

IBUS - International Breast Ultrasound Course:

Multimodality Imaging & Interventional Techniques

“Hands-on” practical workshops, lectures, interactive presentations

COURSE OUTLINE

Day 1: Background

Introduction

Epidemiology, risk factors, preventive strategies

Breast cancer screening

Histopathology of the breast: benign disease, invasive and in situ cancers

Bio-pathological parameters and targeted therapies

Outline of ultrasound: physics, equipment, Doppler, documentation

Live ultrasound demonstration: breast and axilla

“Hands-on” ultrasound examination of the breast

“Hands-on” ultrasound examination of the axilla

Day 2: Basic interpretation

Outline of x-ray mammography: physics, equipment, examination techniques, image reading and documentation

Outline of MR mammography: physics, equipment, examination techniques, image reading and documentation

Ultrasonic examination techniques, normal findings, physiological changes

Ultrasound artefacts and quality control

Imaging and benign pathology correlation: masses, architectural distortion, microcalcifications

Imaging and malignant pathology correlation: masses, architectural distortion, microcalcifications

“Hands-on” experience and test cases

Day 3: Advanced interpretation 1

X-ray mammography BI-RADS (Adapted)

Ultrasound BI-RADS (Adapted)

MR mammography BI-RADS (Adapted)

Interventional techniques: cytology, core biopsy, vacuum assisted techniques, US and stereotactical guidance

Live demonstration: interventional techniques

Interactive session: Decision making for biopsies: correlation of clinical, imaging and tissue sampling

“Hands-on” cytology sampling and test cases

“Hands-on” core sampling and test cases

Day 4: Advanced interpretation 2

Interactive session: BI-RADS (Adapted) for x-ray and MR mammography

Interactive session: Applying BI-RADS (Adapted) for breast ultrasound

Indications for ultrasound including medico-legal implications

Preoperative staging and follow-up of neoadjuvant treatment

Three-dimensional ultrasound

The role of colour Doppler and vascularity assessment

Mammography BI-RADS (Adapted): self evaluation

Ultrasound BI-RADS (Adapted): self evaluation

Day 5: Special topics and new horizons

Ultrasound evaluation of lymph nodes and the role of sentinel node biopsy

Localisation techniques and image guided surgery

Post-operative surveillance of treated breast cancer cases

CME credit test

New developments in breast ultrasound: Elastography and other techniques

Emerging diagnostic and treatment techniques

Discussion of CME test results

Final discussion