PROGRAM AND ABSTRACT BOOK

RESPIRATORY SOCIETY IN BOSNIA & HERZEGOVINA
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Co-organizers: Federal Ministry of Health
Ministry of Health of Sarajevo Canton
Ministry of Education and Science of Sarajevo Canton
Institute for Medical Investigation, Education and Development, University Clinical Centre of Sarajevo

Congress Organization

Congress Chair
Zehra Dizdarević
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Organization Committee

Zehra Dizdarević – Sarajevo
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Bakir Mehić – Sarajevo
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Sead Jamakosmanović – Tuzla
Ljiljana Cupač – Mostar
Zlatan Hadžimurtezić – Sarajevo
Halid Muhić – Zavidovići
Senka Imamović – Kakanj
Faris Gavrankapetanović – Sarajevo
Nedret Mujkanović – Tuzla
Ademir Hadžismajlović – Sarajevo
Ilija Đojić – Orašje
Mustafa Cuplov – Sarajevo
Nadira Maglić – Travnik
Vesna Čukić – Sarajevo
Senada Saka – Sarajevo

Honourable members

Osman Durić
Osman Sinanović
Mehmed Gribajčević
Faruk Dalagija
Edin Arslanagić
Nermina Obralić
Amra Đurđević
Aida Sijerčić
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Luka Kljenak
Vladimir Lovre
Sarija Agić
Redžad Ćatić
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Scientific Committee

Bakir Mehić
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Hasan Žutić - Sarajevo
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Brent R. Brown - Oklahoma
Ekrem Ajanović - Tuzla
Ismet Gavrankapetanović - Sarajev
Sabina Dizdarević - Brighton
Neven Tudorić - Zagreb
Krsto Jandrić - Banja Luka
Žarko Šantić - Mostar
Jurij Šorli – Golnik
Dragan Stanetić - Banja Luka
Belma Paralija - Sarajevo
Hans Gilljam - Stockholm
Vesna Petrović - Beograd

WELCOMING ADDRESS

DEAR COLLEAGUES,

lt's our second Congress.
The significant improvement has been achieved in world and European respiratory medicine since our first Congress of Respiratory Society.

The economic lack has had consequences for the organizing and technological supply of Pulmonology Institutions in Bosnia and Herzegovina as well as for the medical education of medical workers dealing with respiratory patients. That's why the basic aim of this Congress is to present contemporary achievements, knowledge and experiences in respiratory medicine from the point of view of scientists from Europe and all over the world. Our distinguished guests and participants from abroad will help us in achieving this basic aim.

We would like this Congress to be a challenge for all pulmonologists, as well as for doctors of other specialities dealing with respiratory pathology in daily routine. The sessions of oral presentations, poster presentations and satellite symposia of our sponsors will be organized during the Congress. We shall also try to follow contemporary world trends in pulmonology and thoracic surgery as well as the new access and methodology in this permanently developing medical branch.
Our unhidden desire is that Congress is to be a vibrant place for the exchange of ideas and research results that can improve the lives of patients that are dependant on our knowledge and skills for the prevention and treatment of respiratory disorders.

Despite huge devastating happened in the last war, Sarajevo, the capital of Bosnia and Herzegovina, has been the place of meeting the ways of East and West. It's the place of unique multicultural, multiconfessional status. The various historical monuments of eastern and western cultural inheritance have been testifying about that. This city in the month of May offers wonderful opportunities for pleasant stay as well as for successful meeting.

It's our privilege and great pleasure for inviting you for the planning of your participation and contribution to research and science prosperity of respiratory medicine in Bosnia and Herzegovina.

Prof. Zehra Dizdarević MD PhD
Chair of Congress Committee

Prof. Bakir Mehić MD PhD
Chair of Scientific Committee

GENERAL INFORMATION

VENUE AND DATE

The 2nd Congress of Respiratory Society in Bosnia and Herzegovina will be held in Sarajevo, Hotel Holiday Inn on May 12-14, 2005.

During the congress four mini symposia will be held together with several round tables, hot topics, satellite symposia and poster presentation sessions.
The official languages of the congress are the languages of the people of Bosnia and Herzegovina and English. Simultaneous translation will be available during all sessions.
Posters will be exhibited in the Una Hall in Holiday Inn hotel.

CONGRESS REGISTRATION

	Registration	Scientific Sessions	Evening Symposia	Exhibition
Thursday, 12 May, 2005	11.00-19.00	14.00-17.00	17.30-19.30	14.00-19.30
Friday, 13 May, 2005	08.00-18.00	09.00-18.00	18.00-19.00	09.00-19.00
Saturday, 14 May, 2005	08.00-14.00	08.30-13.00		08.30.12.00

Registration on a day-by-day basis will not be permitted. The participants will receive badges and congress bags on registration. Bags will contain the congress program, abstract book, and other materials. There will be badge control in all scientific activities, therefore congress participants are obliged to wear their badges at all times. Congress program charts are placed inside the badges to facilitate matters for the participants. The badges are colour coded as follows: pink for the congress participants; red for the speakers; dark blue for the exhibitors; yellow for the accompanying guests and blue for the congress personnel.

ACCOMPANYING PERSONS

The accompanying persons can visit the exhibition area and take part in the opening ceremony free of charge after they have registered and received their badges.

CONGRESS OPENING CEREMONY AND COCKTAIL

Congress Opening Ceremony will be held on Thursday, May 12, 2005, at 19.15 in Congress Hall; Followed by cocktail in Bosnia and Herzegovina halls of Holiday Inn hotel.

LUNCHES

No official lunches will be provided. Lunch facilities as well as beverages and snacks are possible in hotel and surrounded restaurants and pizzerias.

COFFEE BREAK
Coffee, refreshing beverages will be provided during break time for registered participants with badges.

CENTER FOR THE ACCEPTANCE OF PRESENTATIONS

The table near Congress desk will serve as the acceptance centre for the presentations. All speakers are requested to control their slides, CDs or floppy disks at least 1 hour before their presentation. The speakers can collect their slides from the same centre after the sessions. The speakers are requested kindly to make sure that the total number of slides does not exceed half of the total number of minutes allocated as lecture time.

CONGRESS SESSIONS

Mini symposia: This time all oral presentations are organized in the format of “Mini symposia”, “Round tables” and “Hot topics”. The mini symposia are formed of five papers accepted for presentation on the same subject. Every presentation will be followed by a 5-minute discussion period. “Round tables” are formed from one to two lectures about some current themes in pneumology. “Hot topics” will be presented from very well known subjects from that field of medicine.

Poster presentations: The participants whose abstracts have been accepted for poster presentation sessions will set up their posters, which should be 90X90 cm in size on the indicated day between 08.00 and 08.30am in Holiday Inn hotel, Poster-Exhibition Hall Una, and will dissemble them at 17.00 hour (Friday) and 14.00 hour (Saturday). The necessary material for applying the posters on the boards can be obtained from the congress personnel in the poster hall. Researchers must be present to discuss the posters with the poster chairs and participants between 13.30 and 14.30 (Friday) and 10.00 and 11.00 (Saturday) during poster presentations.

THE CERTIFICATE OF ATENDANCE

The participants will have to attend the Congress to receive the Certificate of attendance that will be disposed by the end of the Congress.

OTHER NOTES

Climate and weather
Sarajevo is the city with continental climate. The weather in May is usually nice with average temperature of 18 Celsius. As the raining and a little bit colder weather are possible, we also recommend the clothes corresponding to that weather.

Sightseeing tours
Information about all tours will be available from tours operator on tours desk.

SCIENTIFIC PROGRAM DAY BY DAY

May 12, 2005 – Thursday

TIME	*SESSION*	*HALL*
11.00-14.00	**Registration**	Entrance of Congress Hall
14.00-16.00	**Mini symposium:** ASTHMA – RECENT ADVANCES	Congress Hall
16.05-17.00	**Hot topic:** POSITRON EMISSION TOMOGRAPHY	Congress Hall
17.00-17.30	Coffee break	Umbrella gallery
17.30-19.00	**Evening symposium – GlaxoSmithKline**	Congress Hall
19.15-19.45	Opening Ceremony	Congress Hall
19.45-21.00	Welcome cocktail	BosniaHerzegovina

May 13, 2005 – Friday

TIME	*SESSION*	*HALL*
09.00-11.00	**Mini symposium:** TUBERCULOSIS	Congress Hall
11.00-11.30	Coffee break	Umbrella gallery
11.30-12.30	**Hot topic:** OBSTRUCTIVE SLEEP APNEA	Congress Hall
12.30-13.30	**Poster Presentations I**	Una Hall
13.30-14.30	Lunch time	
14.30-16.30	**Mini symposium:** COPD	Congress Hall
16.30-16.45	Coffee break	Umbrella gallery
16.45-17.45	**Round table:** VENTILATORY SUPPORT IN ICU	Congress Hall
18.00-19.00	**Evening symposium – Eli Lilly**	Congress Hall

20.00 **Gala Dinner**

May 14, 2005 – Saturday

TIME	*SESSION*	*HALL*
08.30-09.30	**Round table:** TOBACCO SMOKING	Congress Hall
09.30-10.30	**Round table:** NEW HORIZONTS IN BRONCHOSCOPY	Congress Hall
10.30-11.00	Coffee break	Umbrella gallery
11.00-12.00	**Poster Presentations II**	Una Hall
12.00-14.00	**Mini symposium:** LUNG CANCER	Congress Hall
14.00	**Closing remarks**	Congress Hall

CONGRESS SCIENTIFIC PROGRAM

May 12, 2005 – Thursday

14.00-16.00	Mini symposium	Congress Hall

ASTHMA – RECENT ADVANCES
Chairs: H. Žutić (Sarajevo, Bosnia Herzegovina), A. Chetta (Parma, Italy)

14.00 Recent approaches in prevention, diagnosis and treatment of asthma
Z. Dizdarević, H Žutić (Sarajevo, Bosnia Herzegovina)

14.20 Interaction between upper and lower airways
B. Mehić (Sarajevo, Bosnia Herzegovina)

14.40 New concepts on inflammation and airway remodelling in asthma
A. Chetta (Parma, Italy)

15.00 Asthma control in childhood
E. Saračević (Sarajevo, Bosnia Herzegovina)

15.20 Role of family medicine team members in asthma management
Z. Jatić (Sarajevo, Bosnia Herzegovina)

15.40 Discussion

16.05-17.00	Hot topic	Congress Hall

POSITRON EMISSION TOMOGRAPHY (PET)
Chairs: B. R. Brown (Oklahoma City, USA), N. Sečen (Sremska Kamenica, SCG)

16.05 The role of FDG-PET/CT in diagnosis and management of chest tumours
S. Dizdarević (Brighton, Great Britain)

17.30-19.00	Evening symposium GlaxoSmithKline	Congress Hall

APPROACHES TO ASTHMA AND COPD MANAGEMENT:
Advances Today Mean More Life Tomorrow

19.15-19.45	OPENING CEREMONY	Congress Hall
19.45-21.00	WELCOME COCKTAIL	Bosnia and Herzegovina

May 13, 2005 – Friday

09.00-11.00	Mini symposium	Congress Hall

TUBERCULOSIS
Chairs: Z. Dizdarević (Sarajevo, Bosnia Herzegovina), J. Šorli (Golnik, Slovenia)

09.00 Tuberculosis in Bosnia and Herzegovina
Z. Dizdarević (Sarajevo, Bosnia Herzegovina)

09.20 Surveillance of tuberculosis in Europe
H. Žutić (Sarajevo, Bosnia Herzegovina)

09.40 Extra-pulmonary tuberculosis: Epidemiology and characteristics of disease
J. Šorli (Golnik, Slovenia)

10.00 Multi-drug resistant tuberculosis
M. Stanetić (Banja Luka, Bosnia Herzegovina)

10.20 National reference centre for Mycobacterium Tuberculosis
J. Abduzaimović Maglajlić (Sarajevo, Bosnia Herzegovina)
10.40 Discussion

11.00-11.30	Coffee break	Umbrella gallery

11.30-12.30	Hot topic	Congress Hall

SLEEP APNOEA
Chairs: E. Mušič (Golnik, Slovenia), V. Bošnjak Petrović (Beograd, SCG)

11.30 Obstructive sleep apnoea: an overview
Y. Peker (Skövde, Sweden)

12.30-13.30 Poster Presentations I Una Hall

Chairs: Z. Dizdarević (Sarajevo, Bosnia and Herzegovina),
J. Abduzaimović Maglajlić (Sarajevo, Bosnia and Herzegovina),
Lj. Cupač (Mostar, Bosnia and Herzegovina)
A. Hadžismajlović (Sarajevo, Bosnia and Herzegovina)
E. Ajanović (Tuzla, Bosnia and Herzegovina)

THE CORELATION OF A NORMAL AND THE PATHOLOGIC CHEST X-RAY IN THE STATES OF THE PULMONARY THROMBOEMBOLIC DISEASES
Agić S, Bašić H. General Hospital of Sarajevo, Sarajevo, Bosnia Herzegovina

SURGICAL TREATMENT OF PULMONAR AIR CYSTS
Alihodžić-Pašalić A., Guska S., Hadžismajlović A., Ćerimagić Z.,Mulahasanović S., Pilav A., Pilav I
Clinic of Thoracic Surgery, Clinical Center University of Sarajevo, Bosnia Herzegovina

GOODPASTURE'S SYNDROME: CASE REPORT
Ćatović-Pećanac Elmedina[1], Rašić Senija[2], Pećanac Mirsad[1], Babić Mirsad[3], Efendić Dženana[1]
[1] Clinic for Lung Diseases, Clinical Center University of Sarajevo
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[3] Institute of Pathology, Medical faculty University of Sarajevo, Bosnia Herzegovina

WEIGHT LOSS IN PATIENTS WITH CRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AS A PROGNOSTIC FACTOR OF SURVIVAL AND QUALITY OF LIFE
Čukić V, Dizdarević Z, Maglajlić J, Dizdarević D, Žutić H. Clinic of Lung Diseases and Tuberculosis «Podhrastovi», Clinical Center University of Sarajevo, Bosnia Herzegovina

THE SIGNIFICANCE OF POLYMORPHONUCLEAR NEUTROPHIL LEUCOCYTES IN THE DEVELOPMENT OF BRONCHIAL HYPERREACTIVITY IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE
Čukić V, Maglajlić J, Mehić B, Mornjaković J, Dizdarević Z, Žutić H. Clinic of Lung Diseases and TB «Podhrastovi", Clinical Center University of Sarajevo, Bosnia Herzegovina

LEVEL OF EOSINOPHILS AND ECP AS A PROGNOSTIC INDICATOR IN COPD EXACERBATION
Dohranović-Tafro D[1], Mehić B[1], Rustempašić M,[1] Petro M.[2]
[1]Clinic of Lung Diseases and TB "Podhrastovi", Clinical Center University of Sarajevo, Sarajevo,
[2]Public Health Institution "Dom zdravlja Livno" Livno, Bosnia Herzegovina

DIAGNOSTIC THORACOSCOPY-A WINDOW TO PLEURAL SPACE
Guska S, Pilav I, Hadžismailović A. Clinic for Thoracic Surgery Clinical Centre University of Sarajevo, Bosnia Herzegovina

SURGICAL TREATMENT OF 183 CASES OF PRIMARY TUMOR AND CYST OF THE MEDIASTINUM
Guska S, Pilav A, Pilav I, Hadzismailovic A. Clinic for Thoracic Surgery, Clinical Centre University of Sarajevo, Bosnia Herzegovina

TB RELAPSES-ONGOING PROBLEM
Hadžimurtezić Z., Krsmanović S., Sladić I. Clinic for Lung Diseases and TB "Podhrastovi", Clinical Center of Sarajevo University

TUBERCULOSIS AT CHILDREN IN TUZLA CANTON DURING THE PAST TEN YEARS
Hadžibeganović M, Pašić A, Selimović S. University Clinical Centre Tuzla, The Paediatric Clinic Tuzla, Tuzla, Bosnia Herzegovina

THE CHARACTERISTICS OF PARAMETRES OF VENTILATION DURING THE LEFT HEART DECOMPENSATION

Hadžiredžepović A.,Konjić M., Smajić A., Ustamujić A., Krekić S. Clinic of Lung Diseases "Podhrastovi", Clinical Center University of Sarajevo, Bosnia Herzegovina

THE SIGNIFICANCE OF EXPLORATIVE THORACOTOMY AND MEDIASTINOTOMY IN DISEASES WITHOUT DEFINITIVE DIAGNOSIS IN THORACIC SURGERY

Hadžismajlović A, Guska S, Čerimagić Z, Mušanović S, Alihodžić-Pašalić A, Pilav A, Pilav I. Clinic of Thoracic surgery, Clinical Centre University of Sarajevo, Bosnia Herzegovina

EPIDEMIOLOGICAL SITUATION OF TB IN 2003 IN ALBANIA

Hafizi H, Aliko A, Bardhi D, Tafaj S. Albania

HUDATID CYST RUPTURE DIAGNOSTIC APROACH - Case Report

Ibralić M[1], Bešlić Š[1], Dalagija F[12], Vrcić D[1], Čerimagić Z[2], Pilav A[2], Karović J[1], Dilić S[1], Huković F[1], [1]Institute of Radiology, Clinical Center University of Sarajevo, [2]Clinic for Thoracic Surgery, Clinical Centre University of Sarajevo, Bosnia Herzegovina

REVIEW OF RESPIRATORY DISEASES IN KAKANJ MUNICIPALITY

Imamovic Balorda S. Public health institution "Dom zdravlja Kakanj" Kakanj, Bosnia Herzegovina

FAMILY Q-FEVER - CASE REPORT

Konjić M, Hadžiredžepović A, Krekić S, Čukić V, Smajić A. Clinic of Lung Diseases and TB «Podhrastovi», Clinical Center University of Sarajevo, Bosnia Herzegovina

TB MORTALITY RATE IN PATIENTS DURING TREATMENT

Krsmanović S, Hadžimurtezić Z, Sladić I, Genjac S. Clinical Center of Sarajevo University, Clinic of Lung Diseases and TB, Sarajevo, Bosnia Herzegovina

SPECIFICITY OF ELEKTROCARDIOGRAPHY AND ECHOCARDIOGRAPHY CHANGES AT THE PATIENTS WITH THE PULMONARY EMBOLISM

Macić-Džanković A,[1] Pozderac-Memija M.[2]
[1]General Hospital Sarajevo,
[2]Institution PIO/ MIO of Federation of Bosnia Herzegovina, Sarajevo, Bosnia Herzegovina

FREQUENCY OF MICROSCOPIC POSITIVITY OF LUNG TB IN SPUTUM SAMPLES IN LABORATORY FOR MYCOBACTERIOLOGY OF CLINIC OF LUNG DISEASES AND TB «PODHRASTOVI» SARAJEVO

Maglajlić J, Mornjaković-Abazović J, Dizdarević Z, Čukić V. Clinical Centre of Sarajevo University, Clinic of Lung Diseases and TB «Podhrastovi», Sarajevo, Bosnia Herzegovina

HEXAGON TB IN PRACTICE FOR RAPID DIAGNOSIS LUNG TB

Nadarević A[1], Aščerić M[2], Vrabac M[3].
[1]Department of Lung Disease and TB, Clinical Hospital, Tuzla,
[2]Department of Pharmacology, Toxicology and Clinical Pharmacology, Faculty of Medicine, University of Tuzla,
[3]Department of Family Medicine, Clinical Hospital, Tuzla, Bosnia Herzegovina.

EVALUATION OF EFFICIENCY PRACTICAL ISSUES IN THE MANAGEMENT OF CHILDHOOD ASTHMA

Nikšić D [1], Saračević D[2], Kulić A [3], Kurspahić Mujčić A.[1]
[1] Medical Faculty, University of Sarajevo,
[2] Paediatric Clinics, Clinical Centre University of Sarajevo,
[3] Institute of Public Health FB&H, Sarajevo, Bosnia Herzegovina

CONGENITAL BRONCHIECTASIES IN CHILDHOOD - case report

Omerčahić-Dizdarević A[1], Saračević E[1], Hadžimurtezić A[2].
[1]Pediatric Clinic, Clinical Center University of Sarajevo, Sarajevo,
[2] Public Health Institution "Dom zdravlja Sarajevo", Sarajevo, Bosnia Herzegovina

DRUG RESISTANT TUBERCULOSIS AS IMPORTANT INDICATOR OF TUBERCULOSIS CONTROL

Paralija B, Dizdarević Z, Žutić H, Mornjaković J, Ustamujić A, Maglajlić J.
Clinic of Lung Diseases and TB, Clinical Center of Sarajevo University, Bosnia Herzegovina

CYSTIC FIBROSIS – CLINICAL ASPECTS ON OUR PATIENTS

Paralija B[1], Saračevič E[2]
[1]Clinic of Lung Diseases and TB, Clinical Center of Sarajevo University,
[2]Pediatric Clinic, Clinical Center of Sarajevo University, Bosnia Herzegovina

SINUSITIS AND ACUTE EXACERBATION OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Pejovic E[1], Halilovic A[2], Bralić I[2]
[1]Health Center Podgorica,
[2]Health Center Rozaje, Serbia and Montenegro

SURGICAL TREATMENT OF SPONTANEOUS PNEUMOTHORAX

Pilav A, Guska S, Ćerimagić Z, Hadžismajlović A, Mušanović S, Alihodžić-Pašalić A, Pilav I. Thoracic Surgery Clinic, Clinical Center University of Sarajevo, Bosnia Herzegovina

SURGICAL TREATMENT OF PLEURAL EMPYEMA

Pilav I, Guska S, Ćerimagić Z, Hadžismajlović A, Mušanović S, Alihodžić-Pašalić A, Pilav A. Clinic of Thoracic Surgery, Clinical Center University of Sarajevo, Bosnia Herzegovina.

KEEPING ASTHMA UNDER CONTROL BY INHALATION COMBINATION OF CORTICOSTEROID (FLUTICASON PROPIONATE) AND BETA AGONIST WITH LONGTEARM EFFECT (SALMETEROL)

Salihović H. Public Health Institution "Dom zdravlja Banovići", Banovići, Bosnia Herzegovina

EFFICACY OF SALBUTAMOL/FLUTICASONE PROPIONATE 25/50 MCG IN 5 YEARS OLD CHILDREN WITH MILD ASTHMA DISEASE

Saračević E[1], Dizdarević A[1], Hadžić E[2].
[1]Pediatric Clinic, Clinical center University of Sarajevo, Bosnia Herzegovina
[2]Out patient Clinic of Public Health Institution Sarajevo, Bosnia Herzegovina

RETROSPECTIVE STUDY OF TUBERCULOSIS CASES BY SEX AND AGE IN FEDERATION OF BOSNIA AND HERZEGOVINA (1998–2003)

Ustamujić A[1], Dizdarević Z[1], Žutić H[1], Mehić B[1], Paralija B[1], Abduzaimović- Maglajlić J[1], Rold V[2], Bakula I[2], Dervišbegović F[2], Imamović S[2], Osmić M[2], Šantić Ž[2], Tutić F[2], Durić J[2], Delić N[2], Đojić I[2].
[1]Clinic of Lung Diseases and TB "Podhrastovi", Clinical Center University of Sarajevo, Sarajevo, Bosnia Herzegovina
[2]Cantonal TB coordinators from Federation of Bosnia Herzegovina

EXTRAPULMONARY TUBERCULOSIS IN FEDERATION OF BOSNIA AND HERZEGOVINA DURING 1997 – 2003.

Ustamujić A[1], Žutić H[1], Dizdarević Z[1], Mehić B[1], Abduzaimović Maglajlić J[1], Mornjaković-Abazović J[1], Hadžiredžepović A[1], Bakula I[2], Dervišbegović F[2], Imamović S[2], Osmić M[2], Šantić Ž[2], Tutić F[2], Durić J[2], Delić N[2], Đojić I[2].
[1]Clinic of Lung Diseases and TB "Podhrastovi", Clinical Center University of Sarajevo, Sarajevo, Bosnia Herzegovina
[2]Cantonal TB coordinators from Federation of Bosnia Herzegovina

DETERMINATION OF PARTITION COEFFICIENTS AND IN VITRO PERMEATION OF PYRAZINAMIDE THROUGH ARTIFICIAL MEMBRANE

Uzunović A.[1], Mehmedagić A.[1,2], Vranić E.[3]
[1]Institute for Quality Control of Medicines, Sarajevo,
[2]University of Sarajevo, Faculty of Pharmacy, Department of Pharmacokinetics, Sarajevo,
[3]University of Sarajevo, Faculty of Pharmacy, Department of Pharmaceutical Technology, Sarajevo, Bosnia Herzegovina

NEONATAL TUBERCULOSIS – Case report
Mirošljević V[1], Jovičić S[1], Simić E[2].
[1]Clinic of Child Diseases, Banja Luka, [2]"Dom zdravlja" Srbac, Bosnia Herzegovina

ROLE OF GENERAL INFLAMATORY SYNDROMA IN DEVELOPING OF CHRONIC COR PULMONALE
Prnjavorac B, Ajanović E, Članjak M, Kurbašić I, Sejdinović R, Fejzić N. General Hospital Tešanj, Bosnia Herzegovina

SOME CHARACTERISTICS PULMONARY EMBOLISM ON OUR MATERIAL
Ajanović E, Prnjavorac B, Članjak M, Sejdinović R, Kurbašić I, Fejzić N. General Hospital Tešanj, Bosnia Herzegovina

13.30-14.00 LUNCH TIME

May 13, 2005 – Friday

14.30-16.30	**Mini symposium**	**Congress Hall**

CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)
Chairs: B. Mehić (Sarajevo, Bosnia Herzegovina), M. Samaržija (Zagreb, Croatia)

14.30 Recent horizonts in COPD
E. Ajanović (Tuzla, Bosnia Herzegovina), B. Mehić (Sarajevo, Bosnia Herzegovina)

14.50 Clinical approach to infective acute exacerbations of COPD (AECOPD)
E. Mušić (Golnik, Slovenia)

15.10 Pulmonary hypertension
M. Samaržija, M Jakopović, G. Redžepi (Zagreb, Croatia)

15.30 Respiratory failure in COPD
N. Tudorić (Zagreb, Croatia)

15.50 Management of severe, end-stage of COPD
V. Bošnjak Petrović (Beograd, SCG)

16.10 Discussion

16.30-16.45	**Coffee break**	**Umbrella gallery**

16.45-17.45	Round table	Congress Hall

VENTILATORY SUPPORT IN ICU
Chairs: N. Triller (Golnik, Slovenia), Y. Peker (Skövde, Sweden)

16.45 Current concepts in mechanical ventilation
B.R. Brown (Oklahoma City, USA)

18.00-19.00	Evening symposium Eli Lilly	Congress Hall

APPROACHES TO ASTHMA AND COPD MANAGEMENT:

20.00 GALLA DINNER

May 14, 2005 – Saturday

08.30-09.30	Round table	Congress Hall

TOBACCO SMOKING

Chairs: S. Dizdarević (Brighton, United Kingdom), Ž. Šantić (Mostar, Bosnia Herzegovina)

08.30 Smoking – effects and treatment
H. Gilljam (Stockholm, Sweden)

09.30-10.30	Round table	Congress Hall

NEW HORIZONTS IN DIAGNOSTIC AND THERAPEUTIC BRONCHOSCOPY

Chairs: H. Žutić (Sarajevo, Bosnia Herzegovina), K. Jandrić (Banja Luka, Bosnia Herzegovina)

09.30 Endobronchial ultrasound
N. Triller (Golnik, Slovenia)

09.55 Treatment of airway obstruction
B. Mehić (Sarajevo, Bosnia Herzegovina)

10.30-11.00	Coffee break	Umbrella gallery

11.00-12.00	Poster Presentations I I	Una Hall

Chairs: A. Omanić (Sarajevo, Bosnia and Herzegovina),
J. Durić (Bihać, Bosnia and Herzegovina),
Z. Hadžimurtezić (Sarajevo, Bosnia and Herzegovina),
M. Stanetić (Banja Luka, Bosnia and Herzegovina),
S. Jamakosmanović (Tuzla, Bosnia and Herzegovina)

SMOKING AS A RISK FACTOR FOR STROKE OCCURRENCE IN DIABETICS
Alajbegovic A.[1], Alajbegovic S[2], Muminovic A[1], Mehmedika-Suljic E[1], Resic H.[3]
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REDUCTION OF LUNG COMPLICATION AFTER BREAST CANCER IRRADIATION BY COMPUTERIZED TOMOGRAPHY BASED TREATMENT PLANNING
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EFFECTS OF TOBACCO SMOKING TO LUNG HEALTH OF FACTORY WORKERS IN FURNITURE FACTORY « KRIVAJA-ZAVIDOVIĆI
Bišanović S[1], Mehić B[2].
[1]Public Health Institution Gradačac, Bosnia and Herzegovina, [2]Clinical Center University of Sarajevo, Clinic of Lung Disease and TB "Podhrastovi", Sarajevo, Bosnia Herzegovina

CLINICAL FEATURES OF LUNG CANCERS DIAGNOSED AT CLINIC OF LUNG DISEASES AND TB "PODHRASTOVI"
Efendić Dž, Genjac S. Clinic of lung diseases and TB "Podhrastovi", Clinical Center University of Sarajevo, Bosnia Herzegovina

LUNG CANCER IN FEMALES IN TWO SARAJEVO MUNICIPALITIES
Gazdić A, Raljević A. Public Health Institution Sarajevo, Bosnia Herzegovina

BRAIN METASTASIS OF NON-SMALL CELL LUNG CANCER
Genjac S, Sladić I, Lovre V, Krsmanović S, Efendić Dž. Clinic Lung Diseases and TB «Podhrastovi», Clinical Center University of Sarajevo, Bosnia Herzegovina

ANALYSIS OF SURGICAL APPROACH TO DIAGNOSIS AND THERAPY IN SOLITARY PULMONARY NODULES
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RADILOGICAL APPEARANCE, AGE AND SMOKING AS THE FACTORS OF RISK OF MALIGNANCY IN SOLITARY PULMONARY NODULES
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ALGORITHMIC APPROACH TO THE DIAGNOSIS AND TREATMENT OF SOLITARY PULMONARY NODULES
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SMOKING HABITS DURING PREGNANCY IN ČAPLJINA, BOSNIA AND HERZEGOVINA.
Hasanagić M[1], Hodgetts G[2], Knežević T[3], Krešić K[3], Vego G[3].
[1]RMC «Dr Safet Mujić» Mostar,
[2]Queen s University, Kingston-Canada,
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SMOKING HABITS AND ATTITUDES AMONG PATIENT IN PRIMARY CARE CENTERS IN HNK, BOSNIA AND HERZEGOVINA AND CORRELATION WITH INCIDENCE OF CHRONICALLY NO INFECTIVE DISEASES
Hasanagic M[1], Rahimic M[1], Hodgetts G[2], Saric B[3].
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SMOKING HABITS OF PRIMARY CARE NURSES AND THEIR CHILDREN IN BOSNIA AND HERZEGOVINA
Hasanagić M, Sarić B, Hodgetts G, Gavran L, Stanetić K, Ćepo M, Knežević T, Ćupina A, Marić M, Skoro M.
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AGGRESSIVE DIAGNOSIS IN LUNG CARCINOMA
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POSTOPERATIVE RESPIRATORY COMPLICATIONS AFTER LUNG CANCER SURGERY
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THE ROLE OF RADIOTHERAPY IN THE TREATMENT OF MEDICALLY INOPERABLE STAGE I AND II OF NSCLC
Lomigorić J[1], Mehić B[2], Begić A[3]
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NEEDLE ASPIRATION BIOPSY OF EXTRATHORACIC METASTASIS OF LUNG CANCER
Lovre V, Genjac S, Smajic A, Dohranovic D. Clinic of Lung Diseases and TB, Clinical Centre University of Sarajevo, Bosnia Herzegovina

EVALUATION OF HEALTH EDUCATION METHODS IN QUITING OF TOBACCO SMOKING
Omanić A[1], Džubur A[1], Ovčina A[2], Kurspahić – Mujčić A[1], Omanić J[3], Nikšić D[1], Jatić Z.[4]
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THE INFLUENCE OF PARENT SMOKING ON THE CHILDREN RESPIRATORY ORGANS DISEASES
Pašić A, Hadžibeganović M, Selimović S. Clinic for Children Diseases Tuzla, University Clinical Center Tuzla, Bosnia Herzegovina

NEOPLASTIC AND PARANEOPLASTIC SYNDROME IN LUNG CANCER PATIENTS TREATED ON CLINIC OF LUNG DISEASES AND TB «PODHRASTOVI»
Smajić A, Mehić B, Lovre V, Krekić s, Konjić M, Hadžiredžepović A. Clinic of Lung Diseases and TB, Clinical Centre University of Sarajevo, Sarajevo, Bosnia Herzegovina

THE VALUE OF CYTOLOGICAL DIAGNOSTICS
Stanetić M, Jandrić K. Clinic for Lung Diseases, Clinical Centre of Banja Luka, Banja Luka, Bosnia Herzegovina

SEALING PULMONARY AIR LEAKS WITH AUTOLOGOUS BLOOD PATCH
Štupnik T, Mavko Ana, Vidmar S, Eržen J.
Department of Thoracic Surgery, University Medical Centre Ljubljana, Slovenia

PREVALENCE OF SMOKING AMONG ALCOHOLICS TREATED AT THE DAY-HOSPITAL OF INSTITUTE FOR ALCOHOLISM AND SUBSTANCE ABUSE OF CANTON SARAJEVO IN ONE YEAR PERIOD
Žoljic T, Novković M, Mehić-Basara N, Kudra A. Institute for Alcoholism and Substance Abuse of Canton Sarajevo, Bosnia Herzegovina

EFFECTS OF SMOKING ON THE COURSE AND OUTCOME OF PREGNANCY AND THE NEWBORN'S HEALTH
Zvezdin B, Bogavac M, Basta M, Kopcanski M, Kojicic M. Institute for Lung Diseases, Sremska Kmenica, Serbia and Montenegro

SMOKING CESSATION – OUR EXPERIENCES
Živković V, Kovačević S. "Dom zdravlja Doboj", Doboj, Bosnia Herzegovina

12.00-14.00 Mini symposium Congress Hall

LUNG CANCER

Chairs: B. Mehić (Sarajevo, Bosnia Herzegovina), I. Savaş (Ankara, Turkey)

12.00 Lung Cancer Today
H. Žutić (Sarajevo, Bosnia Herzegovina)

12.20 Epidemiology of lung cancer with us in seven-year period
N. Obralić (Sarajevo, Bosnia Herzegovina)

12.35 The diagnosis and staging of lung cancer
I. Savaş (Ankara, Turkey)

12.55 The validity of cytological diagnostic of lung cancer
K. Jandrić (Banja Luka, Bosnia Herzegovina)

13.10 Surgical treatment of NSCLC
A. Hadžismajlović (Sarajevo, Bosnia Herzegovina)

13.25 Paliative chemotherapy of lung cancers
N. Sečen (Sremska Kamenica, SCG)

13.45 Discussion

14.00 CLOSING REMARKS **Congress Hall**

ABSTRACTS

THE CORELATION OF A NORMAL AND THE PATHOLOGIC CHEST X-RAY IN THE STATES OF THE PULMONARY THROMBOEMBOLIC DISEASES.

Agić S, Bašić H. General Hospital of Sarajevo, Sarajevo, Bosnia and Herzegovina

Objective: In the paper has been shown the correlation of the normal and pathologic finding of lungs in accordance with the total number of the patients treated of the pulmonary thromboembolic diseases /PTE/.
Material and methods: It was carried out a retrospective analysis of the chest X- ray finding in 32 patients with the proved PTE in the period of three years /1999-2001/, treated at the Internal Department of General Hospital of Sarajevo. PTE was being proved by perfusion lung scans, spiral computed tomography, ventilation and perfusion lung scans.
Results: A normal chest X-ray had 12 patients. They had the different degrees of the seriousness in the clinical picture: from a mild to the very serious one with hypotension up to an obstructive shock.
Conclusion: In our paper we have proved that a great number of the patients /32%/ with PTE have the normal chest X- ray before starting the therapy.

SMOKING AS A RISK FACTOR FOR STROKE OCCURRENCE IN DIABETICS

Alajbegovic A.[1], Alajbegovic S[2], Muminovic A[1], Mehmedika-Suljic E[1], Resic H.[3]
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Diabetes mellitus is an independent risk factor for occurrence of stroke, both ischemic and hemorrhagic type, either alone or coupled with other changeable or unchangeable risk factors for stroke. In group of changeable risk factors for stroke occurrence smoking has an important place since smokers run 11 times higher risk for ischemic stroke and 4 times for hemorrhagic stroke.
The aim of our work was to evaluate the role of smoking as a risk factor for stroke occurrence in diabetics who suffered stroke.
Material represented diabetics who suffered from stroke treated for various types of stroke at Neurology Clinic, Clinical Centre Sarajevo during 2002.
Results: in the course of 2002 1584 patients were treated at neurology clinic, out of which 96 (6.1%) had type i or type ii diabetes 1: 55.2% females and 44.8% males. Eleven (11.5%) patients were type i, 85 (88.5%) patients type ii diabetes. Ischemic stroke was significantly more frequent than hemorrhagic stroke: 77:7. 66% of patients were ex or present smokers: 42% still smoke, 24% ex smokers, 29% non smokers, while for 5% of patients we had no data of smoking habits.
In conclusion we can claim that smoking is significant changeable risk factor for stroke occurrence in our material. Smoking, as changeable risk factor, correlates with diabetes and significantly influences stroke occurrence. Ischemic type of stroke is more frequent than hemorrhagic type.

RESULTS OF SURGICAL TREATMENT OF PULMONAR AIR CYSTS

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The aim of this retrospective study is to show the significance of surgical treatment of pulmonary air cysts therapy in 12 patients hospitalized at Thoracic Surgery Clinic of the University Clinical Center Sarajevo in a period 1999-2005.
Patients: 12 patients 7(58, 3%) male and 5 (41, 7%) female in the age between 27 and 65 years underwent surgical treatment. All of the patients had surgery after usual preoperative treatment, except one, which had high operative risk due to COPD and cardiac decompensation.
Results: Patients were subject to surgical treatment in sense of thoracotomy and cysts resection including chest drainage. Average duration of chest drainage was 29, 5 days. Average duration of hospitalization was 41, 3 days. In all of the patients the result of treatment was satisfactory without lethal outcomes.

REDUCTION OF LUNG COMPLICATION AFTER BREAST CANCER IRRADIATION BY COMPUTERIZED TOMOGRAPHY BASED TREATMENT PLANNING

Basic H, Drljevic A, Vranic S, Sunjic S. Institute of Oncology, Clinical Centre University of Sarajevo, Bosnia Herzegovina

Background: During the irradiation of breast tissue or thoracic wall with, or without regional lymph nodes (clinical target volume-CTV) in breast cancer patients, a certain part of lung volume is always exposed to the irradiation beams. Post irradiation damage on lung tissue leads to the loss of its function. Conventional techniques of modern radiotherapy- simulation with external body contouring are usually enough precise for estimate the quantity of lung tissue to be included in radiation beams. But in some patients with special constitutional characteristics, it is not possible with this technique to achieve a maximal and homogeneous dose in the CTV, and a minimal dose in surrounding sensitive normal tissues – lung and heart (organ at risk-OR) in the same time.
The purpose of this study was to estimate the value of computerized topography (CT) as the method for breast cancer irradiation treatment planning in order to save the lung from the excessive radiation dose.
Patients and Methods: Conventional simulation with external body contouring was performed in 96 breast cancer patients (46 patients after mastectomy, and 50 after conserving surgeries) for dosimetric planning. The quantities of lung tissue were determined on x-ray simulation film of lateral tangential beam as the Central Lung Distance (CLD).
Then, a CT scanning of CTV was performed, and a dose distribution plan was made
according to the CT scans. This plan was compared with the previous one, and a better plan, with less lung irradiated (lesser than 2.5 cm measured as a CLD) was accepted The difference in the quantity of lung tissue volume, besides the other parameters, were noted in order to minimize the lung irradiated volume.

Results: We found that the treatment plan was changed in 3 of 46 (6.5%) of post mastectomy patients, and in 3 of 50 (6 %) of patients who had conserving surgery, e.g. in the total of 12.5% of examined patients.
All the changes of the treatment plan occurred in patients with a special anatomy constitution of the rib cage, in so called "anatomically difficult" patients.
Conclusion: Although breast cancer irradiation do not often case lung tissue damage with functional impairment, conventional CLD measure can be used for the selection of patients whom CT based radiation treatment planning should be performed.

EFFECTS OF TOBACCO SMOKING TO LUNG HEALTH OF FACTORY WORKERS IN FURNITURE FACTORY « KRIVAJA-ZAVIDOVIĆI

Bišanović S[1], Mehić B[2].
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Background: Tobacco smoking is a major cause of airflow limitation and development of chronic obstructive pulmonary disease (COPD), lung cancer, but and the other respiratory diseases. COPD is a forth-public health problem and a major cause of chronic morbidity and mortality throughout the world.
Problem: How much cigarette smoking has been reflected to lung health of factory workers in furniture factory «Krivaja-Zavidovići»?
Aims: To investigate frequency of lung function disorders in smokers in relation with nonsmokers, and to investigate the frequency of the other illnesses in smokers in relation with nonsmokers.
Examinees and methods: The examination group formed 140 examinees, smokers and the control group 140 nonsmokers, of the same age 35-45 years, and both gender. The both groups work at the same microclimate conditions and the same work protection conditions.
The differences between groups were certified with t-test to the level of tasked signification α=0,05.
Results: Lower values of FEV1 and FEV1/FVC as well as high number of ill of COPD were documented in the group of smokers. Smokers, although aged just 35-45 years, are already significantly ill of COPD, hypertension, ulcer disease, and in this group myocardial heart attack is three times more frequent than in non-smokers group.
Conclusions: Among workers of Furniture Factory «Krivaja-Zavidovići» various diseases are registered 5,5 times more than among nonsmokers (61,42%: 11,42%). Smokers suffer from COPD 6,5 times more than nonsmokers (32,85%: 5,0%).

Keywords: tobacco smoking, forced expiratory volume in first second, chronic obstructive pulmonary disease.

GOODPASTURE'S SYNDROME: CASE REPORT

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Goodpasture's syndrome or pulmonary-renal syndrome is a rare disease, which affects primarily the lung and kidney and present type of vasculitis with pulmonary hemorrhage, glomerulonephritis and the presence of circulating antiglomerular basement membrane antibodies (anti-GBM).
We report a case of patient with classic signs of Good pasture's syndrome. He was admitted to hospital due to increase BUN and serum creatinin. The illness was presented with pulmonal haemoptysis, pulmonal infiltration and anemia, as well as rapidly progressive glomerulonephritis due to antiglomerular basement membrane (anti-GBM) antibodies. Renal involvement was presented with nephrotic syndrome and progression of renal disease to chronic renal failure. Circulating anti-GBM antibodies and renal biopsy with linear IgG and C3 deposits along GBM and crescent formation confirmed the diagnosis of anti-GBM glomerulonephritis. The patient was treated with corticosteroids, cyclophosphamide and therapeutic plasmapheresis, which led to disappear of circulating anti-GBM antibodies as well as recurrent haemoptysis, pulmonary infiltration and good recovery of anemia. Although renal function was significant improvement, the renal damage was freezing on the second grade of chronic renal failure. The treatment of disease during one year was also resulted in withdrawal of signs of nephrotic syndrome with rested of non-nephrotic proteinuria as a sign
of chronically glomerular damage and preservation of renal function on the level of second grade of chronic renal failure.
Although this syndrome per se is a rare entity, we must think on them as one of cause of pulmonary hemorrhage and chronic renal failure. In the same time, this disease requires connecting of different type of medical service.

WEIGHT LOSS IN PATIENTS WITH CRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) AS A PROGNOSTIC FACTOR OF SURVIVAL AND QUALITY OF LIFE

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Low body weight and weight loss are negatively correlated with survival in patients with COPD.
Objectives: showing the association between weight loss and low body weight with a poor prognosis of COPD.
Patients and methods: randomized sample of 30 patients who have been treated in the ICU of Clinic of Lung Diseases and TB in the 2003. They were both sex, age 50 – 75. We measured their body weight and tested their lung functions every 2 months, during 12 months.
Results: the weight loss more than 10% in the past 6 months is negatively correlated with survival, airflow obstruction and oxygen blood pressure.
Conclusion: the weight loss more than 10% is associated with bad prognosis.

THE SIGNIFICANCE OF POLYMORPHONUCLEAR NEUTROPHIL LEUCOCYTES IN THE DEVELOPMENT OF BRONCHIAL HYPERREACTIVITY IN CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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Polymorphonuclear neutrophil leucocytes (PMNL) have an important defensible role against various microorganisms and other agents, but by liberating other various substances, first of all the superoxide anion they can damage the bronchial mucosa and so they have influence on the development of bronchial inflammation, which is the fundament of bronchial hyperreactivity (BHR).
Objectives: to show the role of the PMNL for development and the level of BHR in patients with chronic obstructive pulmonary disease (COPD).
Material and methods: We observed 160 patients with COPD treated in Clinic for Lung Diseases and TB «Podhrastovi» Sarajevo, during three years: from 2001 - 2003. They were divided into groups and subgroups according to the time of the first registration of BHR in the course of disease and to the number of exacerbations of the disease in the one-year. The number of blood PMNL was measured in a quite phase of disease at the beginning and at the end of investigation.
Basic results: The number of blood PMNL was significantly bigger in patients with 3 or more exacerbations per one year (t= 2,764, p = 0, 01). Patients with BHR had significantly
Bigger number blood PMNL than patients without BHR (t =2,182, p=0.05). Patients with
3 exacerbations per year had a statistically significant growth of number of PMNL between the first and last examination (t=3.017 p=0.01).
Conclusion: PMNL have an important role in the development and level of BHR at the COPD by its influence on bronchial inflammation. There is significant correlation between the number of blood PMNL and the level of BHR at the COPD, but future examination need to be done to determine real role and mode of action of PMNL for these processes.

BRAIN METASTASIS OF NON-SMALL CELL LUNG CANCER

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Goals: To establish frequency and type of brain metastasis in patients with non-small cell lung cancer (NSCLC) at the time of diagnosis.
Patients and methods: Retrospective randomized analysis of 582 NSCLC patients treated at Clinic for TB and lung diseases «Podhrastovi» Sarajevo.
Results: 25 patients (19 male and 6 female) had brain metastasis, 10 of them (40%) were adenocarcinoma type, 14 cases (56%) squamous cell cancer and 1 (9%) was mixed type. In 18 cases (64%) brain metastasis were discovered before primary tumor location. In 8 cases (32%) metastases were solitary and 17 (68%) multiple. Lung distribution of primary process was: right side 15 (60%) (9 in upper lobe bronchus, 1 intermediary and 5 in lover lobe bronchus) and left side 10 (40%) (1 in left main branch, 5 in upper and 4 in lower bronchus).
Conclusion: In clinical material of Clinic for TB and lung diseases «Podhrastovi» occurrence of brain metastasis at the time of diagnosis of NSCLC is rare (4.3%). Multiple metastases are twice more frequent than solitary ones.

LEVEL OF EOSINOPHILS AND ECP AS A PROGNOSTIC INDICATOR IN COPD EXACERBATION

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Background: increased level of serum ECP in asthmatic patients is a marker of inflammatory process.

Problem: it is well known that neutrophiles and proteases are markers of inflammatory process in COPD. Could eosinophils and ECP be put in correlation with inflammation in COPD?

Goals: 1. To establish movement of average number of Eo, ECP, FEV 1% and duration of treatment for asthmatic and COPD patients during the exacerbation of the disease.

2. To establish degree of correlation between those parameters in asthmatic and COPD patients.

Materials and methods: in prospective randomized study of clinical samples of 13 asthmatic patients (11F: 2 M) average age of 50.92 ± 17.14 and 22 COPD patients (7 F: 15 M) age of 61.63 ± 10.23, Eo count, ECP level, FEV 1% were monitored at the admission of patients with exacerbation of the disease as well as duration of hospital treatment. Data were analyzed by determining average values of mentioned variables and by determining in-group Pearson's correlation between them.

Results: median values of monitored variables are presented in table:

	ASTHMA	COPD
X Eo	0,2 ± 0.36	0,11 ± 0,21
X ECP	22,32 ± 16,11	12,28 ± 5.89
X FEV1	34,31 ± 13.8	28,63 ± 9.6
X D of T	13,84 ± 5,53	20,72 ± 7,56

There was a significant correlation (r = 0.42) between serum level of ECP in exacerbation of asthma as well as number of days of treatment and significant correlation between blood level of Eo and level of ECP in serum (r = 0.52) in patient with exacerbation of COPD, level of Eo in blood and treatment duration (r = 0.47) in patients with COPD exacerbation.

Conclusions: Average level of increase of Eo and ECP at the patients with COPD exacerbation in randomized clinical group was not found but we have established that patients with COPD exacerbation who have increased level of these parameters are faced with worse prognosis and do need longer hospital treatment.

CLINICAL FEATURES OF LUNG CANCERS DIAGNOSED AT CLINIC OF LUNG DISEASES AND TB "PODHRASTOVI"

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Goal: Evaluate clinical forms of lung cancers diagnosed at our clinic from January to December 2003.
Material and methods: retrospective study of 271 patients with approved histological diagnosis of lung cancer.
Results: The majority of patients had age group from 40 to 70 (78%) male 89.2%. 90.3% were smokers. The most frequent symptom was cough (81.0%), chest pain (63.7%), and dyspnea (47.6%). Diagnoses were based on cytological or histological findings of biopsy tissue samples obtained through different biopsy methods, mainly by bronchoscopy.
Results of histopathological analysis were as follows: 223 (79%) non-small cell carcinoma (NSCLC), 46 (16, 4%) small cell carcinoma (SCLC) and 2 (0.7%) non-differentiated cancer. Histo-pathologycal sub-types of NSCLC were as follows: 167 (74.8%) squamous cell cancer, 52 (23.3%) adenocarcinomas, and 2 (0.8%), large cell carcinoma and 2 (0.8%) non-differentiated (anaplastic) carcinoma. Endoscopic findings were positive in 181 patients (81.1%) and the most frequent presentation was infiltrative (rigid) stenosis 56 (30.9%).
In SCLC positive endoscopic findings had 40 (83.3%) patients and infiltrative stenosis was again the most frequent presentation.
Cancer staging: 82.9% cases of NSCLC were diagnosed in stage III B and IV. 75.8% of SCLC was in extensive stage at the time of diagnosis.
Conclusion: Squamous cell carcinoma is the most frequent patho-histological sub-type of lung cancer. With regrets we have to conclude that in the time of diagnosis NSCLC are in III B and IV and SCLC in extensive stage.

LUNG CANCER IN FEMALES IN TWO SARAJEVO MUNICIPALITIES

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Lung cancer (LC) in females is a growing health problem in B&H.
Patients and methods: In the period 1999-2004, 32 (100 %) female patients with LC, average age of 51, were selected at the Department for pulmonary disease, in community New Sarajevo and Center. The diagnosis was clinically and histological confirmed. Analysis included: clinical finding, chest-X ray, bronchoscopy with biopsy and histological analysis, CT and US findings within selected number of pts in order to present the frequency and the other characteristics of LC.
Results: Histologicaly there were: 9(28, 1%) pts with small cell LC (SCLC), 23(71, 9%) of non-small cell LC (NSCLC) ($p<0, 05$). Smoking related: at the 6 (75,0%) smokers there was carcinoma squamocellular carcinoma as a most frequent tumor compared to adenocarcinoma in non-smokers 1 (100%). The highest number of pts tumor localization was central 9(75,0%), usually in the upper lobe of right lung, compared to number of females with solitary pulmonary nodule 1(8,3 %). Out of 32(100%) pts, 20(62,5%) of them had one and more metastases during detection, 11(55,0%) between SCLC compared to 9(45,0%) of NSCLC. The most frequent metastases were found in liver 7(25,0%) compared to metastases in adrenal glands: 1 (3,6%). Usual symptoms were reflex cough, chest pain, dispnea and hemopthysis. Average time from the first symptoms till diagnosis was 4 months.
Conclusion: These results suggest sputum cytology for risk groups in females (age > 50, smokers) including X ray finding especially with the aim of early detection of LC.

DIAGNOSTIC THORACOSCOPY-A WINDOW TO PLEURAL SPACE

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After complete pneumological investigation remains about 20% of all pleural effusions without etiological diagnosis designated as idiopathic pleural effusions. Thoracoscopy enables further investigation with the final goal – establishing of the etiological cause of the pleural effusions.
Goal: Retrospective appraisal of diagnostic validity of thoracoscopy in establishing of etiology in idiopathic pleural effusions.
Patients and Methods: In the period between 06.11.1984 and 06.11.2004,included in this investigation were all patients with pleural effusions of unknown origin who were referred to the Clinic for Thoracic Surgery – UCC Sarajevo, for thoracoscopy after less invasive means of diagnosis had failed.
Results: We underwent 126 patients to diagnostic thoracoscopy. The most frequent indication was idiopathic pleural effusion established in 94,4%(119/126) patients. Average age was 51,8±12,01 (from 27 to 76) years. Male/female ratio was 1,38:1 (73/53). Etiology of pleural effusion was established in 91,3% (115/119)patients. There is no statistically significant difference ($\chi^2 = 0,144$)of obtained results in regard to literature. General diagnostic sensitivity was 95,6%, specificity 100%, positive predictive value 100% and negative predictive value 87,0%. Per operative complications were found in 0,8%(1/119) patients and postoperative complications in 5,8%(7/119) cases without procedure-related deaths.
Conclusion: Due to its high diagnostic efficiency, no mortality and a low morbidity thoracoscopy should be applied increasingly in the management of idiopathic pleural effusions.

SURGICAL TREATMENT OF 183 CASES OF PRIMARY TUMOR AND CYST OF THE MEDIASTINUM

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Background: Many histological different neoplasm's and cysts arise from multiple anatomic structures present in the mediastinum. Experience has shown that the majority of the primary lesions that occur in the mediastinum can be cured by surgical means.
Goal: Retrospective appraisal of the clinical symptoms, anatomic location, complication and mortality of surgical treatment and histological types of primary mediastinal masses diagnosed and treated at the Clinic for Thoracic Surgery, UCC Sarajevo between January 1985 and January 2005.
Patients and Methods: We operated on 183 patients (72 male, 111 female) with a diagnosis of mediastinal space-occupying lesions with average age of 41.9 ± 16.7 (range 0.3 to 71) years. Chest radiographs and computed tomograms were the main methods of preoperative diagnosis. The anatomic-surgical subdivision of the mediastinum into anterior, middle and posterior section was used. There was excluded retro-sternal goiter, thymus persistent with myasthenia gravis, different types of lymphadenopathy, metastatic, oesophageal and vascular lesions.
Results: Symptomatic were 63.9% (117/183) of patients and a symptomatic 36.1% (66/183). Malignant tumours had 31.7% (58/183), benign tumours 48.1% (88/183) and non-neoplastic lesions 20.2% (37/183) of patients. Malignancy was more associated with symptoms in this

series (79.3%; 46/58) than benign lesions (56.8%; 71/125). There were 48.6% (89/183) of the lesions in the anterior, 20.2% (37/183) in the middle and 31.2% (57/183) in the posterior mediastinum. The most frequent histological types were neurogenic tumours found in 26.8% (49/183) of the cases, followed by thymus tumours in 12.6% (23/183), malignant lymphomas in 12.6% (23/183) and germinal tumours in 12.6% (23/183). Most non-neoplastic lesions were different types of cysts. A total excision of the lesion was performed in 83.6% (153/183) of patients; incomplete excision was performed in 4.9% (9/183) of patients; 11.5% (21/183) of patients underwent biopsy only. The hospital mortality and morbidity rate of all interventions was 1.1% (2/183) and 2.7% (5/183) respectively and concerned almost neural or vascular injuries, chylothorax, postoperative cardio-respiratory failure and CVI.
Conclusion: Majority of our patients with mediastinal masses (whether benign or malignant) are symptomatic and the absence of symptoms is more associated with benign disease. Majority of lesions are situated in the anterior mediastinum. Neutrogena tumours were the most frequent primary mediastinal mass. Majority of lesions were successfully removed.

ANALYSIS OF SURGICAL APPROACH TO DIAGNOSIS AND THERAPY OF SOLITARY PULMONARY NODULES

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Descriptive-analytic appraisal of validity of surgical approach to diagnosis and therapy in solitary pulmonary nodules (SPNS's).
Goal: To establish justification of surgical removing of SPNs with known or unknown etiology after complete previous clinical investigation.
Patients and methods: In the period between 01.January1997 and 01.January 2005, included in this investigation were all patients with SPN who were referred to the Clinic for Thoracic Surgery-UCC Sarajevo after complete previous clinical investigation.
Results: We operated 120 patients with proved SPN. The malignancy was found in 88/120 (73.3%) patients. There were established following types of malignancy: carcinoma planocellular in 48/88 (54.4%) and adenocarcinoma in 32/88 (36.6%) as the commonest malignancy and the others types of malignancy in 8/88 (9.0%) patients. We did following types of operation: atypical (wedge) resection in 40/120 (33.3%), lobectomy in 72/120 (60.0%) lobectomy and pneumonectomy in 8/120 (6.7%) patients. There were neither intraoperative complications nor intraoperative mortality. Postoperative morbidity includes: pleural emphysema in 2 (1.67%), persistent air leakage in 1(0.83%) and stress ulcers in 1 (0.83%) patients. There was not early postoperative mortality (until 30 days after operation).
Conclusion: The malignancy was the most frequent cause of the SPNs. Operative and postoperative morbidity and mortality are relatively negligible. High percentage of the malignancy in SPNs, negligible operative and postoperative morbidity and mortality justify aggressive surgical approach to diagnosis and therapy in SPNs and point out to the necessity for early removing of this kind of pulmonary lesion.

Keywords: solitary pulmonary nodule, malignancy, surgery

CHARACTERISTICS OF VENTILATORY PARAMETRES IN CASE OF DECOMPENSATION OF THE LEFT HEART

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Background: It has been noticed that decompensation of the left heart leads to a disturbance of certain ventilatory parameters which are usually manifested by inspiration dyspnoea.
Goal: To find out which parameters of ventilation are disturbed in decompensation of the left heart.
Patients and methods: Randomized clinical sample of 30 patients with evident signs of left heart deterioration.
Results: Reduced FVC by 20 – 40 % of normal values has been found in 13 patients, with the following reduction of FEV 1, and without the increase of resistance in the respiratory system. Decrease of FEV1/FVC relation by 10 – 20 % of normal values has been noticed in 10 cases, and in 7 cases the findings of ventilation parameters was completely normal.
The analysis of gases showed PP O2 from 8 – 10 KPA in 10 cases, while in other 20 it was within normal parameters.
Conclusion: Regular findings of resistance in respiratory system with medium expressed ventilatory insufficiency, arouses doubt that it is a case of left heart decompensation, so the examination must be complemented with a physical and electrocardiography tests.

RADIOLOGICAL APPEARANCE, AGE AND SMOKING AS THE RISK FACTORS FOR MALIGNANCY IN SOLITARY PULMONARY NODULES

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Objective: Retrospective-prospective, descriptive-analytic evaluation of the radiological appearance, age and smoking as the factors of risk of malignancy in solitary pulmonary nodules (SPN).
Patients and methods: All patients are operated at the Clinic for thoracic surgery-UCC Sarajevo in the period between 01, January 1997 untill 01, January 2005. In relation to the radiological finding we investigated SPN's with nodule size $\leq$ 3 cm, unclear border, without calcification and satellite lesion. According to the age patients are distributed into 2 groups: group I-age >35 years and group II-age $\leq$ 35 years. In respect to habit of smoking the patients are divided into 2 groups: group I-smokers and group II-nonsmokers.
Results: We operated 120 patients with SPN, average age of 53.5 ± 12.72 (from 30 to 75) years. In relation to the defined radiological finding there were 60.0% (72/120) patients and malignancy was found in 100.0% (72/72) patients. There is statistically significant difference (χ^2=18.782; $p<0.01$) in occurrence of malignancy in the regard of age. There is also statistically significant difference (χ^2 = 17.137; $p<0.01$) in occurrence of malignancy between smokers and non-smokers.
Conclusions: SPN's with nodule size $\leq$ 3 cm, unclear border, without calcification and satellite lesion must be observed as malignant and further investigation and treatment will be performed in this direction. Malignancy was more represented in patients who were older than 35 years. Malignancy was statistically significantly represented in smokers.

Key words: solitary pulmonary nodule, radiological appearance, age, smoking, and malignancy

TUBERCULOSIS AMONG CHILDREN IN TUZLA CANTON DURING THE PAST TEN YEARS

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Tuberculosis is infectious disease with a significant public health and economic impact in majority of countries, particularly countries in transition and economically undeveloped. It has been characterized by specific immunological events, chronic impact on socio-economic factors and epidemic dimensions.
The main aim is to present occurrence of tuberculosis amongst children.
Patients and methods: During the past 10 years at the Pediatric Clinic in Tuzla 35875 patients have been treated, and 137 (0.38%) patients were released with diagnosis of tuberculosis.
Results: Among patients with tuberculosis 72 (52.55%) were boys and 65 (47.45%) girls. Age structure was the following: up too one year of age 11 (8.03%); 2-6 years of age (37.95%) and over 6 years of age 74 (54.02%) patients. BCG scarf was not found in 64 (46.72%) children. In 86 (62.78%) children intra-family contact was found, of which 51 (37.22%) children had a recent intra-family contact (some of the family members was treated at the same time).
We have been implementing the World Health Organization strategy *Direct Observed Treatment Short Course* in diagnostic and treatment. All patients, prior to given therapy, are microbiologically tested. In 64 (46.71%) cases tuberculosis mycobacterium was found in taken specimen during microbiological tests.
Conclusion: Although the rate of this disease decreases over the years, tuberculosis is still considered as a diagnostic and therapeutic challenge, particularly among children.

TB RELAPSES-ONGOING PROBLEM

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Background: Location of the relapse is rarely the same as original, and it goes in favor to Zanety theory: relapse mechanism has its source in cheezy masses, which could be hidden in small lesions, fibroses scar tissue, lymph nodes and from there MBT spreads to other parts of lungs. Some unfavorable factors (chronic starvation, bad hygiene, physical overburden, psychical trauma) work as source of stress for susceptible individuals and lead to disease. The largest number of relapse cases appears in the first couple of years after recovery.
Goals: 1) Determine the frequency of relapses on our clinical material, 2) smear positively of cases in relapse 3) social-economical status of our patients with TB relapses.
Patient and methods: For this paper, we used data about patients with confirmed TB relapse hospitalized at the Clinic 2000-2005. Research was clinical, descriptive, and retrospective. We analyzed data from the patient's medical records and analyzed 1303 cases.
Results: TB relapses were confirmed for 102 or 7.82%. Relapse rates indicate decline in the research period (2001-10.08%, 2004- 6.26%). Male was 77(75.49%), female 25 (24.5). The highest relapse rate was among the age group of 40-50 (24 or 23.5%). Smear positive were 55 patients (53.9%), cultural positive 30 (29.4%) and smear negative relapses 17 (16.6%). The highest relapse rate in this institution occurred 2-4 years upon recovery from the previous TB infection. The largest number of relapses appears in the group of patient with previously widespread newly diagnosed TB.
Conclusion: Large percentage of these patients did not comply with an anti TB treatment after initial period at hospital or that prescribed regimes were inadequate. The highest percentage of TB relapses was found among rural, poor, unemployed, displaced, alcoholics and social cases. It was encouraging to note that number of TB relapsed decreases in the researched period (10,08% to 6,27%), what confirms a well planed concept of NTB program for Federation of B&H and DOTS as the best prevention and TB control strategy.

THE SIGNIFICANCE OF EXPLORATIVE THORACOTOMY AND MEDIASTINOTOMY IN DISEASES WITHOUT DEFINITIVE DIAGNOSIS IN THORACIC SURGERY

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The aim of this retrospective study is to show the significance of the explorative thoracotomy and mediastinotomy in the achievement of definitive (etiologic) diagnosis of chest disease. Patients were subject to the surgery because using other, less invasive methods definitive (etiologic) diagnosis could not be established or exact stage of disease could not be determined, as well as, the operability of the patient.
Patients and methods: 50 patients were involved in the study, 44 male and six female. 45 (90%) patients underwent explorative thoracotomy and 5 (10%) anterior mediastinotomy. As a method, different operative approaches were used: anteroaxillary subperiostal thoracotomy with biopsy, anterior mediastinotomy sec. Chamberlain with biopsy of mediastinal lesions. In patients with thoracotomy approach drainage was performed, while in patients with mediastinotomy it was not the case.
Results: In all patients, valid and exact PH finding was encountered following surgery or definitive stage of disease leading to proper treatment.

EPIDEMIOLOGICAL STATUS OF TB DURING 2003 IN ALBANIA

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The Albanian TB program collects standardized information on tuberculosis case notifications including anti-tuberculosis drug resistance since 1998. In 2002, 561 cases of tuberculosis were notified, of which 34 (6%) were patients with a previous episode of tuberculosis. This represents a significant decrease compared to 2002 and a steady decline over eight last years. TB notification rates in 2003 were 18 per 100 000, similar to other center European countries.
Notification rates were highest in patient aged 35-44 and 15-24, indicating active transmission in population. Among adults, notification rates were higher in males compared to females accounting for 60% of the cases notified.
Pulmonary cases and extra-pulmonary accounted respectively for 64% and 36% of total TB cases. Over diagnosis is likely in extra-pulmonary TB cases.
The proportion of smear positive among pulmonary TB cases was 62 % demonstrating a high percentage of detection of infectious TB cases and a good coverage with TB laboratories in the country. Culture was positive for 66% of pulmonary cases, but culture is carried out only in three laboratories and this is the reason for not difference between smear and culture examination.
The results of drug susceptibility testing at the start of the treatment are provided for all positive culture at National Reference Laboratory. The proportion of total MDR and total mono resistance was respectively 1.4% and 10%. Mono-resistance was mainly due to streptomycin and isoniazid.
There was a big discrepancy in TB notification rates among the areas within the country. In the Northeast part of the country, case notification rates is very high more than 40 new cases due to a combination of social-economic difficulties. In the South, case notification is very low less than 10 new TB cases.
Conclusion: Tuberculosis in Albania is decreasing slowly and steadily. Few underreporting cases of TB are also suspected. MDR, primary and acquired multi drug resistance is in low proportion among TB cases. TB affects mainly new adults, but these are in accordance with the structure of Albanian population, which is new one and young adults make up major part of population. Tuberculosis in prisons and among HIV patients is not a problem for the time being.
Finally, TB is not a priority for Albanian government but not an issue to be ignored.

SMOKING HABITS DURING THE PREGNANCY IN ČAPLJINA, BOSNIA AND HERZEGOVINA.

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Aim: To assess tobacco use in pregnant women attending a Primary Health Care Center in Bosnia and Herzegovina.
Methods: This study was done in Dec. 2004 as a requirement of the Program of Additional Training (PAT) in Family Medicine (FM). The PAT is a one-year education program for primary care doctors and nurses who are retraining as Family Medicine Teams (FMT). The assignment was to ask 100 adults about smoking status and readiness to stop smoking.
This pediatrician and his team nurses, who are retraining as a FMT, invited 100 pregnant women to become registered patients and to complete the survey when they attended because of their children's health needs.
Results: Response rate was 100%. Age of participants in years was: <25 = 28; 25-34 = 57; >35 =15. Number of pregnant woman who never smoked = 56; former smokers = 5; occasional smokers = 4; regular smokers = 35.
Percentage of smokers not ready to quit smoking in next six months = 5%; number thinking of quitting = 95%; none stated that they were ready to quit now.
Conclusion: The results of a team assignment to assess tobacco use will be used by the FMT to develop a tobacco prevention program. The PAT in Family Medicine, conducted as part of the health reform strategy of the Federal Ministry of Health in B&H and directed by Queen's University, Canada, is providing opportunities to gather essential information for health policy and planning. It is also leading to improved patient care through audits such as this.

A DIAGNOSTIC APROACH IN CASE OF HUDATID CYST RUPTURE - CASE REPORT

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In this case report we will present a case of large lung's hydatid cyst in case of one 9 years old girl. Simple chest x-ray showed a large ring-form shadow without visualization of lung parenchyma within. The thoracic surgeon suggested further emergency chest CT examination based of the x-ray finding.
Based on the existence of obvious communication of the cyst with the right main bronchus and an ultrasound finding of the localization above diaphragm, CT diagnosis showed a ruptured echinococcus cyst.
The surgical finding completely confirmed the CT and ultrasound findings.

SMOKING HABITS AND ATTITUDES AMONG PATIENT IN PRIMARY CARE CENTERS IN HNK, BOSNIA AND HERZEGOVINA AND CORRELATION WITH INCIDENCE OF CHRONICALLY NO INFECTIVE DISEASES

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The raising incidence of chronically non infective diseases especially lung carcinoma is obvious and worried in Hercegovina-Neretva Canton, B&H. The same is increasing number of young children-smokers of 63% who start smoking in age 10-20. These data are offered by Family Medicine lead by Queens University Canada to Federal Ministry of Health in creating health policy and stop tobacco use.

Aim: To asses smoking habits and attitudes among patients coming to Primary Health Care centers (PHCC) in HN Canton, B&H and correlation with incidence of chronically no infective diseases (CND).

Methods: Retrospective-prospective study has been conducted among 2500 patients, age 9-94, who visited 7 PHCC in November-December 2004 and compared with statistical data of incidence of CND taken from «Analysis of population health status in HN Canton from 1998-2003», published by Public Health Institute, Mostar. The data were analyzed in EPI-INFO program.

Results: The study shows that the number of current smokers was 45%, ex smokers 19% and nonsmokers 36%, almost equal among sexes. Those current and ex smokers make 65% of total population in risk to develop one of CND. 5% are ready and 8% are not ready to quit smoking in next 6months, and 36% are thinking about that.

CND results show that 75% of total deaths are caused by cardiovascular diseases (CVD), 20% of lung carcinoma. 90% of them who died of lung carcinoma were smokers. 55% of adults are smokers, 48% of smokers are teachers and health workers, 25% are «heavy «smokers (with more than 20cig.p/day). Every second adult person is smoker, every fifth has hypertension, and every seventh has high blood cholesterol. «Heavy» smokers are in age group 35-55, which correlates with the incidence of lung carcinoma.

Conclusion: The data from this study will be used by Family Medicine Program lead by Queens University from Canada and Federal Ministry of Health to establish good preventive-promotional program to quit smoking in Bosnia and Herzegovina

SMOKING HABITS OF PRIMARY CARE NURSES AND THEIR CHILDREN IN BOSNIA AND HERZEGOVINA

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Several studies have shown that smoking among health workers is very important and has big influence on smoking of our patients. This study shows that education of health workers about quitting smoking needs to be stronger and effective in order to improve patient care.
Aim: To determine smoking behavior among nurses and their children.
Methods: A survey of nurses was conducted in January-February 2005 in 4 primary care centers in Bosnia and Herzegovina. The WHO Global Health Professional Survey was completed with slight modification for use in B&H. Nurses who are parents were asked about tobacco use and exposure in their children and during pregnancy.
Results: 299 nurses (259 female, 40 male) were surveyed; the response rate was 100%. 120 (104 women and 16 men: 40.1%) are current smokers; 135 (115 women and 20 men: 45.2%) are former smokers and only 44 (40 women and 4 men: 14.7%) have never smoked. These nurses have 218 children aged 0-18 years; 74 (33.9%) are exposed to smoke from parents and 24 (16% of ages 7-18) are current smokers. 60 (50%) of the nurses state they are thinking of quitting in the next 6 months. 56 women (25.6%) smoked during pregnancy or in the immediate postpartum period.

Conclusion: This study confirms that the smoking rate among nurses in BH is high and represents an obstacle for implementation, at the primary care level, of smoking cessation education programs for patients. Other surveys of Family Medicine teams in BH show similar high levels of smoking among doctors and nurses: Tuzla study (1996) 58.3% nurses, 43.7% doctors current smokers; Family Medicine Teaching Centers study (2002) 50% nurses, 40% doctors current smokers.

REVIEW OF RESPIRATORY DISEASES IN KAKANJ MUNICIPALITY

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Due to the fact that a large proportion of heavy industry is located within municipality of Kakanj, for a number of years this municipality is regarded as the most polluted in middle Bosnia.
Aim: To make a statistical review of lung diseases within Kakanj municipality.
Materials and methods: 11 annual medical reports (1992-2004) by Lung department of Primary health care Institute Kakanj have retrospectively been analyzed.

Results: are showed on table

Diseases	**1992**	**1995**	**2000**	**2004**
Lung cancer	13	9	29	33
Asthma	142	42	20	33
COPD	1240	1053	1540	1658
TB	9	207	62	53

Frequencies of respiratory diseases in some of the analyzed years

Conclusion: Result of increasing number of respiratory diseases within Kakanj municipality by years is probably a consequence of the pollution as well as individual lifestyles.

AGGRESSIVE DIAGNOSTIC PROCEDURES OF LUNG CARCINOMA

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The increasing number of the affected by the lung carcinoma requires a quick and correct diagnosis, which is impossible in the majority of cases unless the aggressive diagnostic procedures are applied.

This paper is aimed to accentuate the significance and commonness of certain diagnostic procedures, which are applied in our clinic, both for the diagnosis and for assessment of the stadium and operability of the lung carcinoma.

The results obtained in our clinic by evaluation of all aggressive diagnostic methods in 2004 have been analyzed:

Out of a total of 1107 different procedures, 763 bronchoscopies have been done, out of which 604 diagnostic ones, where we have verified 40% of malignant tumors, which makes approximately 80% of total number of identified tumors; 115 TTPs, out of which in over 50% of cases we prove the malignant tumors, which makes approximately 20% of a total number of verified malignant tumors; 45 lymph knot taps of breast, pericardium, sternum, and abdomen, where, in more than 90% cases we prove the malignant tumors; 171 pleural taps, out of which in over 10% of cases we discover the malign etiology; 13 pleuroscopies, out of which in over 80% of cases we verify malignant tumors. In addition, we have performed 761 cytological analyses of sampled tissues, where we verified the malignity in approximately 33% of analyses, which certifies over 90% of totally verified malignant tumors in our clinic.

Aggressive diagnosis is the method of extreme importance, both for a diagnosis and the assessment of the stadium of the bronchial and pulmonary carcinoma, where the bronchoscopy is the basic invasive method, important for verification of occurrence, localization, histological and cytological analysis and operative assessments of bronchial and pulmonary carcinoma, which is often combined with and complemented by one or more diagnostic procedures, the most often it is TTP.

FAMILY Q-FEVER - CASE REPORT

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Introduction: Q-fever is the most spread Rickettsia in the world and in Bosnia and Herzegovina it is endemic-epidemic. Cattle and sheep's are the main source of infection, and the main infectious agent is localized in their lactic glands and in uterus. Most frequently the spreading of infection is by infectious dust, and rural population catch it. Within people the common infectious syndrome manifests disease and most frequently it is being developed under the pneumonitis and hepatitis clinic status.
Problem: A city family catches the disease?
Objectives: To explain how the disease is spread over, clinic and laboratory presentation and treatment issue.
Patient and treatment methods: A city family is presented, suffered from Q-fever. Anamnesis and epidemiological data with clinic treatment, laboratory findings and serology tests on Q-fever have been examined.
Results: All four family members were affected by the disease. The disease has been transmitted by the veterinarian in the family and the infection transmission appeared after the veterinarian's bloody working overcoat laundry together with other family members clothes.
All infected members had common infectious symptoms, two family members had respiratory symptoms and the one had a positive auscultator finding on lungs. Shadows of atypical pneumonia on chest X-ray were found at the two family members; IFA test on Q-fever was positive at the two family members, and ELISA test on Coxiella burnetii at all four family members.
Conclusion: The Q-fever is the high infectious Rickettsia with the large-rate spreading potential if there is no adequate approach to infectious animal excretion treatment. ELISA test is more specific comparing with IFA test. Treatment of patients with doxicycline gives reliable success.

MORTALITY RATE OF PATIENTS DURING TB TREATMENT

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TB mortality rate is one of treatment efficiency markers.
Goal: To establish TB mortality rate during treatment and approximate length of treatment before lethal outcome.
Material and methods: retrospective study on 5 years material - patients died of TB during treatment in Clinic for TB and lung diseases. Analyzed data includes age, sex, and smear status, disease extent, and recurrence. 1497 patients were treated, mainly with pulmonary TB and we have bacteriological or histological confirmation of diagnosis. In 31 cases (2.1%) lethal outcome was recorded.
Results: There is significant decrease in TB mortality rate from 9 cases (3.3%) in 2000 to 3 (0.9) in 2004. 16 (51.6%) was male and 16 (48.4%) female. Sputum smear and culture positive were 26 (83.9%) patients. Average age of deceased was over 60 and median length of treatment before lethal outcome was 14 days.
Conclusion: In recent five years period there is decreasing tendency of lethal outcome during TB treatment in our material. Median time of treatment before death occurrence is 14 days. Reason for an early death is extension of TB process and more frequent disease occurrence in elderly age group.

THE ROLE OF RADIOTHERAPY IN THE TREATMENT OF INOPERABLE STAGE I OR II NSCLC

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Background and purpose: Surgical treatment remains the treatment of choice for patients with clinical stage I and II of Non Small Cell Lung Cancer (NSCLC). However, there is a group of patients who are inoperable, usually because of poor pulmonary and/or cardiac function, and were not fit for any radical surgical treatment. Radiotherapy is considered as a useful alternative for patients with these conditions.
Aim: to evaluate the efficacy of standard radiotherapy in the treatment of these patients (response rate, median survival time, median time to local progression, 1 year survival rate).
Patients and methods: 18 patients (12 males and 6 women) with medically inoperable, clinical stage I or II NSCLC were treated by radiotherapy alone and retrospectively analyzed. Radiotherapy was performed in conventional fractionation with median TD 54Gy/2Gy daily/10Gy weekly (range's 50-60Gy). 3 patients (16.7 %) had stage Ib, 4 patients (22.2 %) had stage IIa, and 11 patients (61.1%) had stage IIb of disease. The median age was 68.5 (range: 63-75 years). Squamous cell carcinoma was the most common histopathologic type in 15 patients (83.3 %), followed by adenocarcinoma in 3 patients (16.7 %). The median follow up period was 20 months (range: 6-32 months).
Results: Partial response rate achieved in 8 patients (44.5 %). There were no patients with complete response. Median survival time was 10.6 months. Median time to local progression was 9.6 months. One-year survival rate was 44.5% (8 patients). No high grade (III/IV) toxicity was observed.
Conclusion: In our study, patients achieved lower response and survival rate when compared to results in published series, mostly because of low tumor dose delivered. Despite the infirm nature of patients with medically inoperable stage I or II NSCLC, the majority of them will die after local failure or due to distant metastatic disease. Because complications are uncommon after TD 60-66Gy, dose escalation radiotherapy by limited fields is indicated in an attempt to improve overall survival.

NEEDLE ASPIRATION BIOPSY OF EXTRATHORACIC METASTASIS OF LUNG CANCER

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Background: Lung cancers have a fairly high tendency to metastasize early and the most frequent metastases are in the lymph nodes of mediastinum, neck and axils, as well as in brain, bones, liver and adrenal glands.
In some patients metastases have already been notified in the diagnostic period and their biopsy was sufficient to establish proper diagnosis and treatment protocol.
Aim: In our study we aimed to evaluate a value of needle biopsy aspiration of peripheral lesions in comparison to other and more expansive invasive biopsy methods.
Material and methods: Our retrospective analysis involved 41 patients with peripheral metastasis who were treated at the Clinic during the last two years. Needle aspiration biopsy is performed in 38 patients and the results are compared with the results of bronchoscopy biopsy and the removed lymph nodes biopsy.
Results: Biopsy needle aspirates were taken out of neck lymph nodes in 18 patients (47,3%), supraclavicular nodes in 13 patients (34,2%), axillar nodes in 2 patients (5,2%), soft tissue skin alterations in 4 patients (10,5%), submandibular glands in 1 patient (2,6%) and from breast of 1 patient (2,6%). Cytopathological findings confirmed small-cell carcinoma in 13 patients (34,2%), planocellular carcinoma in 6 patients (15,7%), adenocarcinoma in 6 patients (15,7%). Needle biopsy aspirates in 8 patients (21,5%) showed malignant cells that did not meet criteria for classification. Non-small-cell carcinoma was confirmed in 2 patients (5,2%) and in three patients needle biopsy aspirates were invaluable. This procedure was successful in 35 patients (92%). Type of carcinoma was determined in 25 patients and was identical to histological findings of primary carcinoma (28,6%) and in 10 patients malignant cells obtained from the aspirates did not meet criteria for histological diagnosis.
Conclusion: Needle aspiration biopsy in patients with easily accessible metastasis is rather easy, fast and an inexpensive method that enable us to determine diagnosis and spreading of tumor and to decide on treatment protocol. This method has an advantage over more expensive diagnostic procedures.

SPECIFICITY OF ELECTROCARDIOGRAPHY AND ECHOCARDIOGRAPHY CHANGES AT THE PATIENTS WITH THE PULMONARY EMBOLISM

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Patients and methods: We have evaluated electrocardiography and echocardiography changes of 42 patients with pulmonary thromboembolism proved by perfusion scintigrams.
Results: ECG-changes involved sinus tachycardia or absolute tachyarrhythmia de novo, changes type Q1S3T3 and changes in right precordial leads. Analysis of echocardiography was included hyperkinetic, then dilatation and apical hypokinesis of right ventricle and tricuspid regurgitation with maximal transvalvular gradients.
Conclusion: We emphasize high sensibility of echocardiography changes in early estimating of severity pulmonary thromboembolism and necessity for echocardiography as early as possible in cases of suspicion.

POSTOPERATIVE RESPIRATORY COMPLICATIONS AFTER LUNG CANCER SURGERY

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Background: Lung cancer surgery belongs to a group of surgical procedures with significant morbidity and mortality. Intra operative mortality following lobectomy or pneumonectomy has decreased over the past decade but postoperative respiratory complications appeared with incidence rates as high as 49%.

The aim of this study is to assess incidence of postoperative respiratory complications and possible associated risk factors.

Patients and methods: In retrospective study 150 patients undergoing lung cancer resections were included. The following information's were recorded: demographic, clinical, functional and surgical variables. Respiratory complications were grouped according to the type of resection under precise definition. Prognostic factors for postoperative complications were identified through univariant analysis using x^2 tests.

Results: Lung cancer resections were performed on 150 patients. The lobectomy was performed on 87, pneumonectomy on 53, wedge- shaped resections on 10 patients. Thirty-five or 23,33% out of 150 patients developed 44 postoperative respiratory complications. Bronchopleural fistula or prolonged air leak were the most prevalent complications (9,33%), followed by pneumonia (6%) and empyema of the pleura (4%).

Conclusion: Respiratory postoperative complications following lung cancer resections are associated with low FEV1, postoperative high PaCO2 and ASA status.

FREQUENCY OF MICROSCOPIC POSITIVITY OF LUNG TB IN SPUTUM SAMPLES AT CLINIC FOR LUNG DISEASES AND TB «PODHRASTOVI» SARAJEVO

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Introduction: isolation of M. tuberculosis has the most significant place in TB diagnostics and it is real confirmation of having a disease. Laboratory diagnostics includes microscopic examination and samples cultivation. Microscopic diagnostics is the fastest, simplest and cheapest method of TB diagnostics. According to WHO plan, for effective control of TB, we need to achieve 70% smear positive cases.
Objective: Our goal was to show results of our laboratory ant it's place in total results of FB&H.
Material and methods: in this work we used sputum samples that were sent to our laboratory through the project of TB diagnostics. We used the method of homogeneous and concentrated sample, colored with Ziehl-Nielsen method and compared with culture findings of the same samples that were sawn on Loewenstein-Jensen media.
Results: This work includes results in last three years. According to NTP for FB&H, in 2002 we had 1747 diseased and 33,5% smear positive, in 2003 1780 diseased and 30,5% smear positive, in 2004 1600 diseased and 35% smear positive. In the same period, in our laboratory we had, for 2002 53,4% smear positive, for 2003 57,5% smear positive and in 2004 64,5% patients who's samples were smear positive.
Conclusion: According to these results of microscopic diagnostics of TB diseased in our laboratory, we can say that the efficiency our work is satisfactory, because it is in continuing progress and it is approaching to percentage recommended from WHO, and it is considerably higher than the average in FB&H.

HEXAGON TB IN PRACTICE FOR RAPID DIAGNOSIS OF LUNG TB

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Background: Hexagon TB is intended for the rapid diagnosing of tuberculosis. TB is a contagious and epidemic disease. Annually there are 3-4 millions newly discovered cases of this contagious disease, according to the information of WHO. In Tuzla municipality area during 2004 107 new cases of this disease was discovered. Annual frequency of cases is 62.9 out of 100 000 inhabitants in B&H; 28.9 in Slovenia; 33.2 in FYRM; 48.5 in Croatia; 41.8 in Serbia and Montenegro. In Western Europe countries the incidence rate is very low, 5 – 10 ill on 100.000 inhabitants.
Material and methods: Hexagon TB is intended for the rapid, qualitative detection of IgG, IgA, IgM antibodies against M. tuberculosis and mycobacterium in human serum, plasma or blood as an complement in the early diagnosis of tuberculosis infections for professional use.
Sample consisted of patients with clinical symptoms of active TB infection, persons who were in contact with patients with TB and persons earlier treated sue to TB. All patients were tested with Hexagon TB, and results are compared with X-ray lung tests, examining of sputum for BK and LOW.
Goal: To test efficiency of Hexagon TB examination method on 100 patients.
Results: Out of all examined patients 11 were positive on Hexagon TB, 10 patients had changes, which were implied TB. Positive on BK was 1 patient, 3 patients were positive on LOW. Out of baseline, 3 patients had all tests positive.
Conclusion: According to obtained results, Hexagon TB has significant importance in rapid TB diagnostic compared to lungs X-ray and sputum examining on BK and LOW.

CONGENITAL BRONCHIECTASIES IN CHILDHOOD - CASE REPORT

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Introduction: Bronchiectasies are characterized by permanent dilatation of airways associated with inflammatory destruction of bronchial and peribronchial tissue and accumulation of exudative material in dependent bronchi. Congenital bronchiectasies are possibly caused by disturbance in bronchial development, while acquired, which are more frequent, are usually a result of chronic pulmonary infection.
Material and methods: Case reports of two male patients, with congenital bronchiectasies, aged 9 and 12 years are presented. The diagnosis was established by spiral CT scan. In case of the first patient, saccular bronchiectasies in central region of middle lobe and cylindrical bronchiectasies in upper left lobe were discovered. In case of second patient, saccular bronchiectasies in middle lobe and in left basal region of left down lobe were discovered. The patients were treated by conservative methods. Recommended surgical treatment was refused by the parents.
Conclusion: We presented our patients to point out that in the differential diagnostic process, we have to think about this rare disease during childhood, even if in the literature on this topic reported low incidence of congenital broncihectasies.

EVALUATION OF EFFICIENCY AND PRACTICAL ISSUES IN THE MANAGEMENT OF CHILDHOOD ASTHMA

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Asthma is the most common chronic illness among children and adolescents. The pediatric "Asthma School" has been established to improve the health and quality of life of children with asthma through education and support.
The purpose of work is to evaluate the efficiency of education for adolescents, children and their parents in prevention, adequate use medications and control of asthma.
Method: This was an operational investigation. The study enrolled 70 participants from 7 cities in B&H, which attended the "Asthma School". Evaluations of efficiency of education program have been done through questionnaires using a 5-point scale. Test variables were: attitude about quality of education and level of knowledge about asthma at the end of the educational round.
Results: "Asthma School" attended 62 parents and 8 adolescents. The age of children was 6-14 years. The majority of the participants were with middle school education (64.3%). Successfulness of seminars was scored with highest point on scale by 79.9%. Access to health information was important for patients for the adequate treatment of illness (80.6%) and in prevention of asthma (15%). There was a significant improvement in 38.4% on the basic knowledge of asthma among participants, from 2.7 before to 3.8 after education. Among 20 children that have learned proper breathing techniques there wasn’t a symptoms of asthma deterioration by 83.4%. There was a significant improvement in the state of the patients, following by greater value PEF (72.3% participants).
Conclusion: The results implicate necessity of continuity of this kind of action in order to make life of young asthma patients better.

Key words: asthma, school, children, adolescents

EPIDEMIOLOGY OF LUNG CANCER WITH US DURING SEVEN YEARS PERIOD

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Epidemiological data are important to investigate the cause of tumors and the risk factors, as well as to define priorities in fight against cancer and planning of its treatment. Bosnia and Herzegovina does not have a proper cancer register for the population nor does it have precise data of its incidence. In public, we often see that there are claims about enormous increase in the incidence of cancer.
The aim of the study: To collect and analyze data on lung cancer with us, and achieve a realistic picture of actual situation.
Material and methods: We have collected data on patients with lung tumor which where diagnosed or treated in health institutions in Sarajevo during the period from 1998 - 2004 Crude incidence of lung cancer has been calculated for Sarajevo Canton according to gender and the years observed. Data were compared to regional and world indicators, and were observed in the light of specific local situation.
Results: Observed totally for all years lung cancer was mostly registered tumor. Lung was the leading cancer site by males and the fifth leading cancer site by females. During period of 7 years 2840 new cases of lung tumors were registered in Register of Malignant Tumors of Clinical Center University Sarajevo, 2348 among men and 492 among women. That represents 16% of all registered tumors, 27% in man and 6% in female. Number of lung cancers in years 1998-2004 was: 448, 361, 386, 365, 343, 406 and 430. Annual crude incidence for lung cancer in Canton Sarajevo is 126,8; 106,2; 90,1; 99,3; 89,7; 92,6 and 100,0 per 100 000 men, and 25,7; 18,3; 22,4; 20,1; 22,9; 24,1 and 31,8 per 100 000 women.
Conclusions: According to the years observed, the largest number of lung cancer was registered in 1998, right after the war when health capacities recovered and consolidated. Such situation has enabled to diagnose and treat high number of patients with malignant tumors who were not treated earlier because of the war conditions. From the year 2000 until 2004, the number of lung cancers is gradually increasing. Crude incidence of lung cancer in the region of Sarajevo Canton correlates to those in South European countries. The incidence of smoking in Bosnia and Herzegovina is extremely high, almost complete, which can influence the appearance of lung cancer.

EVALUATION OF HEALTH EDUCATION METHODS IN QUITTING OF TOBACCO SMOKING

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Tobacco addiction is direct cause of death over 4 million people a year. WHO considers that tobacco smoking is the most lethal epidemic today. Out of 1.1 billion of tobacco smokers in world, most of them live in developing countries. In FB&H, 37.6% of adult people smoke every day. According to the data's of Federal Institute for Statistics, first cause of death in FB&H -were circulatory disease in period 1996-2002. In total mortality, these diseases appeared in 50%, and prevailed from 388‰ in 1999. - 390‰ in 2002.

Aim of this works was to present results in quitting of tobacco smoking done by Folkenbergs and Mac Farlands method on 100 participants.

Methods of work: We worked in groups of 10-12 participants using lessons, video-technology; first we took family and life anamnesis, physical examination, capacity of lungs, weight, height, then taken fool anamnesis of family and relatives.

Results: The most of health problems are registered in those people who where smoking at least 15 years, and most common illness are cardiovascular systems 36% and respiratory system 24%. Motives for stop using cigarettes are health problems and that is because there is a difficult problem in breading, pain behind chest bone, difficulty during speaking, change in tone of voice, height blood pressure. At 121 people, there is less capacity of oxygen, and most of them 30% had cardiovascular problems. Among those how were quested 50% of them where smokers at the start, 37% where daily smokers how were smoking more than 20 cigarettes per day, 42% of them are not smoking no more, 40% had normal blood pressure, slightly height blood pressure, slightly 20% and difficult 12%. BMI is normal at 56% of those how were quested, 32% of them had overweight. In firs 10 day the symptoms of stopping using cigarettes where, in 92% had wish for cigarettes, in 76% had headache, in 68% physical disorders and fall of concentration, 64% of them had appetite disorder. All of participant are join in the club of "Klub Trezveznjaka" how are meting once at the month in the course for preventing relapses.

Key words: smoking, tobacco, methods and quitting

DRUG RESISTANT TUBERCULOSIS AS IMPORTANT INDICATOR OF TUBERCULOSIS CONTROL

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Concerning the war period, a great number of displaced and expelled people moved in Sarajevo Canton; performing a TB control was great challenge in this Canton. Diagnosis of resistant TB, especially multi-drug resistant TB (MDR-TB), was very important for TB control.
The aim of the study was to determine disease category and percentage of the resistance to the main antituberculotics in new and relapse cases.
Patients and methods: The total number of 67 in 1998 and 86 TB smear positive cases in 1999 were treated in Sarajevo Canton. Patient medical histories, WHO TB treatment cards, as well as Referral Microbiological Laboratory Registers were used for the study.
Results: Almost one half of affected patients belonged to the younger age groups (46.2% in 1998; 46.5% in 1999.). The percentage of displaced people affected by TB was 49.3% in 1998 and 50% in 1999. 16.4% in 1998 and 10.5% were considered relapse cases.
Drug resistance rate was calculated in the relation to the total number of only TB smear positive cases, but not TB culture positive cases. In 1999 drug resistance rate was 3.5%. The highest single drug resistance was registered in 1998 (Rifampicin -3%), but the MDR-TB was relatively low (1.5%). There were no MDR-TB cases in 1999 at all.
Conclusion: Results showing success in TB control, especially its treatment, which were of good quality.

CYSTIC FIBROSIS – CLINICAL ASPECTS OF OUR PATIENTS

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Cystic fibrosis (CF) is a common genetic disease occurring in childhood. Milder forms of CF are increasingly being recognized in adults as well. CF is presented with abnormal function of CF transmembrane conductance regulator protein (CFTR).
Patients and methods: Eighty patients with recurrent respiratory infections and/or gastrointestinal disturbances were observed at the University Pediatric Clinic in Sarajevo during four years period (1998-2002). CF was diagnosed in 16 patients. The diagnosis of CF was confirmed by positive chloride sweat test (average levels of 108.13 mmol/l). There were 9 male (56.25%) and 7 female (43.75%) aged from 2 months to 12 years. Additional genetic analyses were performed in 9 patients with positive sweat test in another Medical Centre in Slovenia and both copies of CFTR gene were proved.
Results: Of total number of CF patients (n=16) 6 patients (37.5%) had positive family history for CF. Among CF patients the initial diagnosis was established by lung disease in 12 patients, steatorrhoea in one patient and both lung disease and steatorrhoea in 3 patients. Weight loss was present in 15 patients.
Sputum cultures were positive for Pseudomonas aeruginosa in 7 (43.75%) cases; for Staphylococcus aureus in 13 (81.25%) cases.
Two patients died in the end stage of the illness.

THE INFLUENCE OF PARENT SMOKING ON RESPIRATORY DISEASES OF THE CHILDREN

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We would like to point out the problem of the prolonged hospitalization and the total cost of treatment for these patients, by taking into account a larger number of relapses from the smoker's families.
The objective of our research is to point out the higher incidence of pulmonary diseases in population of children from the smoker's families. We have been comparing the presence of acute obstructive bronchitis at infant population, the presence of asthma, pneumonia, sinusitis in smoker's and non-smokers families. For testing of the statistical differences significance a Chi-square test and non-parametric tests were used.
Patients and methods: During the 2004, at the Pulmonary department 58 infant children has been treated due to acute obstructive bronchitis. Thirty-four children (60%) of them have been from smoker's families and 24 children (40%) from non-smokers families.
Results: Trough insight into the case history we found that, nine children (15%) had two or more hospitalization within one year, and six (10%) came from the smoker's families. Fifty children at the department have been treated because of asthma. One hundred and eight children (72%) were from smoker's families. One child who was a smoker at age of 11,6 years was also hospitalized. The rest of fifty-two children (28%) came from non-smoker families. In the one year period, 25 patients were re-admitted (16,5%). In the same period, one hundred and sixty eight children were treated due to pneumonia, 110 children (65.4%) came from smoker's families while the other 58 (34.6%) children were from non-smoker's families. In the same time period 84 children with sinusitis mostly accompanied with pneumonia and asthma were treated at the department.
Conclusion: Fifty-six (66.5%) children treated on our department coming from smoker's families while twenty-eight (34.5%) were from non-smoker families.

SINUSITIS AND ACUTE EXACERBATION OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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The Problem: There are few studies which investigate sinusitis as a concomitant disease with the acute exacerbation of chronic obstructive pulmonary disease (COPD).
Material and methods: This study included two groups of patients: Either with an acute exacerbation of COPD (n = 55), or with an acute asthmatic attack (n = 54) and control group (n = 45) who were physically healthy but had cataracts. All patients were asked for symptoms related to sinusitis. Anterior rhinoscopy examinations, waters radiograms and CT of paranasal sinus were performed and evaluated. The group of patients with COPD was 45 males and 10 females, mean age 55 years' ±10 years. The asthmatic group was 48 males and 6 females with mean age 48±10 years. In the control group 40 males and 5 females with mean age 60 ±10.4 years.
Results: 33 patients (60%) with COPD, 38 patients in the asthmatic group (80%) and 5 patients in the control group (10%) had sinusitis. The differences between patients and controls were found as statistically significant ($p<0.001$)
Conclusion: These results suggest that sinusitis may play a role in the development of acute exacerbation of COPD as well as an acute asthmatic attack.

SURGICAL TREATMENT OF SPONTANEOUS PNEUMOTHORAX

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The aim of this retrospective study is to show the significance of surgical treatment, in the first place, pleural drainage as a method of choice in the initial treatment of pneumothorax (primarily spontaneous).

Patients and methods: Study includes 334 patients with verified pneumothorax hospitalized at Thoracic Surgery Clinic in a period 1999-2004, 269 (80.54%) male and 65(19.46%) female. Surgical treatment was performed in 325 patients in the age between 2 and 78 years, and 9 patients (2,69%) was observed and spontaneous air resorption occurred, thus, no further treatment was required. According to way of treatment patients were divided in two groups: group1 – only thoracic drainage, pleural punction or observation was performed -275 (82.34%); group 2 – patients that underwent surgical treatment if satisfactory lung re-expansion following drainage was not established or initially in the case of recidivated or successive pneumothorax– 59 (17.66%).

Results: As a method, different surgical treatments were performed: pleural punction, thoracic drainage or adjuvant drainage, chemical pleurodesis, thoracotomy with resection of bullous changed part of lung and mechanical abrasion of pleura, as well as, observation in the case of minimal partial pneumothorax. Drainage was performed in 318 (95.21%) cases, thoracotomy in 59 (17.66%), chemical pleurodesis following drainage in five (1.5%) patients. In 263 (78.74%) patients, drainage is considered as definitive treatment. In 59 (17.66%) patients surgical treatment was considered as definitive treatment. Lethal outcome was encountered in 7 (2.1%) cases, all in drained patients. Average duration of hospital treatment in patients who underwent thoracic drainage was 8.6 days and in patients that underwent thoracotomy 16.5 days.

SURGICAL TREATMENT OF PLEURAL EMPYEMA

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Pleural empyema is defined as a purulent collection in pleural space. It exists and develops in 3 stages: exudative, fiber purulent, stage of organization.
The aim of this study is to show the significance of surgical treatment in therapy and diagnostics of pleural empyema hospitalized at Clinic of Thoracic Surgery, Clinical Center University of Sarajevo in a period 1999-2004.
Patients and methods: Surgical treatment was performed in 75 patients with average age of 35,92 years +19,68 years, male 74,67%(56/75), female 25,33%(19/75). Regarding the treatment method patients were divided in 2 groups: group 1- underwent thoracic drainage 45, 33 %(34/75); group 2 –pulmonary decortication 54, 67 %(41/79). As a method, different surgical approaches were used: thoracic drainage, thoracic drainage with rib-resection, thoracoscopy with drainage and thoracotomy with pleural decortication.
Results: Drainage was performed in 45,33% (34/75) of cases, re-drainage in 8% (6/75) and drainage with rib resection in 2,67% (2/75) of cases. Thoracotomy was performed in 54,67% (41/75) of cases. In 4% (3/75) of cases treatment was finished with pleural decortication following chest drainage. In 38,67% (29/75) of patients treatment was finished with chest drainage, while complete success in all of the treated patients was accomplished with pleural decortication. Mortality was 1,33% (1/75). Average duration of hospital treatment in patients that underwent thoracic drainage was 26,5 days and in patients that underwent thoracotomy 19,57 days.
Conclusion: Depending on empyema stage it’s possible to apply surgical method, which will lead to optimal effect.

PREVALENCE OF SMOKING AMONG ALCOHOLICS TREATED AT THE DAY-HOSPITAL OF INSTITUTE FOR ALCOHOLISM AND SUBSTANCE ABUSE OF CANTON SARAJEVO IN ONE YEAR PERIOD

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This research is conducted on a sample of 103 alcoholics, treated at the Day-Hospital during the 2004. Data obtained indicated that our patient start to smoke between 15 and 17 years of age, while they start to drink three years later. Average age of our patients is 50 years, they also mainly have finished secondary education, smoke for more than 30 years, and use for over 25 years mainly spirits.
A positive correlation between smoking and alcohol consumption has been proven, although smoking does not cause the severe mental disorders, it still leads to addictive type of crisis reactions. A tobacco smoker and alcoholic will try everything to find a cigarette or alcohol in cases of frustration and problems related to occurrence of withdrawal symptoms. Within the Therapeutic community, or during the first phase of the treatment smoking is intensified, so alcoholics who smoked one pack of cigarettes per day, now smoke double as much. After psychological and somatic stabilization, craving for cigarettes reduces among alcoholics. Only some patients decide to quit smoking during the therapy, which is usually unsuccessful. Within the above mentioned sample, 10% of the treated alcoholics do not smoke at all.

KEEPING ASTHMA UNDER CONTROL BY INHALATION COMBINATION OF CORTICOSTEROIDES (FLUTICASON PROPIONATE) AND BETA AGONIST WITH LONGTERM EFFECT (SALMETEROL)

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Asthma is an inflammatory disorder of the air paths, characterized by periodic attacks of wheezing, shortness of breath, chest tightness, and coughing.
Aim: This study-work is an objective evaluation of prophylactic effect of the cure (medicine) for frequency and severity of asthma attacks – as well as possibility to reduce the symptomatic therapy.
Patients and methods: In this study-work, we used medical files from pulmonary clinic in health-care centre Banovići. The respond to aerosol Flixotide® and Serevent® was followed on 80 asthma patients sample within 14 weeks period. First group used combined therapy of both medicines, and the other group was divided in two subgroups – A and B. Each subgroup used different aerosol.
Results: After use of aerosols results showed that 28 of 55 patients had better medical finding of lung capacity. 11 patients from the group of 17 patients with very serious obstruction that were mentioned above, had improvement, and there was 3 patients, from the group of 8, with slight obstruction.

Conclusion: Asthma is a two-component illness, which requires combined therapy. A combination of corticosteroid inhaler Flixotide® and bronchodilator with long-term effect Serevent® is the best choice for keeping asthma under control.

SEALING PULMONARY AIR LEAKS WITH AUTOLOGOUS BLOOD PATCH

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Pulmonary air leak is a major cause of prolonged pleural drainage. Most common causes are ruptured pulmonary blebs and bulla associated with spontaneous pneumothorax or lung injury following pulmonary resection.
Sealing air leaks with autologous blood patch is a simple, cheap and very effective method: 50-100ml of autologous blood is instilled into the pleural cavity and the chest tube clamped for 1-2 hours. Most air leaks are sealed within 24 hours. This procedure can be repeated in rare cases of persisting leaks.
The exact course of action of the intrapleural blood is not yet known, although it is speculated that it acts as a chemical agent stimulating pleurodesis - severe pleural adhesions are a common residue of posttraumatic haemothorax.
At our department we have treated 5 patients using this method during the past 6 months: 3 cases of complicated spontaneous pneumothorax and 2 cases after pulmonary resection. The treatment was successful in all cases without any noticeable complications. In all cases severe leaking completely or almost completely stopped within 24 hours. The duration of pleural drainage before autologous blood patch was 6-35 (in average 8) days and the chest tube was successfully removed after 2-11 (average 3) days after the procedure.
Our experience supports the evidences on autologous blood patch pleurodesis reported by other authors.

EFFICACY OF SALBUTAMOL/FLUTICASONE PROPIONATE 25/50 MCG IN 5 YEARS OLD CHILDREN WITH MILD ASTHMA DISEASE

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Background: Recommendations of GOAL study (Gaining Optimal Asthma Control) are complete asthma control: without chronic symptoms (night symptoms and caught), without exacerbations, normal physical activity and sport activity, without symptomatic drugs, normal lung function (variability of daily PEF or FEV1 less than 10%).
Seretide® includes two active components with different ways of activity, salmeterol and fluticasone propionate. Salmeterol is high selective beta 2 agonist with long-term bronchodilatory effects and fluticason propionate is inhaled corticosteroid with anti-inflammatory effects.
The aim of this study is to verify the efficacy of Seretide in children aged 5 years with mild asthma disease.
Material and methods: 25 children aged 5 years, who were treated through respiratory outpatient clinic and Pediatric clinic are represented. According to days and night symptoms, the patients are classified in 3 degrees of asthma. These children used Seretide® 25/50 mcg by volumetric 2 X 2 inhalations. The children and their parents were informed about usage of inhaler. The principle of breathing was respected, repeated superficial breath in and breathes out. On that way the medicament was deposited centralizing the group of 25 children there were 14 boys (56, 0%) and 11 girls (44%). The patients were controlled 7th, 15th and 30th day of therapy.
Results: On the first control only two children had night symptoms (8%) and only one child (4%) wheezed. On the second (15^{th} day) and third (30^{th}) control all children were asymptomatic.
Conclusion: Seretide® 25/50 mcg inhaler is recommended and permitted for children above 4 years and in our presentation showed high efficacy and the application is simple. With this drug night and day symptoms completely disappeared without using beta 2 agonists of short effects. With Seretide® we expect completely asthma control and the child with normal physical and sport activity.

NEOPLASTIC AND PARANEOPLASTIC SYNDROME IN LUNG CANCER PATIENTS TREATED AT THE CLINIC FOR LUNG DISEASES AND TB «PODHRASTOVI»

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There are a few very well defined neoplastic and paraneoplastic syndromes in lung cancer.
Objectives: To show occurrence of neoplastic and paraneoplastic syndrome in patients treated from lung cancer at the Clinic for lung diseases and TB «Podhrastovi», Clinical Center University of Sarajevo.
Material and methods: Randomized sample of 200 patients with PH demonstrated diagnosis of lung cancer. Patients were different oldness. Youngest had 18 and oldest 81 year. Average oldness was 55,2. Of that, 162 were men or 81 % and 38 women or 19 %. Index was 4,2: 1.
Results: In total, there were 171 patients with non-small cellular lung cancer (NSCLC) or 85,5 % and 29 patients with small cellular lung cancer (SCLC) or 14,5 %. With neoplastic syndrome there were 17 patients or 8,5 % from which 3,5 % were with Pancoast syndrome and 5% with syndrome V. cava superior. With paraneoplastic syndrome were entirely 14 patients or 7 % from which 6 % were with HPO and 1 patient was with hypercalcaemia or 0,5 % and 1 patient or 0,5 % with hyponatraemia and syndrome of non-corresponding secretion of antidiuretic hormone. Neoplastic syndrome was most frequently represented in NSCLC with 15 patients or 88,2% and with 2 patients or 11,8 % in SCLC. Paraneoplastic syndrome was represented with 12 patients or 85,7 % with NSCLC and with 2 patients or 14,3 % with SCLC. Neoplastic syndrome was represented with 76 % patients of male and 24 % of female. Paraneoplastic syndrome was represented with 71 % in men and 29 % in female.
Conclusion: Obtained results on randomized sample of 200 patients with lung cancer who were treated at the Clinic of Lung Diseases and TB «Podhrastovi» are in accordance with results that can be found in available literature.

QUITINNG SMOKING – OUR EXPERIENCES

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Background: To stop smoking and suppress smoking habits should be a priority in the activities on the primary health care level.
When creating a person's opinion about the smoking and quitting smoking we should have in mind the importance of tradition, habits, models for spreading of smoking habits, economical motives of the tobacco manufacturers, etc.
Goals: To find a method to quit smoking, which is applicable in practice, and to show the importance of teamwork in family medicine?
Patients and methods: All patients used the brochure for patient education about quitting smoking and in the same time they have opportunity to discuss this issue with their doctor.
Results: We have followed 10 patients during the four-year period after they stopped to smoke.
Conclusion: Practical examples and our results indicated the importance of teamwork when working on smoking cessation in family practice. The education of doctors and patients is the main perquisite for achieving the good results in smoking cessation programs.

THE VALUE OF CYTOLOGICAL DIAGNOSTIC METHODS

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In the past 10 years at the Clinic for Lung Diseases, the cytological analysis of the exfoliate and aspirate materials has been performed as a routine procedure. These materials were obtained from the respiratory system by various techniques. By 31st December 2004, there were 7,800 patients registered who had a cytological analysis on one or more types of materials.

The objective of this research was to confirm the value of cytological analysis in the definite morphological confirmation of the malignant disease, based on the results obtained.

Material and methods: The cytological analyses results of the patients suffering from malignant diseases were compared with the endoscopic and histological findings.

Results: The mean values of positive outcomes of various materials are: catheter aspirate-77,13%; bronchial needle aspiration-91,62%; percutaneous needle aspiration-98,14%; pleural needle aspiration-85,71%; lymph node needle aspiration-95,43%; material obtained by pleuroscopy-97,42%. The catheter aspirate had the highest positive value at endoluminal squamous cancer, while the positive value of bronchial needle aspiration was the highest in patients suffering from endoscopy indirect signs of malignancy caused by microcellular cancer. Percutaneous needle aspiration had its highest positive value in peripherally localized tumor with normal endoscopic finding.

The differences in definite diagnosis between the cytological and histological respond were found in 2% of the patients, while in 9,85% of the patients there was discordance in malignant disease type.

Conclusion: The cytological analysis of various materials enables the definite morphological confirmation of the malignant diseases in high percentage, which makes this simple and economical method very acceptable in the pulmologists routine work.

RETROSPECTIVE STUDY OF TUBERCULOSIS CASES BY GENDER AND AGE IN FEDERATION OF BOSNIA AND HERZEGOVINA (1998 – 2003)

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Goal: To determine the frequency of tuberculosis (TB) cases (collected through standard tables) including numbers of TB cases by gender, age, national structure and bacteriological findings – sputum smear results.

Materials and methods: This was a retrospective analysis of the reported cases of TB in FB&H during the period 1998-2003 collected through standard tables according to the recommendation of the WHO and IUATLD in Europe and World.

Results:

Table 1. Gender structure of TB cases in FB&H during 1998-2003

Year	Male	Male citizens	Male Foreigners	Female	Female citizens	Female Foreigners
	No %	No %	No %	No %	No %	No %
1998	1190 (57.8)	1189(57.7)	1 (100.0)	870 (42.2)	870 (42.2)	0 (0)
1999	1212 (58.5)	1207(58.6)	5 (50.0)	858 (41.5)	853 (41.4)	5 (50.0)
2000	1017 (57.8)	1010(57.7)	7 (58.3)	745 (42.2)	740 (42.2)	5 (41.6)
2001	966 (55.5)	964 (55.6)	2 (33.3)	774 (44.5)	770 (44.4)	4 (66.6)
2002	1017 (58.2)	1013(58.1)	4 (66.6)	730 (41.8)	728 (42.0)	2 (33.3)
2003	995 (55.9)	995 (56.0)	1 (33.3)	782 (43.9)	782 (44.0)	2 (66.6)

Table 2: Age groups (> 64 year) and sex of TB cases in FB&H during 1998-2003

Year (>64)	Male		Female	
	No	%	No	%
1998	260	21.8	295	33.9
1999	244	20.1	279	32.5
2000	253	24.9	294	39.4
2001	255	26.3	276	35.6
2002	288	28.3	293	40.1
2003	242	24.3	313	40.0

This study showed that male cases were more present than women, especially in 1999. (M 1212 - 58.5%, FM 858 - 41.55%) and in 2002 (M 1017 - 58.2%, FM 730 - 41.8%).

Gender structure TB cases, citizens in FB&H, show that males were more represented, especially in 1999 (1207 - 58.5%, female 853 - 41.4%) and in 2002 (male 1013 - 58.1%, female 728 - 42.0%)

Gender structure of TB cases - foreign citizens in FB&H, show that males were more present in 2000 (male 7 - 58.33%, female 5 - 41.66%) and in 1999 both sexes equal (male 5 - 50.0%, female 5- 50.0%)

Male and female at the age of more than 64 were most frequent, particularly woman.

Gender structure - new smear positive pulmonary TB cases in FB&H during the analyzed time period showed that male cases were more frequent during all years particularly in 2002 (male 320- 60.8%, female 206- 39.1%)

Conclusion: The higher TB notification rates in men compared to women observed in FB&H during 1998-2003 result from higher prevalence of infection in men. Age specific rates were

highest in the age group over 64 years. Among citizens adult rates increased regularly with age and were highest in the age group over 64 years. The higher report rate in the older age group in FB&H mainly reflects reactivation of old M. tuberculosis infection.

EXTRA PULMONARY TUBERCULOSIS IN FEDERATION OF BOSNIA AND HERZEGOVINA DURING 1997 – 2003.

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Extra pulmonary tuberculosis (EPT) can affect any organ and tissue of the body and can occur at any age. Young children and HIV positive adults are particularly susceptible.
Aim: To characterize the epidemiology of (EPT) cases, primarily pleural form, in FB&H during 1997- 2003.
Material and methods: Retrospective chart review of tuberculosis cases reported to FB&H between 1997-2003.A standard set of data was used for TB patients and was included in the standardized form "Minimum information for reporting tuberculosis" which is used according to the recommendation of the WHO and IUATLD in Europe and elsewhere.

Results are summarized in the table:

Year	TB of all localizations	EPT (N0)	EPT (%)
1997	1820	175	9.6
1998	2060	235	11.4
1999	2070	259	12.5
2000	1762	198	11.2
2001	1740	237	13.6
2002	1747	227	13.0
2003	1780	215	12.1

From the table it is evident that the number of cases of EPT in FB&H is slightly lower during the period 1997-2003, which also refers to the total number of all localization of TB.
The pleural form of EPT is the most frequent in the period of 1997 - 2003.
Conclusions: There was no increase in the incidence of EPT during the last 7 years.
We determined significant differences in localization of EPT. The frequency of pleural, genital-urinary and lymphatic form of EPT is the greatest considering all other forms of EPT in FB&H during the analyzed period.

EFFECTS OF SMOKING ON THE PROCESS AND OUTCOME OF PREGNANCY AND THE NEWBORN'S HEALTH

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Objective: To investigate the correlation between smoking and spontaneous abortions, pre-term delivery and placenta maturation, calcifications and decreased amniotic sac content, type and length of delivery, the newborn assessment – APGAR score and body weight, mother's and baby's respiratory gas levels in the arterial blood.

Material and methods: The examined group included 58 married couples which are smoking 10-20 cigarettes per day for at least five years, while the control group included 51 married couples - nonsmokers. The relevant data were gathered trough a questionnaire, from case history reports and blood gas findings.

Results and Conclusion: A pre-term delivery occurred in 24.1%. Within the total of US diagnosed placenta abnormalities, 78.9% and 21.1% were registered in the examined and control group respectively; 35.9% in the examined and control group had a prolonged delivery (over 6 hours); a low APGAR score (5-7) was registered in 31% and 13.7% of the newborn from smoking and-non-smoking mothers respectively; 24.1% and 13.7% of the newborn had a low body weight of <2,500g. Decreased partial oxygen pressure levels were registered in 50% of mothers and 45% of babies in the examined and in 20% of mothers and 10% of babies in the control group; 55% of smoking mothers and their babies had a decreased oxyhaemoglobin saturation, but 15% of non-smoking mothers and 25% of their babies ($p<0,05$). Recurrent spontaneous abortions, premature delivery and abnormal US findings are also evidently more frequent among pregnant women who smoke, but no statistical significance has been found for these parameters.