2014

BREAST SEMINAR SERIES

LÁSZLÓ TABÁR, M.D., F.A.C.R (Hon) Course Director
Professor emeritus of Radiology
and
STAMATIA DESTOUNIS, M.D., F.A.C.R.

Multimodality Approach to Detection and Diagnosis of Early Breast Cancer, Tomosynthesis included

Jan 27 - 30

Scottsdale, AZ

Plaza Hotel, 7200 N. Scottsdale Rd

Designed for:
Radiologists • Surgeons • Pathologists
Oncologists • Radiology Technologists

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, surgical management and newest diagnostic technologies.

29 HOURS OF CATEGORY I CME CREDITS
László Tabár, M.D., F.A.C.R. (Hon).
Course Director
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Clinical Associate Professor of Radiology
University of Rochester School of Medicine and Dentistry

Elizabeth Wende Breast Care, LLC
Mammography Education, Inc. is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. Mammography Education, Inc. designed these medical education activities for a maximum of 29 credit hours in Category I of the Physicians’ Recognition Award of the American Medical Association, 8 hours Tomosynthesis CME credit included.
Each physician should claim only those hours of credit that he / she actually spent in the educational activity.

CREDITS

We would like to thank the sponsors for their support of the teaching seminars of Mammography Education, Inc (list of vendors will be presented at the beginning of the course)
1st day

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

8:30

INTRODUCTION FOLLOWED BY DIDACTIC LECTURES COVERING:

THE HISTORY OF DIGITAL BREAST TOMOSYNTHESIS - Stamatia Destounis, M.D., F.A.C.R.

- The early technology
- Physics
- Radiation dose

Discussion

Break at 10:00 AM

EARLY RESEARCH STUDIES:

- Two-view DBT versus one-view
- Synthetized 2D tomosynthesis
- Tomo CAD

Break at 11:00 AM

Discussion

INITIAL EXPERIENCE WITH DIGITAL BREAST TOMOSYNTHESIS AT EWBC

- Our research studies
- IT issues
- Physician and technologist training
- Initial implementation: protocols, image interpretation, room specifications
- Costs, billing considerations

Discussion

Lunch 12:00 - 1:00 PM
# 2014 BREAST SEMINAR SERIES

**Multimodality Approach to Detection and Diagnosis of Early Breast Cancer, Tomosynthesis included**

László Tabár, M.D.,
F.A.C.R.(Hon)

*Professor emeritus of Radiology*

*Course Director*

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**1st DAY**

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<th>Time</th>
<th>Activity</th>
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<td>1:00 PM</td>
<td>Hands-on tomosynthesis cases</td>
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| 1:15 - 2:15 | **GROUP 1**  
**HANDS ON TOMOSYNTHESIS CASES.**                                  |
| 1:15 - 2:15 | **GROUP 2:**  
**DIGITAL BREAST TOMOSYNTHESIS: WHERE DO WE STAND NOW?**  
**LATEST RESEARCH WITH CASE EXAMPLES.** Faculty-audience interaction |
|         | Break 2:15 - 2:30 PM                                                    |
| 2:30 - 3:30 | **GROUP 2**  
**HANDS ON TOMOSYNTHESIS CASES.**                                    |
| 2:30 - 3:30 | **GROUP 1:**  
**DIGITAL BREAST TOMOSYNTHESIS: WHERE DO WE STAND NOW?**  
**LATEST RESEARCH WITH CASE EXAMPLES.** Faculty-audience interaction |
|         | Break 3:30 - 3:45 PM                                                   |
| 3:45 - 5:30 | **GROUPS 1 & 2:**  
**DISCUSSION OF THE TOMOSYNTHESIS CASES. QUESTION AND ANSWER SESSION.** |
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Multimodality Approach to Detection and Diagnosis of Early Breast Cancer, Tomosynthesis included

2nd day
Morning lectures between 8:30 AM and 12:00 PM

8:30 INTRODUCTION FOLLOWED BY DIDACTIC LECTURES COVERING:

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

THE BASIS FOR EFFICIENT INTERPRETATION OF THE MAMMOGRAPHIC IMAGE

• Correlative 3-dimensional, subgross anatomy and mammography of the normal breast
• 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

Breaks at 10:00 and at 11:00 AM

MAMMOGRAPHIC PARENCHYMAL PATTERNS

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

12:00 - 1:00 Lunch
2nd day

Afternoon lectures between 1:00 PM and 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

**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

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

**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 concept of **neoductgenesis**. Long-term follow-up results. New aspects, correct terminology.

* 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.

4:30 End of Day 1
DAY 3 Morning lectures between 8:00 AM - 12:00 PM

8:00 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.

Breaks at 10:00 AM and at 11:00 AM

Analysis of malignant lesions presented as radiating structures on the mammogram. Clinical presentation, mammographic appearance and outcome:

- Classic invasive lobular carcinoma: the most deceptive and frequently missed cancer of the breast. The value of ultrasound and MRI in finding and diagnosing 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

Multimodality workup of a huge invasive lobular carcinoma

12:00 - 1:00 Lunch
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:

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 End of Day 2
DAY 4  Morning lectures between 8:00 AM - 12:00 PM

8:00  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

- 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

- Malignant stellate lesions: clinical presentation, histology, mammographic/ MRI/ ultrasound appearance and outcome:
  - invasive breast carcinoma, not otherwise specified (NOS): the most frequently occurring carcinoma. Multimodality case demonstrations
  - tubular carcinoma: the stellate tumor with the best outcome
  - sonographic and MRI correlation with the mammogram

Breaks at 10:00 AM and at 11:00 AM

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

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

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

• Didactic workup of circular/oval-shaped lesions without associated calcifications
  - Circular benign hyperplastic breast lesions:
    1) Fibrocystic change/solitary and multiple cysts
    2) Fibroadenoma, phylloides tumor
    3) Papilloma
  - Circular/oval-shaped malignant breast tumors:
    1) Malignant papilloma, solitary and multiple. Intracystic papillary cancer
    2) Invasive "ductal" carcinoma
    3) Medullary cancer: one of the fastest growing breast cancers:
    4) Mucinous / colloid cancer: rare and special form of breast cancer
    5) Metastases to the breast

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

Mammographic-histologic comparison of the many subtypes of circular/oval shaped invasive breast cancers.

4:30 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.
Understanding the Breast in Health and Disease

Prostate and Breast: Brother and Sister Organs

www.amazon.com