



INTERACTIVE AND INNOVATIVE COURSE IN LUNG AND THORACIC ULTRASONOGRAPHY

SUMMARY OF PART ONE
HELD IN ORADEA, 10th-11th July
2015

DAY ONE

10th of July
Program

9:00 to 9:15 INTRODUCTION
9:15 to 9:45 THE LUNG ANATOMY
**9:45 to 10:30 THE BREATHING PHYSIOLOGY
AND PHISIOPATHOLOGY**
**11:00 to 12:00 LUNGS AND PLEURA
IMAGINING**
**12:00 to 12:30 PRACTICAL ISSUES FOR
CLINICIANS**
**12:30 to 13:00 ULTRASOUND TECHNOLOGY
AND TECHNIQUES**
14:00 to 18:30 HANDS ON SESSION

LECTORS

List

Lavinia Davidescu
Ruxandra Ulmeanu
Edith Ianosi
Marinela Crisan
Oreste Straciuc
Beatrice Mahler
Zeno Sparchez

INTRODUCTION

9:00 to 9:15

Hotel Maxim

Lector *Lavinia Davidescu* and *Ruxandra Ulmeanu* talked about the course and its targets. *Lavinia Davidescu* explained the program and talked about the follow-ups.

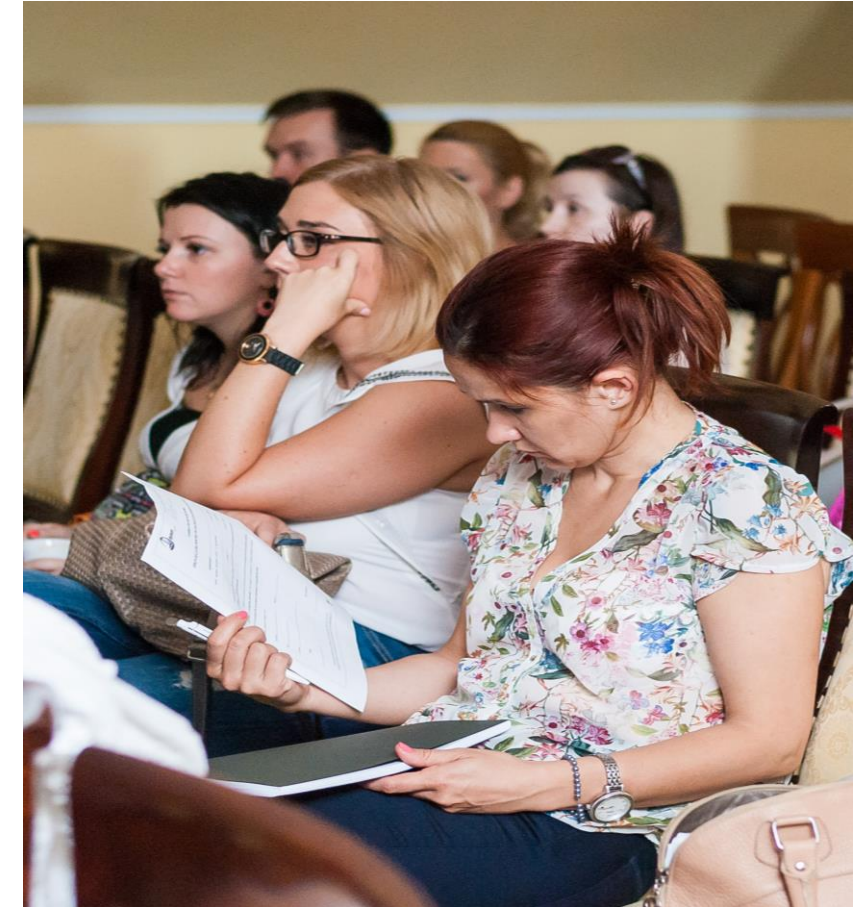


THE LUNG ANATOMY

9:15 to 9:45

Hotel Maxim

Lector **Edith Ianosi** and **Marinela Crisan** talked about the **lung anatomy** and its organs. They made a **throughout** presentation on every part of the **respiratory system** showing *many examples* involving pictures.



THE BREATHING PHYSIOLOGY AND PHYSIOPATHOLOGY

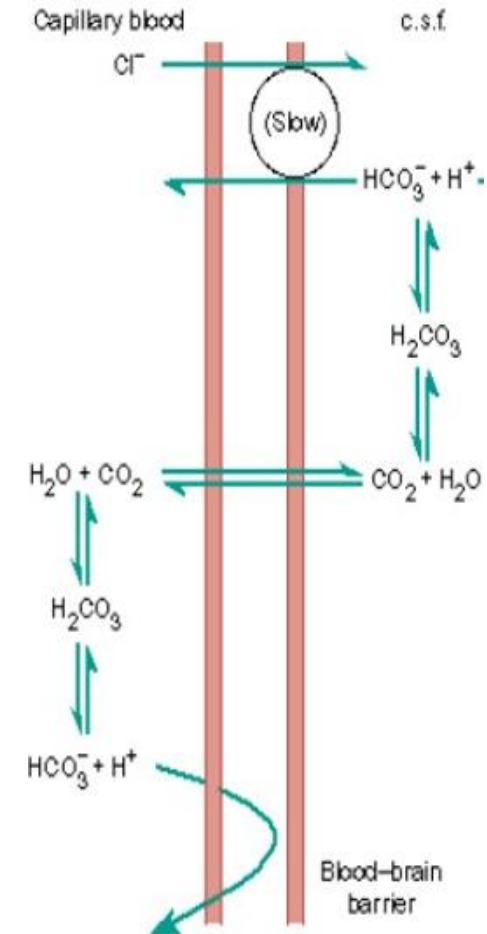
9:45 to 10:30

Hotel Maxim

Lector **Lavinia Davidescu** talked about *the breathing physiology and physiopathology* as she explained *the mechanics of breathing, pressure-volume relationships, influencing factors and so on.*



• Traditionally, air has been considered the main component of the lung and the lung has been considered an organ in ultrasonographic examination
• The explanation is the big attenuation effect of the lung
• In the last 15 years, a new imaging application has emerged in the clinical arena: lung ultrasound
• From its traditional assessment of pleural effusion, LUS has moved towards the revolutionary approach of the pulmonary parenchyma, the so-called "B-lines" technique

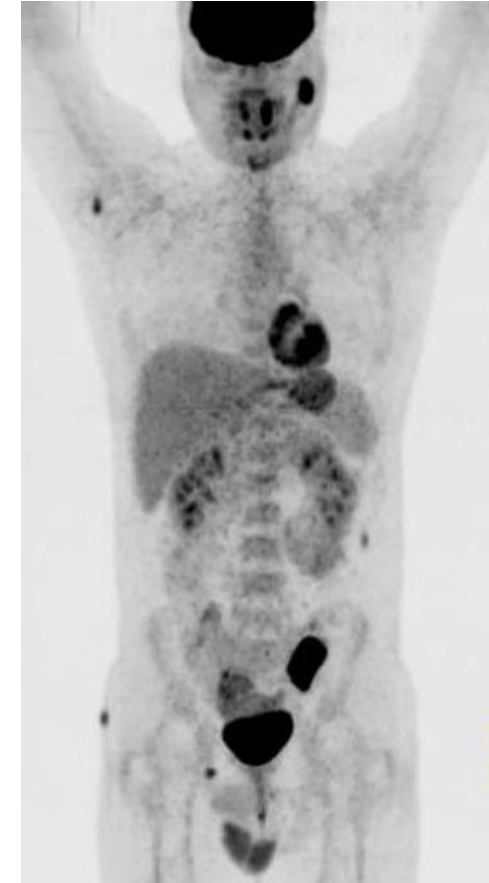


LUNGS AND PLEURA IMAGING

11:00 to 12:00

Hotel Maxim

Lector **Oreste Straciuc** presented the *imagistic methods of diagnostic* in the **pulmonary, pleural** and **mediastinum pathologies** using **Chest X-rays, CT scans, IRMs** and **Pet CTs**.

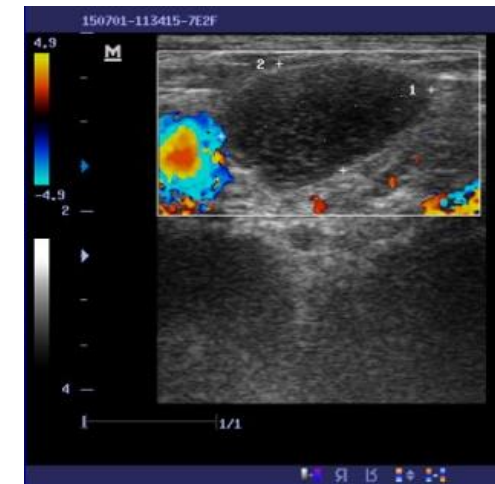
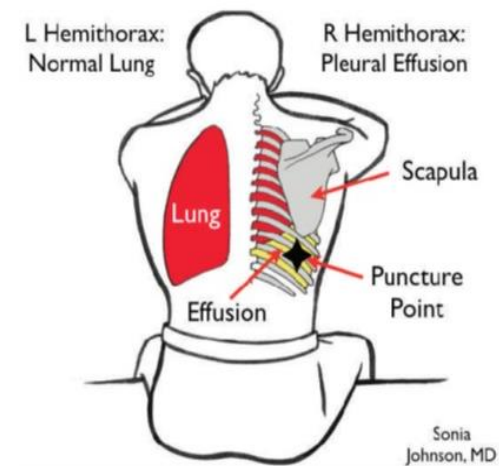


PRACTICAL ISSUES FOR CLINICIANS

12:00 to 12:30

Hotel Maxim

Lector **Beatrice Mahler** talked about when the **transthoracic ultrasound** is necessary in **pleural effusions**. She explained the **pleural effusions** and gave *examples* of **ultrasonographic appearances exudates types** using *x-ray images* followed by: the *benefits* of **thoracic ultrasound**, *real-time ultrasonographic guidance*, **thoracentesis techniques**, **thoracentesis procedure**, *complications*, **pleural biopsy**, *thickening* and **clinical cases**.



ULTRASOUND TECHNOLOGY AND TECHNIQUES

12:30 to 13:00

Hotel Maxim

Lector **Zeno Sparchez** talked about *the ultrasound technology* and its *techniques* using examples and images of the latest technology and techniques.



HANDS ON SESSION

14:00 to 18:30

Clinical Municipal
Hospital of Oradea

The **participants** were able to **experiment** on *their own* what the **lectors** *thought* them and *shown* them, **earlier** on *the course*. They were *very enthusiastic* about it and they *learned* while *having fun*.



DAY TWO

11th of July
Program

9:00 to 13:00 HANDS ON SESSION

14:00 to 14:30 THE LIMITATIONS OF LUNG

**14:30 to 15:00 THE SONOGRAPHIC DETECTION OF
B-LINES IN PATIENTS WITH NORMAL LUNGS**

**15:00 to 15:30 THE LUNG'S ULTRASOUND
RELEVANCE IN THE DIAGNOSIS OF ACUTE
RESPIRATORY FAILURE**

**15:30 to 16:00 THE ULTRASONOGRAPHIC
PROTOCOLS OF RESPIRATORY EMERGENCIES**

16:00 to 17:30 CLINICAL CASES

17:30 to 17:45 QUIZ

**17:45 to 18:00 COURSE EVALUATION
QUESTIONNAIRE**

18 to 18:30 DISCUSSIONS

LECTORS

List

Nicolae Rednic
Zeno Sparchez
Adela Golea
Ruxandra Ulmeanu
Beatrice Mahler
Edith Ianosi
Lavinia Davidescu
Gogu Dragnea
Oreste Straciuc

HANDS ON SESSION

09:00 to 13:00

Clinical Municipal
Hospital of Oradea

The **participants** were able to continue **experimenting** what the **lectors** *thought* them and *shown* them, *the day before*. They were **eager** to *learn* some **more**.



THE LIMITATIONS OF LUNG SONOGRAPHY

14:00 to 14:30

Hotel Maxim

Lector **Nicolae Rednic** talked about *the limitations of lung sonography: definition, causes, the pros and the cons*. He **also** gave examples of **artefacts** using *various images*.



THE SONOGRAPHIC DETECTION OF B-LINES IN PATIENTS WITH NORMAL LUNGS

14:30 to 15:00

Hotel Maxim

Lector **Zeno Sparchez** talked about *the sonographic detection of b-lines in patients with normal lungs*. He **presented** examples using *interesting images that showed more about the techniques used*.

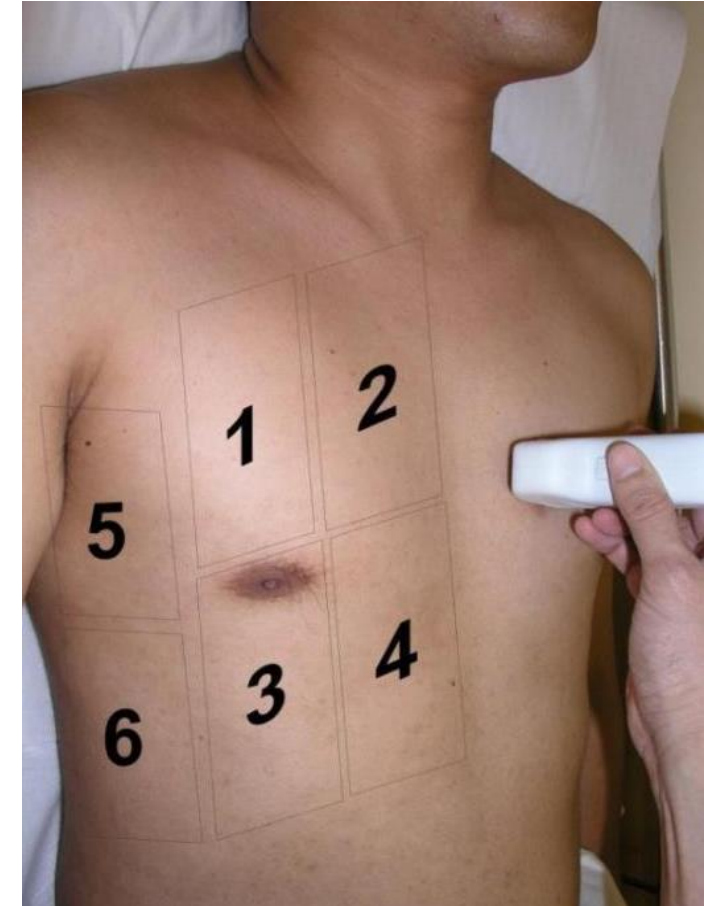
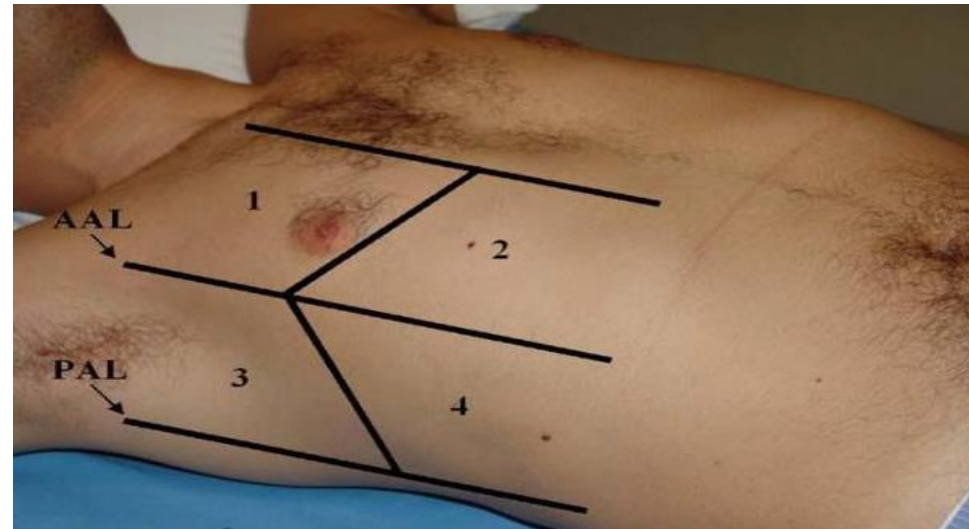


THE LUNG'S ULTRASOUND RELEVANCE IN THE DIAGNOSIS OF ACUTE RESPIRATORY FAILURE

15:00 to 15:30

Hotel Maxim

Lector **Adela Golea** talked about *the lung's ultrasound relevance in the diagnosis of acute respiratory failure* showing **the methods used** and giving examples by presenting a vast variety of **images**.

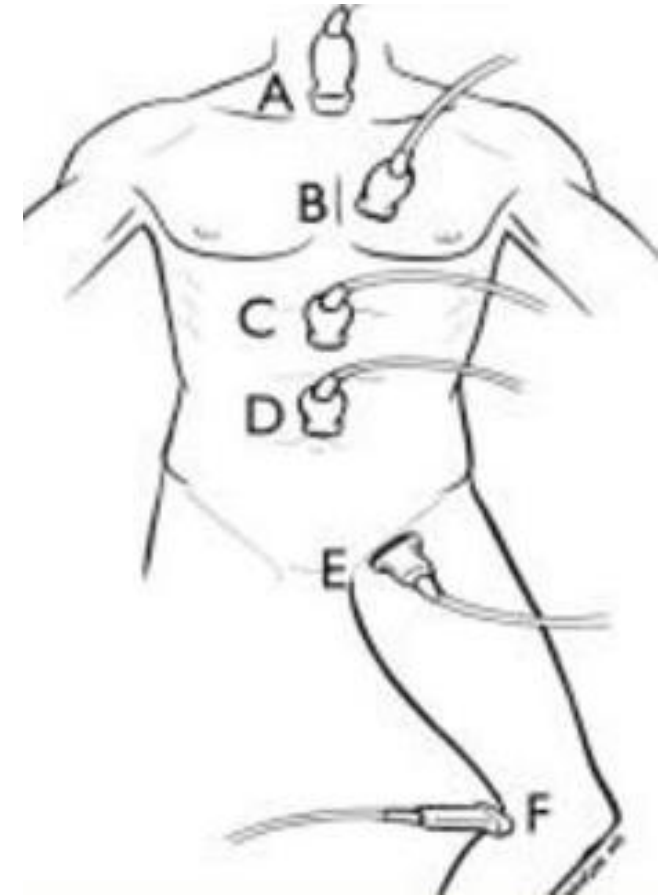
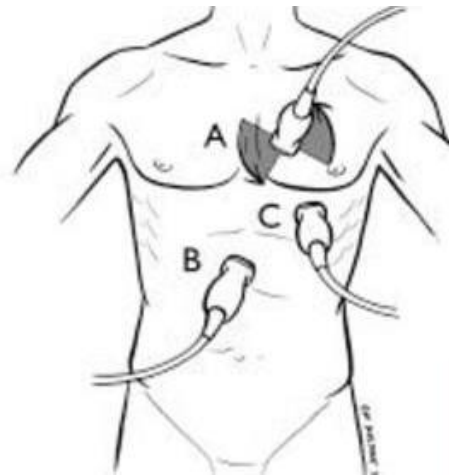


THE ULTRASONOGRAPHIC PROTOCOLS OF RESPIRATORY EMERGENCIES

15:30 to 16:00
Hotel Maxim

Lector **Adela Golea** talked about the *ultrasonographic protocols of respiratory emergencies*. She explained the **protocols** showing *images of examples and complex schematics of the procedure and the decision making process*.

- A) Parasternal Views
Long / Short Axis
- B) Subxiphoid View
- C) Apical View



CLINICAL CASES

16:00 to 17:30

Hotel Maxim

The following lecturers presented the clinical cases in the order that follows: **Zeno Sparchez, Nicolae Rednic, Adela Golea, Ruxandra Ulmeanu, Beatrice Mahler, Edith Ianosi, Lavinia Davidescu, Gogu Dragnea and Oreste Straciuc.**



QUIZ

17:30 to 17:45

Hotel Maxim

The **participants** had to take a *little quiz* that *measured* how **much** they *learned* from the **course**.



COURSE EVALUATION QUESTIONNAIRE

17:45 to 18:00

Hotel Maxim

The **participants** were asked to *express their opinion about the course*, say what they **liked** or **disliked** about it, and *ask questions* if they had any.



DISCUSSIONS

18:00 to 18:30

Hotel Maxim

The **matter** of *the discussion* was the **intention** of forming a **SRP organized working group** with *the basis* in **Thoracic and Pulmonary Echography**.

After a *pleasant group discussion*, it was in *everybody's agreeing* that *the group shall* be formed.

