method:Presentation of the indication, suggestive aspects of the TUS in emergencies (exemplification with cases from Pulmonology Clinic Mures).

Results:TUS is an "easy-to do", real time, cheap, bed-side, no irradiant, method for diagnosis and treatment guide in several critical lung/ pleural disease. It will be used portable high-performance devices and different transducers (3.5-5 curvilinear and 7-10 MHz linear with de-contamination access). TUS may reveal the alveolar-interstitial syndrome: cardiac edema or lung injury (excess in vertical B-lines, "comet tails" aroused from the pleura and spread to the base of the screen). Pleural effusions are very common and easy to recognize (transonic image between the thoracic wall and visceral pleura with floating lung in large pleurisies). TUS allows thoracentesis or drain insertion in safe condition without the risk of hemothorax or pneumothorax. Empyema includes greater density of the liquid and possible septa and locations of the liquid.Lung consolidation (pneumonia, atelectasis, contusion) consists in wedge-shaped, poorly defined hypoechoic regions. Air bronchogram (pneumonia) adds some hyperechoic shadows. Pneumothorax is easy to be recognized (absence of lung sliding, lung point = the limit between pneumothorax and normal lung).

Conclusion:TUS is an indispensable tool for rapid diagnosis of the critical diseases in emergencies. It is a repeatable, non-invasive, "friendly" investigation and provides accurate diagnosis in respiratory diseases. TUS ensures an excellent guide for drain insertion or thoracentesis.

Key words: thoracic ultrasound, emergencies.

MIXED APNEEA IN A PATIENT WITH COMPLEX CARDIAC DISEASE

Gabriela Jimborean[1], Alpar Csipor[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: To underline that sleep apneea is a major risk factor for ischemic coronary disease and to show the treatment chalenge in a case of mixt sleep apneea (MSA).

Method: Case report.

Results: A 58-year-old male was admitted in the Pulmonology Clinic with snoring, sleep apneea (proved by this wife) and diurnal somnolence, BMI 44kg/m^2. A severe MSA was detected by sleep poligraphy. The patient had hypertension, dyslipidemia and type II diabet. The cardiovascular interdisciplinary consult diagnosed ischemic coronary disease with 2 over 90% obstructions on the right coronary artery. At that time the patient refused the Continuous Positive Airways Pressure (CPAP) treatment but accepted angioplasty, antihypertensive drugs, statins and antiagregants. After 2 years the patient returned into our clinic to ask a treatment for his sleep apneea. We found an agravated MSA with 46.4 events/h and a desaturation index 55.8/h and the SaO_2 percentage <90% 31%.We tried the CPAP treatment firstly, but a lot of residual MSA and desaturations remained. We recommended Bilevel Continuous Positive Airways Pressure machine and nocturnal Oxygen with good clinical and polygraphic result. We proposed for the future the aquisition of a personalised Adaptive servo-ventilation (if ejection fraction still remains >50%), lifestyle change and weight loss.

Conclusions: Sleep apneea has to be searched in any ischemic cardiac disease especially in obese patient. The early specific treatment for sleep apneea is crucial to eliminate the nocturnal hypoxemia and to prevent further cardiovascular, metabolic and nervous complication.

Key words: mixt sleep apneea, coronary disease, adaptive servo-ventilation.

TRAINING TECHNIQUE IN THORACIC ULTRASOUND

Gabriela Jimborean[1], Alpar Csipor[2], Mioara Szathmary[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: To emphase the importance of the thoracic ultrasound (TUS) courses and competence.

Method: Presentation of the TUS training technique.

Result: The Discipline of Pneumology proposes for our University to become the headquarter for national competence-exam in TUS. Several national courses in TUS were already held (1 in Oradea, 2 in Tg. Mureş, 2 in Vama Bucovina). We included in the course "pleural pathology" for the Vth-year medicine students, a section concerning TUS with indication, technique and suggestive features of TUS.The first level module

is an easy-learning course addressed to different physicians: pneumologists, internists, surgeons, anesthetists, pediatricians, radiologists. Level II module will study the TUS like guiding for drain insertion, pleural/lung biopsy and emergencies. The exam will consist in a theoretical and a practical test. The TUS learning curve is accessible (3-4 weeks) but requires advanced theoretical knowledge and experienced trainers. Repetitive demonstrations and exercises are recommended. Practice and hands-on will be accredited only after 100 pleural supervised procedures. The number of students per course: 20. We will use 5 devices (1 with Doppler) and common transducers: a) low frequency 3.5-5MHz (similar to the abdominal curvilinear transducer; b) high frequency 7.5-10MHz for superficial layers (thoracic wall).

Conclusion: TUS competence is a "must-have" skill, a precious investigational technique for diagnosis of the respiratory disease with large addressability. The competence in TUS is easy to achieve, cheap, with a short curve of learning in specific conditions: advanced devices and experienced trainers.

Key words: thoracic ultrasound, training, practicability.

APPROACH OF THE SMOKER PATIENTS FROM THE POINT OF VIEW OF THE ANESTHETIST AND THE INTENSIVIST

Bianca-Liana Grigorescu[1], Raluca Stefania Fodor[2]

1. Department of Pathophysiology, University of Medicine and Pharmacy Tirgu-Mures
2. Department of Anesthesiology and Intensive Care, University of medicine and Pharmacy Tirgu-Mures

The increasing number of smokers is one of the leading cause of morbidity and mortality in general population. Smoking increases the risk of perioperative complications in patients undergoing thoracic and nonthoracic surgery. Current smokers with more than 20 pack-year exposure are most likely to have perioperative complications due to both toxic effects of recent smoke inhalation and the cumulative chronic effects of tobacco exposure. Postoperative epidural analgesia, for patients with chronic obstructive pulmonary disease who underwent abdominal surgery under general anesthesia, could be beneficial, due to improving pulmonary function and reducing the risk of pulmonary infection. The release of nicotine, carbon monoxide, hydrogen cyanide and nitric oxide is responsible for the impairment of inflammatory cell function and collagen synthesis, as well as for the imbalance between oxygen demand and delivery, the increasing oxidative stress and inflammation. These are the main pathophysiological changes responsible for: prolonged length of stay in hospital, prolonged mechanical ventilation, increasing pulmonary infection rate, delayed wound healing, cardiovascular and neurological complications, in smokers admitted in intensive care. The approach of the smoker patient is a challenge both for anesthetist and the intensivist. Smoke cessation improves the outcomes of these patients.

Key words: smoker, anesthesia, intensive care, morbidity, mortality.

SMOKING AND HEART FAILURE

Attila Frigy

Department of Internal Medicine IV, Faculty of Medicine, UMF Tg. Mures

Heart failure is an ongoing epidemic, with increasing incidence and prevalence, and – despite progresses in its management – with still high mortality. The relationship of smoking and heart failure are multiple: (1) smoking is a main risk factor of ischemic heart disease and hypertension, the most important substrates of heart failure; (2) smoking could trigger acute decompensations and arrhythmias in the setting of heart failure; and (3) smoking is in the background of numerous pulmonary diseases, which, as comorbidities, could influence the clinical course of heart failure patients. All these aspects will be presented using the most recent clinical and pathophysiological data.

Keywords: smoking, heart failure, prognosis, arrhythmia

"DOES SMOKING CESSATION INFLUENCE THE LUNG CANCER PROGNOSIS? "

Ruxandra Râjnoveanu[1], Andrada Tecsi[2], Monica Pop[1]

1. "Iuliu Hatieganu" Faculty of Medicine,Pneumology Clinic "Leon Daniello" Cluj-Napoca, Romania
2. "Leon Daniello" Pneumology Clinic, Cluj-Napoca,Romania

The links between smoking and lung cancer are very clear but less is known about the effect of smoking cessation after lung cancer diagnosis. Smoking affects cancer treatment and outcome, interfereing with the effects of some therapeutic or chemopreventive agents. Smoking not only leads to lung cancer but also lowers the survival of those who undergo treatment of their cancer. The impact of the cessation on survival rates remains a complex issue. The current scientific data showed that quitting smoking in lung cancer patients shortly before or after diagnosis may reduce the risk of cancer recurrence and death. Survival benefit is significantly higher in tobacco quitters, despite the severity of the disease. Still, the focus of most of the studies is represented by early-stages. Besides the cases having chemotherapy or other treatments, for the surgical cases, quitting smoking also helps improve the body's ability to heal and the response to therapy. The risk of complications,

such as pneumonia and respiratory failure is also lowered. Increasing advocacy for tobacco control including patients with diagnosis of lung cancer should become a standard of care for all patients.

Conclusion: There is still a lack of randomized clinical trials that evaluate the complex impact of tobacco cessation in lung cancer patients.

Keywords: smoking, cessation, lung, cancer, survival.

COURSE DESIGNING AND NEW TEACHING METHODS AT THE DISCIPLINE OF PULMONOLOGY FROM UMPH TG.MUREȘ

Edith Simona Ianoși[1], Simona Mureșan[2], Gabriela Jimborean[1]

1. Discipline of Pulmonology,UMPH Tg.Mureș
2. Discipline of Phisiology, UMPH Tg.Mureș

Introduction: Respiratory disease is a major cause of morbidity and mortality worldwide. A good understanding of respiratory disease and its treatment is essential for all medical graduates.

Material and method: Beginning from 2016 our Phthisiology Department had been transformed into a Pilot Discipline of Pneumology representing a professional success. At the end of the respiratory pathology curriculum the students should have the knowledge, skills, and basic competencies in respiratory diseases which will represent the base to practice as an independent general practitioner. At our Discipline we try from one year to apply the new methods of teaching(case-based,team based,problem based) which are an important challenge for us.

Results: I asked my students at the end of pneumology practical stage to state their preferred medical teaching method which has been applied and used in our university. The results of students questionnaires reflect that in our university the teaching is still teacher-centered which means that is necessary to make big changing in teaching curriculum in the next years.

Conclusions: Teaching after the principles of the student-centered learning method represented a different new way also for myself and it has offered some ideas which may be applied during my courses and extra-course activities too.

Keywords: new teaching methods,pilot pneumology discipline.

NEW THEORIES IN NICOTINE ADDICTION MECHANISM

Adriana Mihai, Daniela Cimpan

University of Medicine and Pharmacy Tg Mures, IPPD Institute of Psychotherapy and Personal Development

Objective: The main purpose of this study is to clarify the neurobiological mechanism of nicotine addiction in actual state of knowledge.

Methods: A scientific literature systematic review was done. The Pubmed was used as database for this research and key words used were: neurobiology of nicotine addiction, neurotransmitters in nicotine addiction, reward pathway, addiction mechanism.

Results: The main symptoms of nicotine addiction are increase tolerance to substance use and/or withdrawal syndrome at cessation of substance use. All other characteristics of addiction show loss of control of drug use. The most known neurobiological mechanism of nicotine addiction is the stimulation nicotinic acetylcholine receptor subtype which facilitates dopamine release and other neurotransmitters involved in pleasure and mood modulation mechanisms. The addiction is reinforced by conditioning and in this way some psychological situation became cues for an urge to smoke.

Conclusions: The mechanism of nicotine addiction consist mainly in actions of nicotine on brain $\alpha 4\beta 2$ nAChRs. Both the conditioned process of nicotine addiction and all stimuli involved, but also the avoidance of withdrawal symptoms maintains the addiction.

Keywords: nicotine addiction, neurobiological mechanism, neurotransmitters, reward pathway

PREVALENCE OF SMOKING IN PREGNANT WOMEN IN OBSTETRICS AND GYNECOLOGY CLINIC 2 TÂRGU MUREȘ

Ovidiu Grama, Marius Gliga, Ovidiu Gîrbovan, Caterina Grif, Levente Ilyés, Carmen Rădulescu, Claudiu Mărginean

Clinic 2 Obstetrics and Gynecology

Background: Smoking in pregnant women is a public health issue, and is associated with a variety of obstetric pathologies, especially premature birth and low birth weight. The objective of the study is to analyze the prevalence of smoking in pregnant women and childbeds in the Obstetrics and Gynecology Clinic 2 Târgu-Mureș and its association with other risk factors and obstetrical pathology.

Material and Methods: We conducted a survey based on questionnaire, composed of 75 simple questions, to a total 100 hospitalized patients on the third day after the delivery. The questionnaire included questions about smoking, the socio-economic status, personal history, the current pregnancy period, and was completed with objective data on current delivery and newborn.

Results: The results show that the prevalence of smoking was 42%. Smoker status was directly influenced by poor socioeconomic conditions (p = 0.043, OR: 2,390, 95% CI = 1,039-5,397), lack of occupation (p = 0,001, OR: 4,091, 95% CI = 1,741-9,613), low education level (p = 0.013, OR: 3.205, 95% CI = 1.307-7.859), Roma ethnicity (p = 0.021, OR: 4.273, 95% CI = 1.750-10.434). Also, smokers were more likely to have premature birth (p = 0.047, OR: 3.313, 95% CI = 1.038-10.567).

Conclusion: Prevalence of smoking in pregnant women remains high despite smoking cessation programs. Improving socio-economic conditions, increasing the level of education could lead to a decrease in the prevalence of smoking in pregnant women.

Keywords: pregnancy,smoking,tobacco.

THE ROL OF ELECTRONIC CIGARETTE IN WITHDRAW OF SMOKING FOR ADULTS OR A RISK OF SMOKING BEGINNING FOR ADOLESCENT

Ioana Munteanu, Florin Mihălțan

Institute of Pneumology "Marius Nasta" Bucharest

The electronic cigarette is a relatively new acquisition in Romania, but since 2010, when the first products appeared on the market, the trend is ascending and it's getting more and more users. According to a Spanish study (2014), most users (85%) preferred it because it could be used in closed spaces and only 14% for nicotine withdrawal, and 13-14 year olds find it a cool accessory. In this context, cigarette companies have focused on creating their own brands of electronics cigarettes with an increasingly attractive appearance. Although they have been shown to be safe and have no effects on the body, there are more and more studies that shows this by highlighting carcinogenic dives in the boat aerosols : inhaled and exhaled by the smoker (there is also exposure to the 2nd hand). In terms of its role in smoking cessation, data show only an extension of the smoker status by its use and not a waning effect, which is similar to the waiver (0.05%). In this context, there are new legislative measures that want to standardize them, limiting access for adolescents and differentiating them into medical or tobacco products.

Keywords: electronic cigarette,withdraw of smoking for adults,risk for adolescent.

ASPECTS OF SMOKING, ALCOHOL CONSUMPTION AND DRUGS IN PUPILS AND STUDENTS FROM TG.MUREȘ BETWEEN 2015-2016

Edith Simona Ianosi[1], György Lorand[2], Gabriela Jimborean[1]

1. Discipline of Pulmonology,UMPh Tg.Mureș
2. Student UMPh Tg.Mureș

Objectives: Analysis regarding the tobacco smoking, alcohol and drugs use in high-school pupils and students from different Universities in Tg.-Mures.

Method: we used the method of questionnaires (41 questions) on 163 high-school pupils and 439 students from different universities in Tg.Mureș.

Results: Smoking is a habit for 58,7% pupils and 78,81 students. Students consume 10% more tobacco than pupils; 80% of the respondents have already consumed alcohol and 23% have already tried some form of narcotic drugs, as opposed to being aware of their harmful effects. The drug users consume cannabis in a procent of 73%.

Conclusions: For the future is in important to spread more medical informations about the harmful effects of tobacco,alcohol and drugs between pupils by organizing courses at the high school. Students have more knowledge about diseases and complications caused by tobacco,alcohol and drugs and despite of this they use to smoke,drink alcohol and consume drugs. For these purpose the spread of medical informations it is necessary to be more effective among the young population.It is important to fight against this killer scourge by all medical methods and psihological support for our young generation.

Key words: tobacco, alcohol and drugs consumption,prohylaxis.

SOCIO-ECONOMIC IMPLICATIONS OF ACTIVE SMOKING

Corina Mărginean

Clinic of Pneumology,County Hospital Mureș,Târgu-Mureș,Romania

Objective: To assess the economic impact of active smoking in the society.

Results: In the assessment of the economic impact of active smoking, we have considered: mortality, shorter life span due to smoking illnesses, declining productive years and the financial burden that smoking is for the entire family, entourage, employer and medical services. The economic impact of smoking is assessed at both microeconomic and macroeconomic level.

Studies regarding the economic impact of active smoking aim at both: direct costs, represented by the value of goods and services consumed by smoking-related illnesses and the indirect costs, represented by low productivity due to premature morbidity and mortality and smoking disability.

Internal costs are related to smoking cost of purchasing tobacco products, medical costs, costs due to low productivity. External costs include cost of public health and education programs, smoking cessation treatment costs and insurance costs.

Conclusions: Smoking is followed by an enormous economic burden on the entire society. Smoking-related illnesses generate massive extra-health care costs for the healthcare system by imposing legislative and education measures that reduce smoking rates by 5% by the year 2025.

Keywords: socio-economic implications,active smoking.

COGNITIVE-BEHAVIOUR PSYCHOTHERAPY IN SMOKING CESSATION

Andrada Todea

Clinical psychologist, psychotherapist

Objective: My goal is to present the main aspects of cognitive-behavior therapy and its application in smoking cessation. Cognitive-behavior therapy (CBT) is a brief intervention therapy aimed at solving “current problems” by changing the thinking and behavior patterns which cause and maintain those “problems”. CBT is an efficient psychological intervention for people who want to quit smoking because changing and restructuring thought processes, combined with learning new behaviours, is essential for people who want to effectively quit smoking and maintain cessation. Studies have shown that pharmacotherapy combined with CBT achieves high and stable abstinence rates.

The presentation describes the key phases of psychotherapy, emphasizing those factors which increase the chance of quitting: 1. identifying how the smoker perceives smoking and cessation, the level of motivation and trust, the function of the smoking behavior, the psychological need for smoking; 2. identifying and restructuring the beliefs which maintain the smoking; 3. prevention of relapse; 4. learning to cope with the emotions associated with quitting (anxiety, anger, sadness, irritability).

Keywords: cognitive-behaviour intervention, smoking cessation, cognitive restructuring.

NICOTINE ADDICTION TREATMENT IN ADOLESCENTS

Monica Marc[1], Voicu Tudorache[2]

1. Hospital of Infectious Diseases and Pneumology ‘’Victor Babes”, Timisoara
2. University of Medicine and Pharmacy ‘’Victor Babes”, Timisoara

It is demonstrated that addiction to nicotine develops very rapidly in adolescence, which is why it is important to carefully approach this age category.

Guides recommend that adolescents ‘approach be similar to that of adults, therefore they should be asked about their parents’ consumption of tobacco and should be encouraged to quit smoking.

Of great importance among adolescents are the youth-oriented prevention campaigns, educational policies, restriction of marketing, the most effective interventions being those that combine school programs with the involvement of the local community.Among young people, although they are eager to quit smoking, attempts to quit are not carefully planned in a timely manner. However, those who use specialized services are twice as likely to succeed. In addition to non-pharmacological methods, there are several studies that highlight the effectiveness of nicotine replacement therapy in adolescents.

Although smoking is widespread among teenagers, most of the research in the field has focused on psycho-social treatments and less on drug therapy. Therefore there is not enough data for adult prescription medication to be recommended to young smokers, clinical trials being limited to nicotine replacement therapy and bupropion.

Keywords: smoking cessation, adolescents, treatment.

EVOLUTION OF TOBACCO DEPENDENCE AMONG THE UMPH STUDENTS IN TARGU MUREŞ 2015-2016

Pál István Kikeli, Mihály Imre László

Procardia Foundation

Objective: Tobacco addiction represents a major healthcare issue with little data regarding healthcare professionals and healthcare professional students. Our objective was to evaluate the smoking prevalence and the level of addiction among the students in the Smoke Free Medical University Târgu Mureş.

Methods: Within the "Smoke free university project" in 2015 and 2016 the smokers level of addiction was evaluated using the Fagerstörm nicotine addiction questionnaire. Data was analyzed with the SPSS v21 software.

Results: In 2015, 2996 students participated to the evaluation (67% of the total) and in 2016 2995 students (66% of the total). Gender distribution 70.9% female in 2015 and 72.1% in 2016. Smoking prevalence in 2015 was 33.5% and 33.4% in 2016. In 2015 -861 and in 2016 -879 smoking students completed the test with 661(76.7%) students in 2015 and 670(76.2%) in 2016 with various level of dependence . Low level 304 (46%)in 2015 and 321(46%)in 2016. Low to moderate in 210 students (31.7%) in 2015 and 224(33.4%) in 2016, moderate 140 (21.2%) in 2015 respectively 123 (18.4%) in 2016 and high dependence7 students (1%) in 2015 respectively 2 in 2016 (0.3%).

Conclusions:There is a high percentage of students in the moderate and high dependence group that might need nicotine replacement therapy according to the Fagerstorm guidelines. A significant proportion of smokers could benefit from counseling. It is imperative to find an effective and accessible solution for smokers to access the interventions and offer support in their efforts to quit.

Keywords: medical students, smoking, dependence.

EDUCATION IN PLEURAL ULTRASOUND

Mirela Gliga[1], Cristian Chirila[2], Paula Chirila[2], Edith Simona Ianosi[3]

1. University of Medicine and Pharmacy,Internal Medicine Department,Tg.Mureş
2. Students University of Medicine and Pharmacy,Tg.Mureş
3. University of Medicine and Pharmacy,Pneumology Discipline,Tg.Mureş

Objective: Ultrasonography has become a clinical investigation routinely used in medical practice and thoracic structures are prone to be visualized because of their superficial location. Combining anatomy, physiology, morphopathology and clinical data, ultrasound of the pleura can finally establish the diagnosis, without harming the patient. But because of the complex pathology, simulation of the ultrasound images can be a very useful method for teaching purposes.

Method: One can examine pleura and lung using an abdominal ultrasound, especially in obese patients, but linear probes are more useful in slim individuals. Ultrasound simulator consists in a silicon mannequin and an abdominal transducer. The software allows student to perform multiple sections and to teach the anatomy of the lung and pleura in normal and pathology. Pathology consists in the following: small and massive pleural effusion, left-sided or right-sided; atelectasis, pneumonia, pulmonary edema, left ventricular failure.

Results: We teach students basic skills in performing ultrasound: image formation, echogenicity, normal anatomy of the lung and pleural space. After the theoretical lecture, they perform ultrasound examination of the normal and pathology, and compare this images with real-time ultrasound. In a cohort of 50 students, there was a 94% improvement in ultrasound knowledges before and after the simulator lesson.

Conclusion: We consider that simulation in ultrasound is a very good tool in the improvement of medical education in pneumology, both for normal and pathological situations. More accurate images are needed in the future together with the technical advances.

Key words: ultrasound, simulator, lung, pleura.

WHY IS THE AVOIDANCE OF PASSIVE SMOKING SO IMPORTANT IN THE CHILD'S SLEEP ROUTINE

Mihaela Oros

Regina Maria Baneasa Clinic, Bucharest

Objective: Passive smoking or second hand smoke has a potentially significant negative impact on physical and emotional health among adults and children. The presentation review the studies of second hand smoke effects on sleep disturbances among pregnant women and children.

Methods: A major limitation of these studies in children is that they rely on parental reports of exposure. There are also a few studies that used serum cotinine as a biomarker of tobacco exposure and a validated pediatric sleep survey to caracterize sleep patterns.

Results: The results show that exposure to second hand smoke negatively impacts sleep possible through exacerbations of nighttime respiratory symptoms and nicotine arousal mechanisms.

Conclusions: Children aged 3–11 years have higher exposure to second hand smoke and its harmful effects. Reduction in exposure may have a significant impact on the quality of sleep in children which have been linked with behavioral and mental health problems, poor school performance, some of which can persist into adulthood.

Keywords: second hand smoke, sleep disturbances, children

HEALTHY SMOKERS AT RISK FOR CARDIOVASCULAR DISEASE: THE USEFULNESS OF LEFT VENTRICULAR FUNCTION AND METABOLIC STATUS EVALUATION

Ovidiu Rusalim Petris[1], Cristina Vicol[2], Milena Adina Man[3], Adina Magdalena Turcanu[4], Ioana Buculei[2], Antigona Trofor[4]

1. "Grigore T. Popa" University of Medicine and Pharmacy - Internal Medicine Dept., Iasi, Romania
2. Clinical Hospital of Pulmonary Diseases Iasi, Romania
3. "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj Napoca, Romania
4. "GrigoreT.Popa" University of Medicine and Pharmacy - Pulmonology Dept., Iasi, Romania

Background: Tobacco use is a certain risk factor for atherosclerosis. Ultrasonography is the most used investigation for revealing cardiovascular disease. Metabolic parameters (glucose, triglycerides, HDL-cholesterol) are modified by tobacco exposure.

Aim: To assess global left ventricular function using the myocardial performance index (MPI), carotid arteries and metabolic status evaluation in smokers versus a control non-smokers group without any history of cardiovascular disease.

Methods: The study population included 96 smokers (group I), without previous history of cardiovascular disease, and 93 control subjects (group II), non-smokers.

Results: Smokers compared with non-smokers had significantly higher systolic blood pressure ($p< 0,001$), diastolic blood pressure ($p<0,001$), and respectively heart rate ($p< 0,001$). Smokers had a higher level of fasting glucose ($p=0,04$), and triglycerides levels ($p=0,001$), while HDL-cholesterol level was significantly lower ($p=0,003$). The MPI was found to be significantly higher in smokers compared with control subjects ($p=0,001$), as well as an increased left ventricular mass index (60, 1%, compared with 33,5% in controls, $p <0,001$).

Smokers had associated carotid subclinical atherosclerosis (increased carotid IMT 28,1%, compared with control group 12,9 %, $p<0.001$).

Conclusions: Healthy smokers with asymptomatic LV dysfunction may have an increased risk for future cardiovascular disease. We recommend active screening of tobacco consumers for cardiovascular disease, as well as for metabolic co-morbidities, such as impaired fasting glucose and dyslipidemia.

Keywords: healthy smokers, cardiovascular risk, left ventricular function, metabolic status.

CORRELATIONS BETWEEN LUNG FUNCTION, EXHALED CARBON MONOXIDE AND „LUNG AGE" IN SMOKERS VERSUS FORMER SMOKERS WITH COPD

Larisa Moldovan[1], Ioana Buculei[1], Ramona Miron[2], Letitia Trofor[2], Ionela-Alina Grosu[2], Antigona Trofor[3]

1. Clinical Hospital of Pulmonary Diseases Iasi, Romania
2. "Grigore T. Popa" University of Medicine and Pharmacy, Iasi, Romania (Ph.D. Student)
3. "GrigoreT.Popa" University of Medicine and Pharmacy-Pulmonary Diseases Dept., Iasi, Romania

Background: Smoking cessation is the most efficient treatment to stop COPD progression. The educational and motivational role of the "lung age" concept, of the spirometry testing and of biochemical validation of tobacco exposure in COPD patients deserves attention for driving intention to quit.

Aim: To assess effects of continuing versus stopping smoking on exhaled carbon monoxide (CO), on "lung age" and on lung function in COPD patients and to determine correlations between these parameters.

Material and methods: 61 hospitalized smokers and former smokers with COPD were evaluated for demographics, smoking characteristics, COPD status (lung function, mMRC dyspnea, COPD assessment test- CAT), exhaled CO and "lung age", in a prospective study, with statistic SPSS Inc pack analysis.

Results: There was a statistically significant difference between FEV1/FVC ratio in smokers (n=30) vs. ex- smokers (n=31) of 0.54 vs. 0.62 ($p=0.02$), but no statistic difference in FEV1 or in FVC alone. Significant statistic differences were found in exhaled CO concentrations of smokers (9.73 ppm) compared to ex-smokers (0.58 ppm) ($p\leq 0.001$). Exhaled CO was statistically correlated with FEV1/FVC ratio ($p= 0.05$). Mean "lung age" was 118.3 years in smokers and 119.58 years in ex- smokers. Lung age was statistically significant correlated with FVC % ($p=0.03$), with FEV1% ($p<0.001$) and respectively with mMRC dyspnea ($p<0,026$).

Conclusions: Exhaled CO and "lung age" assessments, used together with lung function evaluation add value to proving impact of smoking exposure on COPD patients, in clinical settings.

Keywords: smoking cessation, exhaled carbon monoxide, "lung age", lung function, COPD.

SMOKING IN HEALTH-CARE WORKERS (2017)

Gabriela Jimborean[1], Alpar Csipor[2], Andrea Ciociu[2], Dombi Istvan[2], Mioara Szathmary[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy, Tg. Mures, Discipline of Pulmonology, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania

Objectives: Study of the tobacco use among health-care workers in Clinic County Hospital Tg. Mures (2017).

Methods: We analyzed responses to 25 items questionnaire in 21 interns, 10 specialists, 24 nurses, 15 auxiliary personnel

Results: Smoking is widespread among health professionals (41.4% comparing with the national prevalence 26%, 2015). We noticed an increased prevalence comparing with a 2015 study (34.8%). There was a higher frequency in women (45%) than in men (31.5). In the last 2 years smoking has declined in physicians group (32.5%) but remains constant in nurses group (45.8%) and auxiliary personnel (53.3%). Smoking records a higher frequency in women than the national (22.7%) and European prevalence (19%) in the over 15-year-old population. Alcohol use is very high (40%). Medical employees' knowledge about the harmful effects of smoking is still insufficient 71.4%. 41.3% of smokers began smoking before 18yo and 66.6% before 16yo. 68.9% of smokers don't consider that smoking affects the health entourage (second hand, third hand smoking). 71.4% of responders report smoking inside hospital. 86.2% of smokers would like to quit smoking and asked us for support.

Conclusions: Smoking has a high prevalence among healthcare-workers. The lower prevalence in physicians comparing with other personnel can be explained by the greater accessibility to information during faculty and in the daily activity. Physicians and nurses constitute a target group in antismoking education considering the great potential they have for further transmission of information to large groups of general population.

Key words: smoking, medical staff, education.

OCCUPATIONAL EXPOSURE AND PLEURAL DISORDERS RELATED ASBESTOSIS

Oana Cristina Arghir[1], Agripina Raşcu[2], Ioana Sînziana Husaru[3], Adela Badiu[3], Edith Simona Ianosi[4]

1. Ovidius University of Constanta, Romania
2. Carol Davila University of Medicine and Pharmacy, Bucharest, Romania
3. St Andrei Clinical emergency Hospital of Constanta, Romania
4. University of Medicine and Pharmacy, Târgu Mureș, Romania

In Romania, in 21st century, industrial occupational exposure to asbestos has still medical consequences, with a great variety of chest disorders. Diffuse fibrosis of the lung, pleural plaques, effusions or tumors, even lung cancer could be suggestive for asbestosis related chest diseases.Tuberculosis and metastatic pleural disease could be suspected in most of the patients with exposure to asbestos fibers. Delayed diagnosis of asbestosis and asbestos related diseases is frequently induced by omitted or partially professional anamnesis. Most physicians are unaware or uninformed about occupational exposure to asbestos fibers and, in most of the cases, patients forget to mention their past profesional and/or medical history. So, pitfalls can determine a wrong differential diagnosis of a pleural involvement. We present a serie of pleural diseases with tuberculosis confusion, delayed proper diagnosis of asbestosis and fulminant evolution of malignant pleural mesothelioma to death. In conclusion, asbestosis must not be forgotten by pulmonologysts because it is not a disappeared disease.

Keywords: pleural disorders,occupational exposure.

REHABILITATION TECHNIQUES IN PULMONARY DISEASES

Paraschiva Postolache[1], Alpar Csipor[2], Edith Simona Ianosi[3], Mioara Szathmary[2], Gabriela Jimborean[3]

1. University of Medicine and Pharmacy, "Grigore T. Popa" – Iasi, Faculty of Medicine, Pulmonary Rehabilitation, Iasi, Romania
2. Clinic of Pulmonology, Clinic County Hospital, Tirgu Mures, Romania
3. University of Medicine and Pharmacy, Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania

Objectives and method: Analyze of the pulmonary rehabilitation (PR) techniques in respiratory diseases in Pulmonology Clinic.

Result: PR associates non-pharmacological techniques for functional improvement of lung/thoracic diseases. Several respiratory diseases could benefit of dedicated measures of PR. In our Clinic we recommend PR in chronic obstructive disease, bronchial asthma, sleep apnea, obesity, bronchiectasis, cystic fibrosis, interstitial fibrosis, sarcoidosis, tuberculosis, pleural thickening, lung cancer. PR includes several goals: smoking cessation counseling, inhaled medication technique optimization, exercise, diet, healthy life style counseling and social assistance.

Initially, PR is started in the hospital then continued in ambulatory in specialized centers or at home as a long-term program. PR has important health effects: a). improves exercise capacity; b). reduces dyspnea and deconditioning; c). increases the endurance of postural/respiratory muscles; d). increases quality of life; e). improves patient autonomy; f). reduces depression and isolation; g). increases compliance to treatment. The physical exercises are individualized to each patient (3-5 sessions/week, 20-45 min/session, 12weeks). Long-term PR program has additional benefits in improving symptoms and comorbidities and in professional/social reinsertion. Some special techniques are easy to achieve, cheap and accessible: general gymnastic; walking on flat terrain; ergometric bicycle, "inspiratory muscle trainers" (devices to breathe against a resistance, "incentive spirometer", "energy-conserving techniques"). For viscous mucus mobilization: postural drainage, cough/ expectoration education, "flutters -devices", "oscillating positive expiratory pressure therapy".

Conclusion: PR is a complementary therapy in respiratory diseases, accessible to everybody, with important health benefits.

Key words: pulmonary rehabilitation, mucus clearing, inspiratory muscle training.

ROLE OF POSITRON EMISSION TOMOGRAPHY MERGED WITH COMPUTED TOMOGRAPHY (PET – CT) IN THE DIAGNOSIS AND STAGING OF THE SOLITARY PULMONARY NODULE

Alpar Csipor[1], Alexandra Ciociu[1], Vasile Bud[2], Edith Simona Ianosi[3], Gabriela Jimborean[3]

1. Clinic of Pulmonology, Clinic County Hospital Mures, Romania
2. First Surgery Clinic, Emergency Clinic County Hospital, Tirgu Mures,Romania
3. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology,Romania

Objective: Emphasing the role of early diagnosis and staging in a solitary pulmonary nodule (SPN) by corect clinical screening and pozitron-emision-tomography fused with computed tomography (PET-CT).

Method: Case presentation

Results: A 64-year-old male (heavy smoker) was admitted in the Pulmonology Clinic for an exacerbation in a chronic obstructive pulmonary disease (COPD). The chest-x-ray showed alongside an emphysema a 20mm SPN. Considering the risk factors for lung cancer LC (male, midle age, smoker 25 pack/years, presence of COPD, spiculated contour of the SPN and dimension around 2cm) we start the protocol for etiological diagnosis. Bronchoscopy was not suggestive given the peripheral location of the SPN.To avoid the delay of diagnostic (late programming) and the higher radiation (by repetition of the CT and PET-CT for staging) we recommended from the begining the PET-CT. The PET-CT revealed a SPN with hyper-caption (6.5SUV) stage IA (T1b,N0,M0) without lymph nodes extension or metastasis. The patient was a perfect candidate for surgical resection of the nodule by lobectomy. Histology pointed out a squamous LC. We continued oncological and pneumological monitoring with at six-month PET-CT control in the first year than by low-dose CT.

Conclusion: PET-CT permitted the differentiation between benign and malignant SPN and LC staging st.IA (T1b,N0,M0). The early diagnosis allowed an accurate targeted surgical treatment with a radical cure visa. PET-CT performed from the beginning eliminated the diagnosis delay with at least 2-3 months comparing with CT assessment alone.

Key words: PET-CT, solitary pulmonary nodule, lung cancer staging.

COMORBIDITIES (LARYNGEAL TUMOR AND PULMONARY TUBERCULOSIS) – STILL A DIAGNOSIS CHALLENGE

Gabriela Jimborean[1], Gabriel Grigorescu[2], Bunus Paul[2], Alexandra Ciociu[2], Alpar Csipor[2]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania

Objective:Underlining the importance of the early histology confirmation in a tumoral laryngitis comorbid with pulmonary tuberculosis (TB).

Method: Case report

Results: A 53-year-old male with dysphonia (lasting from 4 month) was sent in Pulmonology Clinic from Otorhinolaryngology Clinic to investigate a lung infiltrate found on the chest x-ray. Bronchoscopy revealed whitish multiples small processes on the arytenoids that could be both TB and tumor. A laryngeal biopsy was performed guided by the flexible bronchoscope. Histology confirmed an epidermoid laryngeal tumor. Bacteriology from bronchoalveolar lavage and repeated sputum examination revealed acid fast bacilli in microscopy (Ziehl Neelsen stain). A standard treatment regime for TB with antibiotics and associated corticoids was started. A cervical and thoracic CT was considered to determine laryngeal tumor extension. We send the case for an interdisciplinary consult in the otorhinolaryngology and oncology clinic for specific treatment of the laryngeal process. We noted a rapid favorable evolution of the TB under treatment.

Conclusion: Early histological confirmation in a laryngeal tumor is crucial for the future treatment even in a TB clinical context. Dysphonia claims always early otorhinolaryngology consult, biopsy, chest x-ray and CT exam, bronchoscopy and bacteriology in a multidisciplinary approach.

Key words: laryngeal tumor, biopsy, bronchoscopy, lung TB.

PREVALENCE OF CARDIAC COMORBIDITIES IN SMOKERS AND EX-SMOKERS WITH SEVERE OR END STAGE CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Lavinia Davidescu[1], Bhavish Pothegadoo[2]

1. University of Medicine and Pharmacy,NewMedics Hospital,Oradea
2. NewMedics Hospital,Oradea

The relation between Chronic Obstructive Pulmonary Disease, cardiac comorbidities and its frequency upon tobacco consuming population is not well established.

Objective:Analysing the most common cardiac comorbidities in stage III, IV Chronic Obstructive Pulmonary Disease smokers and ex-smokers along with the impact of tobacco consumption even after quitting.

Methods:100 stage III and stage IV Chronic Obstructive Pulmonary Disease patients admitted between September 2015 – January 2016 in the pneumology ward of the Oradea municipal hospital were involved in this study. These patients were treated solely with medication therapy according to the Global Initiative for Chronic Obstructive Lung Disease 2016 guideline. The group had been judged based on their associated cardiac comorbidities, age, gender, body mass index, 6 minutes walking test and index smoking pack year.

Results: 98% of patients had associated cardiac comorbidities with Chronic Obstructive Pulmonary Disease stage III and stage IV. Arterial hypertension along with ischemic cardiomyopathy were accounted in most patients 68% and 50% respectively. Current smokers had an occurrence of 50% with high blood pressure compare to 69,2% for ex-smokers. Ischemic cardiomyopathy had an equal 50% for both sets of patients.

Conclusion:Tobacco smoking has a long lasting negative impact in severe and end stage Chronic Obstructive Pulmonary Disease patients leading to an increase occurrence of cardiac comorbidities.

Keywords: Chronic Obstructive Pulmonary Disease, cardiac comorbidities, smokers.

CHRONIC OBSTRUCTIVE PULMONARY DISEASE AND CARDIOVASCULAR COMORBIDITIES

Lavinia Davidescu[1,2] , Bhavish Pothegadoo[2]

1. Faculty of Medicine and Pharmacy, Oradea
2. NewMedics Hospital, Oradea

Cardiovascular diseases are the most common comorbidities among patients with Chronic Obstructive Pulmonary Disease. However, it is not clear whether this is due to shared risk factors or if Chronic Obstructive Pulmonary Disease increases the risk for cardiovascular diseases independently. Among all comorbidities observed in Chronic Obstructive Pulmonary Disease, cardiac and vascular diseases are among the most important as they share a number of risk factors, including smoking and gaining.

Epidemiological associations: Sharing the main risk factor: smoking, strong association between coronary heart disease and Chronic Obstructive Pulmonary Disease, is expected. Patients known with chronic bronchitis have an increase in mortality due to an acute coronary event by up to 50%. Whereas obstructive airway disease is less clear, as it was seen to increase the risk of a coronary episode by 30%.

Chronic Obstructive Pulmonary Disease is an independent risk factor for cardiac comorbidities, increasing the risk of cardiovascular disease 2- to 3-fold.

Shared pathophysiological mechanisms: A number of potential pathophysiological mechanisms linking Chronic Obstructive Pulmonary Disease and Coronary heart disease have been proposed, including the proinflammatory milieu, increased oxidative stress and clotting abnormalities, that is common in both Chronic Obstructive Pulmonary Disease and Coronary heart disease.

Since having almost the same pathophysiological backgrounds, the development of cardiovascular disease could arise by the presence of COPD through hypoxia, impaired vasodilatory capacity, oxidative stress and systemic inflammation

Conclusion: Cardiac comorbidities have a far greater negative impact in terms of exacerbation, quality of life and mortality in COPD patients.

Keywords: Chronic Obstructive Pulmonary Disease, cardiac comorbidities, risk factors.

THE ROLE OF THORACIC AND ABDOMINAL ULTRASOUND IN THE THORACIC TUMOR STAGING (CASE REPORT)

Gabriela Jimborean[1], Alpar Csipor[2], Alexandra Ciociu[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objectives: To underline the role of ultrasound (US) in thoracic tumor staging

Method: Case report

Results: A 68-year-old male, heavy smoker (60pack/year) was admitted in the Pulmonology Clinic with mediastinal syndrome with cyanosis in the superior part of the thorax and cranial extremity, collateral circulation in the superior vein cave region and a supraclavicular process. The US performed in the supraclavicular area revealed a firm well defined hypoechoic mass (lymph node block). Bronchoscopy found an external tracheal compression without approachable lesions for bronchial biopsy. CT showed a peripheral lung tumor and a giant mass expanded in the right mediastinum with veins compression. We considered the case in IIIB stage T4N3M0 (N3 - supraclavicular lymphnode bloc, M0 - absence of visible dissemination in abdominal region at the CT and abdominal ultrasound). As the lymph node block was subcutaneous (under the skin as the US showed) we sent the patient for a safe surgical biopsy for histological confirmation. The case could be a candidate for EBUS-Endobronchial US (in Pulmonology Clinic Cluj - Napoca).

Conclusion: Thoracic US was a useful tool for tumor staging (assesses peripheral lymph nodes dissemination). Abdominal US permitted in conjunction with abdominal CT the exclusion of the M1b dissemination. In the same time thoracic US is a guideline for the surgical biopsy in the supraclavicular area and EBUS permits the mediastinal/paratracheal mass needle aspiration/biopsy.

Key words: Thoracic US, abdominal US, EBUS, histology confirmation.

EXTENDED SUBCUTANEOUS EMPHYSEMA AFTER A BRONCHIAL ASTHMA CRISIS

Gabriela Jimborean[1], Gabriel Grigorescu[2], Alpar Csipor[2], Edith Simona Ianosi[1], Ovidiu Jimborean[3]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania
3. Second Surgery Clinic, Emergency Clinic County Hospital, Mures, Romania

Objective: Evaluation of severe complications of an infectious exacerbated asthma (pneumothorax, pneumomediastinum,pneumoperitoneum, subcutaneous emphysema SE) and treatment issues.

Method: Case report.

Results: A 20-year-old female was admitted in emergency in Pulmonology Clinic with asthma crisis (and infection signs), thoracic pain, fever, dry cough, orthopneea, wheesing, respiratory failure (SaO2 84%), tachicardia.She received bronchodilators and corticoid inhalers, systemic corticoids, antihistaminic drugs, oxygen 4l/min, antialgics.The chest x-ray rises the suspicion of a pneumomediastinum. It was excluded systemic corticoids and a thoracic CT was considered. The patients developed in short time SE (with crackling sensation on palpation), with face and neck swelling and extension in abdominal region, back region and upper limbs. CT confirmed a small pneumothorax, a pneumomediastinum, large SE in the thoracic wall with pectoral muscles dissection, extension in the cervical region, upper limbs, abdomen, and pneumo-peritoneum. She was transferred in Surgery Clinic for surgical decompression. Treatment continued with general measures, antibiotics, oxygen, maximal bronchodilation (to decrease the pressure of lung air trapping).The SE was drained by multiple skin punctures with sterile needles. The evolution was rapidly favorable in 48 h.

Conclusion: SE may evolve after an asthma crisis or respiratory infection. The level of SE is not directly related with the amount of pneumothorax. CT imaging is crucial to detect the precise extension of the SE. Case surveying in the surgical/ICU ward is important for the complex treatment (including future need for subcutaneous drain insertion if respiratory failure is threatening).

Key words: subcutaneous emphysema, skin punctures, decompression.

PERITONEAL TUBERCULOSIS HISTOLOGICALLY AND BACTERIOLOGICALLY CONFIRMED

Gabriela Jimborean[1], Edith Simona Ianosi[1], Alexandra Ciociu[2] , Mioara Szathmary[2], Alpar Csipor[2]

1. University of Medicine and Pharmacy, Discipline of Pulmonology, Tg. Mures, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: Presentation of challenges raised by a peritoneal tuberculosis (TB) with ascitis

Method: Case report

Result: A 18-year-old female, was admitted in the Pulmonology Clinic with specific histology: peritoneal TB with caseating granuloma evidence. The patient presented 1 month-ago abdominal pain, flatulence and amenorhea. Abdominal ultrasound revealed ascitis and polychistic ovary. The gynecologist recommended a laparoscopy to establish the etiology of the ascitisand to rule out tumoral ovary. The epiploonum and the parietal peritoneum revealed whitish, elastic nodules. Histology confirmed multiple granuloma (Langhans cells, epitheliod cells and lymphocytes) in fibrotic tissue. The Ziehl-Neelsen stain from the biopsy revealed acid fast baciliand thus peritoneal TB was confirmed. Specific antituberculous treatment (Isoniazid, Rifampin, Pyrazinamide, Amikacin) was started together with corticoids (for peritoneal adherence prevention). The only risk factor found for TB was consume of unboiled/unpasteurised milk ingestion. Since we suspected infection with Mycobacterium bovis by digestive pathway, we recommended large investigation for species identification and an extended antibiogram. Given that Micobacterium bovis has a native chemoresistence to Pyrazinamide we will administrated personalised treatment (with Pyrazinamide replacement) if Mycobacterium bovis strains will be isolated.

Conclusion: Peritoneal TB still exist nowadays in special condition like lack of milk hygiene. Peritoneal biopsy is always indicated in chronic peritonitis with ascitis. Double confirmation of the TB disease (by histology and bacteriology) is important for the diagnosis safety but also for obtaing cultures regarding the antibiogram and strains identification. Personalised treatment could avoid complication and extension of the chemoresistence.

Key words: Peritoneal TB, biopsy, mycobacteriology, antibiogram.

INVESTIGATING SLEEP-RELATED ISSUES IN INTERN PHYSICIANS AND MEDICAL STUDENTS

Gabriela Jimborean[1], Alpar Csipor[2], Alexandra Ciociu[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology,Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania

Objective: Investigation of sleep related issues and lifestyle in young physicians and medical students.

Method: Questionnaires with 17 items (23 residents and 55 fifth-year-students - before the somnology course of Pneumology specialty)

Results: Overweight/obesity is slightly more common in physicians (17.58% female, 15% males) than students (15% female, 13.2% males). Alcohol consumption is very high (33%-29% in doctors, 33%-12% in students). Smoking is widespread in both categories: 30.4% in doctors and 41% students. The presence of insufficient sleep is common (sleep of 6 hours and <6 hours - 34% in doctors, 32.7% in students). The observation is related to age and responsibilities, but also linked to the lack of knowledge about consequences of sleep deprivation. 14.5% of the students and 21.7% of the interns have experienced unintentional sleep in inappropriate situation (because of chronic fatigue). Knowledge about sleep disorders (65.2% for doctors and 38.1% for students) is still insufficient. Any participant met insomnia in chronic type (<3 month).

Conclusion: Young students and physicians have a high amount of insufficient sleep time and fatigue. Knowledge about the importance of sleep for health is still incomplete. The knowledge about sleep diseases and respiratory sleep disorders are also insufficient. There is a high necessity to raise the awareness of doctors/students about the sleep pathology and sleep hygiene because physicians will be the ones who will transmit the patients information for sleep education and healthy lifestyle.

Key words: sleep hygiene, sleep pathology, education.

ELECTRONIC DATABASE FOR PACIENTS WITH LUNG CANCER AND FOR LUNG CANCER SCREENING

Gabriela Jimborean[1], Alpar Csipor[2], Edith Simona Ianosi[1], Ovidiu Jimborean[3]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania
3. Second Clinic of Surgery, Emergency Clinic County Hospital, Mures, Romania

Objective: Proposal for an electronic data base for patients with lung cancer (LC) and lung cancer screening (LCS).

Method: Interdisciplinary project for the database (association with mathematics/informatics specialists).

Result: The electronic database for patients with LC is a project of the Discipline Pulmonology. The database will be useful both for monitoring patients with LC and for registering people entering in LCS. The electronic database will be accessible (with password) to pneumologists, specialists in imaging, oncologists and will permit data access and data transfer (including images) and telemedicine. There is currently a National Global Cancer Registry but it underestimates LC cases (does not include cases that are not recording for special treatment, cases that refuse oncological treatments, those living in other country or geographic areas, and patients without insurance). Our database will not work only as a simple statistic list, but it will include all cases particularities and issues: demographic data, risk factors (smoking, exposure), medical history, investigations as imaging and written result (computed tomography CT, PET-CT, bronchoscopy, biopsies), intervention, mean of confirmation, histological types, staging, immunohistochemistry, blood tumoral markers, treatment (surgery, radiotherapy, chemotherapy,

immunotherapy, palliation), performance index, consultation, evolution. Our database could be implemented in the regional or national frame. LC screening will consist in clinical exam, bronchoscopy, low dose CT, biomarkers in high risk patients: heavy smokers (over 25 pack/years), exposure to harm noxious, associated COPD and low lung function, previous other neoplastic disease, age over 50, nodules in chest x-ray.

Key words: lung cancer, electronic extended database, telemedicine.

DIAGNOSTIC CHALLENGES IN A CASE OF POLYCYSTIC LUNG DISEASE, BONE CYSTS AND INSIPID DIABETES WITHIN A DEMYELINATING NEUROPATHY

Gabriela Jimborean[1], Rodica Bălașa[2], Edith Simona Ianosi[1], Alexandra Ciociu[3], Alpar Csipor[3]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania
2. University of Medicine and Pharmacy, Clinic of Neurology, Emergency Clinic County Hospital, Tg. Mures, Romania
3. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objective: Diagnostic challenges and differential diagnosis in a case of polycystic lung, bone cysts and insipid diabetes.

Method: Case report

Result: A 40year-old male, smoker, was admitted in the Neurology Clinic with clinical signs of diabetes insipidus and an ancient facial paresis. Cranial CT revealed an inflammatory demyelinating neuropathy. The bone CT revealed several cysts on the iliac bone. The patient was sent in Pulmonology Clinic for an ancient pulmonary fibrosis. We found exertional dyspnea, facial erythema, parodontosis and multiple dental losses. Thoracic CT showed a multi-cystic lung disease with thin-walled cysts, predominant in the upper lobes bilaterally, extended hyperinflation and interstitial fibrosis. The need of the differential diagnosis with several interstitial cystic diseases (pan lobular emphysema, lymphangiomatosis, lymphangioleiomyomatosis, Pneumocystis jiroveci pneumonia, and sarcoidosis) recommended a large panel of investigations: bronchoscopy with bacteriology/mycology and immunology from bronchoalveolar lavage, lung biopsy, immunologic seric antibodies, seric alpha 1-antitrypsin, seric anti HIV antibodies, CSF analysis, angiotensin-converting enzyme, repeated bacteriology/mycology exam from sputum. We recommended corticotherapy and inhaled corticoids combined with bronchodilators and large interdisciplinary further evaluation.

Conclusion: Association of the bone cysts with diabetes insipidus and lung cysts is suggestive for Langerhans cell histiocytosis but other interstitial inflammatory diseases and systemic diseases could not be excluded without lung biopsy. Our case is a typical interdisciplinary team based diagnosis and case management.

Key words: demyelinating neuropathy, bone cysts, lung multiples cysts, lung biopsy.

ROLE OF MAGNETIC RESONANCE IMAGING IN THE DIAGNOSTIC AND MONITORING OF PLEURAL DISEASES

Gabriela Jimborean[1], Alpar Csipor[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Romania
2. Clinic of Pulmonology, Clinic County Hospital Mures, Romania

Objective: To underline the role of the Magnetic Resonance Imaging (MRI).

Method: Short presentation of the technique and the indication in the diagnostic of the pleural diseases.

Results: MRI is a less used imagistic method in the diagnostic of the pleural diseases than CT or thoracic ultrasound due to artifacts produces by the heart/lungs movements. However, MRI has several important indications especially related to the assessment of pleural/lung tumors and their extension: a). Staging of pulmonary/pleural tumors; b). Evaluation of mesothelioma extension (circumferential pleural involvement = sign of malignancy); diaphragm infiltration; c). Lung tumor invasion in the thoracic walls; d). Invasion of the Pancoast tumors of the supraclavicular/axillary fossa; e). Pott's disease invasion into the vertebral canal; f). Evaluation of the mediastinal pathology: tumors of the esophagus, lymphomas, thymomas, neuromas; g). Evaluation of the pericardium and great vessels (without contrast); h). Characterization of the density of the pleural fluid (role in hemothorax or empyema); i). Assessment of the evolution under treatment in tumor by quantifying the neo-vascularization. MRI is a safe investigational method without irradiation, comfortable. Dynamic contrast-enhanced MRI allows the evaluation of excessive vascularity in the tumor tissues, correlations with pharmacokinetics, treatment response and prognostic data.

Conclusion: MRI is a valuable, noninvasive technique of thoracic investigation with multiple specific indications especially for the thoracic wall tumoral pathology and mediastinum.

Key words: magnetic resonance imaging, chest wall tumors, staging.

COUNSELING IN TOBACCO CESSATION AND SPECIFIC TREATMENT FOR TOBACCO WITHDRAWAL

Gabriela Jimborean[1], Alpar Csipor[2], Dombi Istvan[2], Alexandra Ciociu[2], Mioara Szathmary[2], Timea Gal[2], Edith Simona Ianosi[1]

1. University of Medicine and Pharmacy Tg. Mures, Discipline of Pulmonology, Tg. Mures, Romania.
2. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania

Objectives: To evaluate the methods used for smoking cessation.

Methods: Analysis of 146 smokers with treatment for tobacco withdrawal.

Results: The patients were included in a smoking cessation program during 2014-2017. The gender ratio was males/females =2.17. After the first 3 months 55.4% were abstinent (14 COPD, 6 lung cancer, 14 cardiovascular disorders, 2 sarcoidosis, 7 tuberculosis, 28 healthy individual including students). We had 14 relapses inside COPD and TB. After reinitiating the program we obtain in 6 month 6.8% abstinence. 48% have medium or superior studies. We used several method for smoking cessation: 1).Repeated counseling for quitting smoking (100% of cases) (success in 14 students and 7 respiratory diseases 27.2%); 2).Counseling and nicotine replacement therapy NRT (patch+oral spray 24-31.1%); 3).Counseling and bupropion (21-27.2%); 4).Counseling and varenicline (11-14.2%). We explained the harm effects upon health, we recommended smoking replacement with pleasant activities and physical activities (gymnastic, walking, occupational therapy). We underlined the advantages of saved money. Success was greater in couples where the partner was nonsmoker. Success was greater in males than females and in heavy smokers than medium smokers.

Conclusion: The tobacco withdrawal rate was still small at 9 month after combined method of quitting smoking. Repeated counseling was crucial for smoking cessation and information reception. Success was greater in very sick patients and in healthy students. Combination between behavioral counseling and NRT had the best success, was accessible and well tolerated. Nonsmoker partner could contribute to success of smoking cessation.

Key words: smoking cessation, behavioral counseling, NRT.

MEANS OF IMPROVING ADHERENCE TO THE CPAP/BPAP USED IN PULMONOLOGY CLINIC TG. MURES

Alpar Csipor[1], Dombi Istvan[1], Edith Simona Ianosi[2], Mioara Szathmary[2], Gabriela Jimborean[2]

1. Clinic of Pulmonology, Clinic County Hospital, Tg. Mures, Romania
2. University of Medicine and Pharmacy, Pulmonology Clinic, Clinic County Hospital, Tg. Mures, Romania

Objectives: Assessment the means of improving adherence to CPAP in sleep apnea (SA).

Method: Retrospective analysis.

Result: Non-adherence to CPAP-treatment is defined as the ≤4h machine use/night. We included here also the complete device refuse despite the medical indication. Whereas we observed a good adherence to the treatment, the most common problem was the indecision to start the treatment. We analyzed 90 SA patients with CPAP indication. 30 patients refused from the beginning the therapy. All the patients had very severe obstructive/mixed SA (60% +obesity-hypoventilation syndrome). Causes of treatment refusal: lack of material support: 66.6% (expensive price for borrowing/buying the device; no assurance covering); fear to sleep with the masque 26.5%, lack of diagnostic confidence 6.6%. 11 patients came back after 1-2 years: 5 due to the disease worsening; 2 sent by the cardiologist, 4 by the bariatric surgeon. From 2017 we observed an important reduction in CPAP refusal and non-adherence. Our methods to improve adherence were: 1).CPAP use determined by objective criteria, specific reports with graphs displays; 2).Repeated (4-5 times) information by different physicians (2 specialists/3 interns); 3).Promotional papers; 4).Involving the relative in the process of treatment; 5).Monthly checks. In our study we met the following favorable predictors: younger age, severity of the disease, being man, advanced tuition level, having a precise CPAP titration via poligraphy, suitable mask.

Conclusion: Adherence could be increase by combined educational factors and devotion. Work in an interdisciplinary team has a better result in patient compliance.

Key words: CPAP adherence, interdisciplinary team.

THE ROLE OF THORACIC ULTRASOUND IN THE MONITORING OF TUBERCULOUS PIOPNEUMOTHORAX-CASE PRESENTATION

Edith Simona Ianosi[1], Mioara Szathmary[2], Gal Timea[2], Gabriela Jimborean[1]

1. Department of Pulmonology,UMPh Tg.Mureş,Romania
2. Clinic of Pulmonology,County Clinical Hospital Tg.Mureş,Romania

Background: Piopneumothorax is a complication which may occure most frequently in pleurisy caused by tuberculosis.Thoracic ultrasound has an important role in diagnosis and treatment of this pathology.

Case presentation: A 45 year-old (heavy smoker and everyday alcohol consumption) was admitted in the hospital for respiratory failure, coughing with expectoration, fatigue,weight loss.Chest-X-ray:evidenced left piopneumothorax and multiple nodular lesions on the right lung. Bacteriological investigation from sputum smear revealed Koch bacillus at microscopy examination intense positive.Left pleural thoracic punction was made a lot of time under ultrasound guidance;we evacuate pleural fluid with macroscopic aspect of pus which was sustained by the bacteriological and biochemical examination made from the pleural fluid.We monitored the quantity of pleural fluid with chest ultrasound made at least at two days. It was performed thoracic CT which evidence the tendency of left pahypleuritis.The patient received antituberculostatic drugs and antibiotics, oxigenotherapy, inhaled bronchodilators. Clinical status improved significantly.We send the patient to thoracic surgery for pleural drainage.

Conclusion: Thoracic ultrasound is very useful in diagnostic,monitoring of evolution of the pleural disease due to several advantages: absence of radiation,real-time imaging,bed-side investigation,easy to make pleural punction under ecography due to best focusing about the location of pathologic area,without complication

Key words: piopneumothorax,thoracic ultrasound guided punction.

ADVANCED MIXT TUBERCULOSIS (NEGATIVE MILIARY PULMONARY TUBERCULOSIS AND COMPLICATED POTT'S DISEASE)

Alpar Csipor[1], Pribac Ioan[1], Alexandra Ciociu[1], Edith Simona Ianosi[2], Gabriela Jimborean[2]

1. Clinic of Pulmonology, Clinic County Hospital Mures,Tg. Mures, Romania
2. University of Medicine and Pharmacy, Discipline of Pulmonology,Tg. Mures, Romania

Objective: Underline the continuous threat of tuberculosis (TB)

Method: Case report

Result: A 31-year-old female was admitted in the Pulmonology Clinic with right leg paresis and walk deficit, low fever, dyspneea, astenia. We found bilateral thoracic crackles, cachexia, palor, tachicardia, functional impotence in crural extremity. The chest x-ray revealed bilateral miliary micronodules with repeated negative Ziehl Neelsen exam from sputum. The spine CT showed D11-L1 spondilodiscitis with a small paravertebral abccessus and compaction of the vertebral bodies, kyphoscoliosis. We began the antituberculous treatment on the basis of the clinical and radiological aspects. After 2 month the Löwenstein Jensen culture for Koch bacili became positive. The ortopedic consult recommended immobilization in orthosis and neurosurgery consult. The antituberculous regime included Isoniazid, Rifampin, Pyrazinamide, and Ethambutol for 3 months in attack phase, than 5 month continuation period and orthopedic/neurologic survey. Evolution was slowly favorable. An interdisciplinary approach (orthopedics, neurosurgery, neurology, physiotherapy) has to be done for a complete functional recovery.

Conclusion: Miliary TB still remains a threat and can appear in patients without visible risk factors or immune depression. Miliary TB is usually negative in microscopy that why we have to corroborate the clinical aspect with the radiological one. Hematologic dissemination was the cause of extrapulmonary TB involvement. Early CT diagnostic in neurological complaints with impaired function could accelerate the diagnosis and prevent complications. Mixt TB is a typical example for interdisciplinary activities for an accurate diagnosis and treatment.

Key words: miliary tuberculosis, Pott's disease, interdisciplinary approach.

PERITONEAL TUBERCULOSIS IN THE CASE OF A YOUNG FEMALE

Mioara Szathmary[1], Noémi Iakab[2], Norbert Nagy[2], Edit Nagy[1], Katalin Bereczky[3], Edith Ianosi[4]

1. Clinic of Pulmonology,Clinical County Hospital Tg.Mureş
2. Clinic of Internal Medicine, Clinical Emergency Hospital Tg.Mureş
3. Department of Obstetric and Ginecology, UMPh Tg.Mureş
4. Department of Pulmonology, UMPh Tg.Mureş

Introduction: Extrapulmonary tuberculosis (EPTB) refers to disease outside the lung, which by nature often poses real challenge for clinicians, resulting frequently in delayed diagnosis and therapy. The present study describes the presentation and diagnostic management of one patient with EPTB, aiming to highlight the necessity of considering this entity in any differential diagnosis process.

Material and method: A 18-ys-old, non smoker female, without any previous medical history, was referred to our clinic from a Gynecology ward, where she was admitted with diffuse abdominal pain and malaise caused by newly onset ascites. She underwent exploratory laparoscopy due to the suspicion of ovarian tumor based on abnormal abdominal ultrasound. Routine blood tests were negative, serologic examinations showed no HIV infection. Tissue sampling was performed form the peritoneum with bacteriologic confirmation of M.tuberculosis, histological examination described multiple granuloma with epithelioid macrophages, Langhans giant cells and lymphocytes. We administered initial intensive–phase antituberculous therapy with successful results so far.

Discussions and conclusions: Our patient presented intense positivity at direct microscopic examination, with characteristic histological findings as well. Peritoneal TB infection is often caused by seeding from abdominal lymph nodes or from salpingo-oophoritis due to diminished or inefficient local immune mechanisms.

Key words: extrapulmonary tuberculosis, biopsy, peritoneum.

"THIRDHAND SMOKE" A DANGEROUS INVISIBLE THREAT

Alpar Csipor[1], Mioara Szathmary[1], Andreea Ciociu[1], Edith Simona Ianosi[2], Gabriela Jimborean[2]

1. Clinic of Pulmonology, Clinic County Hospital Mures, Tg. Mures, Romania
2. University of Medicine and Pharmacy, Discipline of Pulmonology, Tg. Mures, Romania

Objective: Warning against thirdhand smoking (THS)

Method: Presentation of the dangerous effects of the THS for educational purpose

Results: THS describes the invisible residues left behind from active or passive smoking that are deposited on every object of the smoking area (furniture, floor, paving, carpets, clothing, hair, skin, food walls, drapes, home dust, cars indoor). The tobacco smoke toxins remain long time (hours) after the active smoking ends. The small toxic particles can enter the body through skin exposure, dust inhalation or by ingestion. The toxin contamination of the environment is dangerous by direct effect of health but also by combination with other common air components. The new compounds can produce even more carcinogenic harmful. THS is particularly dangerous in young children (predisposed to touch everything with hand and mouth) and people not informed about the danger. A study in 260 medicine-students showed that the knowledge about the harmfulness of second hand and THS is very low. Before our curs in Pulmonology Discipline, only 9.6% of the students heard about the toxicity of the secondhand smoke, and only 4.2% about THS.

Conclusion: Wide spreading the antismoking law ratification and law enforcement by the national authorities for smoke-free public spaces could protect people for exposure to THS. Continuous transmission of the information to population about the harmful on human health and environment produced by the active, passive and THS is a priority and an every medical- personnel duty.

Key words: thirdhand smoke, toxins, antismoking laws, prevention.

INDEX OF AUTHORS