2014

BREAST SEMINAR SERIES

LÁSZLÓ TABÁR, M.D., F.A.C.R (Hon) Course Director
Professor emeritus of Radiology
and
SUSAN ROUX, M.D.
Monterey, CA

Advanced Course on Multimodality Detection and Diagnosis of Breast Diseases

SCOTTSDALE, AZ
Scottsdale Plaza Hotel
7200 N. Scottsdale Road

Febr 17-19

Designed for:
Radiologists • Surgeons • Pathologists
Implications of mammography, MRI, breast ultrasound and interventional methods in radiological and surgical practice

This course provides extensive knowledge about diagnostic breast imaging, differential diagnosis of breast diseases, implications for management and newest diagnostic technologies

Three day course: 21 hours of Category I CME credits
László Tabár, M.D., F.A.C.R. (Hon)
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www.tabarfoundation.org
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1st day  Morning lectures between 8:30 AM and 12:00

8:30  INTRODUCTION

8:45  A NEW ERA in the DIAGNOSIS and TREATMENT of BREAST CANCER.
THE ISSUE of UNI- and MULTIFOCALITY - CLINICAL IMPLICATIONS - Tabar L

THE BASIS FOR EFFICIENT INTERPRETATION OF THE MAMMOGRAPHIC IMAGE
Correlative 3-dimensional, subgross anatomy and mammography of the normal breast- Tabar L

- The problem: The variable appearance of the normal mammogram.
- The solution: classification into structural subtypes, mammographic parenchymal patterns, based on 3D/subgross histologic-mammographic correlation.
- Result: Increased confidence in reading a mammogram and finding subtle perceptual abnormalities
- The dynamic change of mammographic patterns and its application in clinical practice

MAMMOGRAPHIC PARENCHYMAL PATTERNS - Tabar L,

- Practical implication, problems and solutions. Mammographic patterns and the risk of developing breast cancer. Understanding the mammograms of dense breasts.

I  II  III  IV  V

Breaks at 10:00 and at 11:00 AM

11:15 - 12:00  THE PROBLEM OF VIEWING THE MAMMOGRAMS OF WOMEN WITH DENSE BREASTS. DEMONSTRATION OF A POTENTIAL SOLUTION - Roux, S.

12:00 PM - 1:00 PM Lunch
**ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN**

**Breast diseases originating in the major ducts**

- **Benign type calcifications** originating in the major ducts
  - a) Secretory disease type calcifications

- **Malignant type calcifications** originating in the major ducts
  - a) Fragmented casting type calcifications
  - b) Dotted casting type calcifications
  - c) Skipping stone-like calcifications
  - d) Pearl necklace-like calcifications

* Four different malignant type calcifications developing in the major ducts: a) fragmented casting type b) dotted casting type c) skipping stone-like d) pearl necklace-like.
* The role of breast MRI examination in demonstrating the extent of Gr 3 in situ carcinoma.
* Mammographic/3D histologic correlation helping to explain the underlying pathophysiology and outcome.

**Breaks at 2:30 and at 3:30 PM**

| 4:30 - 6:30: HANDS-ON TEACHING SESSION 1/3 WITH FDA APPROVED CURRICULUM FOR 3D AUTOMATED ULTRASOUND - Roux, S. (Optional but highly recommended). |
### 2nd DAY

**Morning lectures between 8:30 AM - 12:00 PM**

#### 8:30

**ASYMMETRIC DENSITIES ON THE MAMMOGRAM**

- Didactic workup of *non-specific asymmetric densities without architectural distortion*
- Didactic workup of *non-specific asymmetric densities with architectural distortion*

#### ANALYSIS of BENIGN RADIATING STRUCTURES on the mammogram, originating in the ducts

- Radial scar. A suggested algorithm for the workup of stellate lesions
- Indications and contraindications of using minimally invasive preoperative diagnostic techniques.

#### ANALYSIS of MALIGNANT LESIONS PRESENTED as RADIATING STRUCTUREs on the mammogram. Clinical presentation, mammographic appearance and outcome: Tabar, L., Roux, S.

- **Invasive lobular carcinoma:** the most deceptive and frequently missed cancer of the breast. The value of ultrasound and MRI in finding and diagnosis invasive lobular cancer subtypes. Case demonstrations

  - Neoductgenesis cases presenting on the mammogram as architectural distortion
  - A suggested algorithm for the workup of lesions with architectural distortion
  - Indications and contraindications of using minimally invasive preoperative diagnostic techniques.

#### Multimodality workup of a huge invasive lobular carcinoma

**12:00 PM - 1:00 PM Lunch**
2nd DAY  Afternoon lectures between 1:00 PM - 4:30 PM

1:00  THE DIDACTIC LECTURE SERIES WILL COVER THE FOLLOWING TOPICS:

ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN

- Didactic workup of asymmetric densities caused by:
  - Normal breast tissue / focal fibrosis / Hamartoma, Cowden disease (multiple hamartoma syndrome). PASH.

- Benign breast diseases originating in the TDLU and associated with calcifications on the mammogram:
  - Fibrocystic change. Fibroadenoma. Different types of adenosis. Understanding pathophysiology leading to calcified and non-calcified hyperplastic breast changes.
  - Detailed analysis of calcifications associated with hyperplastic breast changes Weddellites, powdery calcifications, pleomorphic calcifications on the mammogram.

- Malignant breast diseases originating in the TDLU(s) and associated with calcifications on the mammogram: - Tabar, L.

Breaks at 2:30 and at 3:30 PM

1) Grade 1 in situ carcinoma: Mammographic / 3-D histologic / MRI correlation of cases with powdery calcifications on the mammogram

2) Grade 2 cancer in situ: Mammographic / 3-D histologic / MRI correlation of cases with crushed stone-like/pleomorphic calcifications on the mammogram.

4:30 - 6:30: HANDS-ON TEACHING SESSION 2/3 WITH FDA APPROVED CURRICULUM FOR 3D AUTOMATED ULTRASOUND - Roux, S.. (Optional but highly recommended).
3rd day

Morning lectures between 8:30 AM and 12:00 PM

8:30

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ALGORITHM FOR CLASSIFYING BREAST DISEASES ACCORDING TO THEIR SITE OF ORIGIN

• Didactic workup of asymmetric densities caused by:
  - Normal breast tissue / focal fibrosis / Hamartoma, Cowden disease (multiple hamartoma syndrome). PASH.

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  - Fibrocystic change. Fibroadenoma. Different types of adenosis. Understanding pathophysiology leading to calcified and non-calcified hyperplastic breast changes.
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Breaks at 10:00
and
at 11:00 AM

12:00 Lunch
3rd Day

Afternoon lectures between 1:00 PM and 4:30 PM

1:00  HOW TO FIND THE INVASIVE BREAST CANCER WHEN IT IS STILL SMALL. SCREENING COMBINED WITH AN ANALYTICAL APPROACH FOR THE DIFFERENTIAL DIAGNOSIS OF STELLATE/SPICULATED LESIONS - Tabar L.

- A systematic method for viewing mammograms.
- Areas on the mammogram where most breast cancers will be found
- Viewing dense breasts
- Viewing relatively easy-to-read breasts

PRACTICE IN PERCEPTION OF SUBTLE, NON-CALCIFIED CANCERS.

The role of hand-held ultrasound / 3D automated ultrasound / MRI in the detection and workup of the findings. The multimodality approach. - Tabar L, Roux, S.

- Architectural distortion, parenchymal contour changes, imaging the postmastectomy patient - Tabar L., Roux, S.

PRACTICING MULTIMODALITY APPROACH IN SOLVING COMPLEX CASES - Tabar L Roux, S.

Multifocal invasive and in situ carcinoma on an area measuring 180X60 mm pN 4/9

4:30 - 5:30: HANDS-ON TEACHING SESSION 3/3 WITH FDA APPROVED CURRICULUM FOR 3D AUTOMATED ULTRASOUND - Inciardi, M. (Optional but highly recommended).

4:30 PM End of course
Computer simulation images of the development of Grade 2 *in situ* carcinoma within the TDLU. The lobule becomes gradually distended and deformed. Calcifications are formed within the necrotic debris and are seen on the mammogram as **crushed stone-like calcifications.**
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Breast Cancer
Early Detection with Mammography

Casting Type Calcifications: Sign of a Subtype with Deceptive Features
László Tabár
Tibor Tot
Peter B. Dean

Breast Cancer
Early Detection with Mammography

Crushed Stone-like Calcifications: The Most Frequent Malignant Type
László Tabár
Tibor Tot
Peter B. Dean

Breast Cancer
The Art and Science of Early Detection with Mammography

László Tabár
Tibor Tot
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Teaching Atlas of Mammography

László Tabár
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Advanced Course on Multimodality Detection and Diagnosis of Breast Diseases

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Understanding the Breast in Health and Disease

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