Basic and advanced EUS Workshop

Kazuo Hara (Japan), Tae Hyun Kim (Korea), Vikram Bhatia (India), David Lao (Taiwan), Charing Chong (Hong kong)

Training Sub-committe ,

Asian EUS Group

Workshop General Objectives

- participants should be able to:
- List the benefits of EUS;
- Explain the technology and principles of EUS;
- Recognize the indications, limitations and complications of EUS Procedures;
- Understand the role of EUS in diagnosis and staging;
- Identify and interpret EUS anatomy images;
- Produce EUS image with the basic EUS equipment and tools;
- Effectively apply diagnostic EUS in clinical practice

BASIC EUS WORKSHOP
Participant pre-requisite

- for endoscopists who have no or little experience with EUS and wish to understand and practice EUS in their clinical practices
  - *(To define endoscopist/endoscopy trainees – with credential by the local professional bodies/training committee)*
  - *Medical degree*
  - *EUS bigginer*

Course Structure

- This workshop comprises of
  - Lectures
    - Indication EUS
    - Patient and equipment preparation
    - Normal EUS anatomy
    - Hands-on Model: anatomy
    - Basic EUS-FNA/B
    - Peripancreatic fluid collection
    - Coeliac plexus neurolysis/block
  - Hands-on session – models
  - Hands-on Session –close observation
  - Live demonstration
  - Case Discussions

Assessment

- The competency level of participants will be assessed before and after the workshop through a combination of knowledge and skill assessments.
- MCQ based on lectures
- Video cases in:
  - Identifying Artefacts
  - Identifying organs
  - Identify common lesions

PART 3 – TOPIC OUTLINE/SCHEDULE

- Day 1
  - Lectures
    - EUS overview
    - Patient preparation
    - EUS anatomy
    - Hands-on Model: anatomy
- Day 2
  - Lecure:Basic EUS-FNA/B
  - Illustrative Case Discussions
  - Hands-on

ADVANCED EUS WORKSHOP

Kazuo Hara (Japan), **Tae Hyun Kim (Korea),** Vikram Bhatia (India), David Lao (Taiwan), Charing Chong (Hong kong)

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Advanced EUS Workshop

- for endoscopists who have some experience with EUS
- and wish to gain or improve their skills in EUS and understand the role of EUS in therapeutic interventions.

Faculty member for Advanced EUS

- Be well recognised by their peers as experienced in performing diagnostic EUS (with both radial and linear echoendoscopes) and FNA
- Have vast experience in performing sufficient volume and wide spectrum of cases for a well-rounded training environment

Facilities

- The workshop should be conducted in either a hospital-based endoscopy unit or an ambulatory surgery/endoscopy center, with modern EUS equipment including image-recording devices, including but not limited to, radial and linear echoendoscopes, catheter-based EUS probes (optional), and EUS needles
- Support team comprising of either endoscopy and cytopathology and staff with knowledge on proper processing of specimens
- anaesthesia / Sedation, and post procedural monitoring facilities,

Pre-requisite of Trainees

- Trainees should be competent in diagnostic and appropriate aspects of upper gastrointestinal endoscopy
- ERCP experience although not essential, is recommended
- Participants should have experience on EUS.

General Objectives

- Recognise the indication EUS-guided FNA/B
- Utilization of EUS-guided FNA/B for tissue sampling with higher yield rate
- Understand advanced Diagnostic Technique such as Elastography & the role of Contrast Agent in EUS
- Understand the basic principles equipment required for therapeutic procedures
- Effective application of EUS in therapeutic interventions.

Assessment

- Competency of participants will be assessed before and after the workshop through a combination of knowledge and skill assessments.
- Participants' Knowledge will be assessed with
  - MCQ based on lectures delivered
  - Video cases in:
    - Identifying Artefacts
    - Identifying organs
    - Identifying common lesions
  - Skill Assessment on Cytology include
    - Slides preparation Assessment
    - Images for assessment

PART 3 – TOPIC OUTLINE/SCHEDULE

- DAY 1 or 2
- EUS-FNA/B
- EUS Pathology
- EUS in altered anatomy
- Documentations
- Advanced Diagnostic techniques
- Therapeutic techniques
- Management of complications
- Illustrative Case Discussions
- Hands-on

Lecture topics

- **EUS-FNA/B**
  - Optimizing the diagnostic yield of EUS-guided FNA/B
  - Tips and tricks for high FNA Tissue sampling
- **EUS Pathology**
  - smear/specimen preparation
  - Basic findings on cytology
    - How to recognize normal cells in EUS aspirates
  - smear/specimen preparation
  - What tests to request
  - Ancilliary Tests in the aspirate (Optional, country specific)

Lecture Topics

- **EUS in altered anatomy**
- **Documentations**
  - How to write a proper EUS report (with or without FNA/B)
  - Minimal Descriptive for each lesion
- **Advanced Diagnostic techniques**
  - Tissue harmonic imaging
  - Contrast-EUS
  - Elastography
  - IDUS

Lecture Topics

- **Therapeutic techniques**
  - Pancreatic Fluid Collection
  - CPN
- **Management of complications**

Lecture Topics; Illustrative Case Discussions

- Evaluation of Lesions
- EUS-TNM staging of cancers
- solid pancreatic neoplasms.
- pancreatic cystic neoplasms.
- Pancreatitis
  - ✓Complication
  - ✓Autoimmune
  - ✓Chronic
- Adrenal lesions
- Pancreatic Divisum
- AUPBD
- Cancer recurrence
- Lymphoma evaluation

Hands-on Practicum

- Model/Simulator Hands-on
- Gut Wall Model
- EUS FNA Model
- Tissue Harmonic Echo (THE)
- Ikuma
- 3-D Printing Model
- Animal Model

- **Live patient demonstration just by faculty**

Thankyou so much for your attension