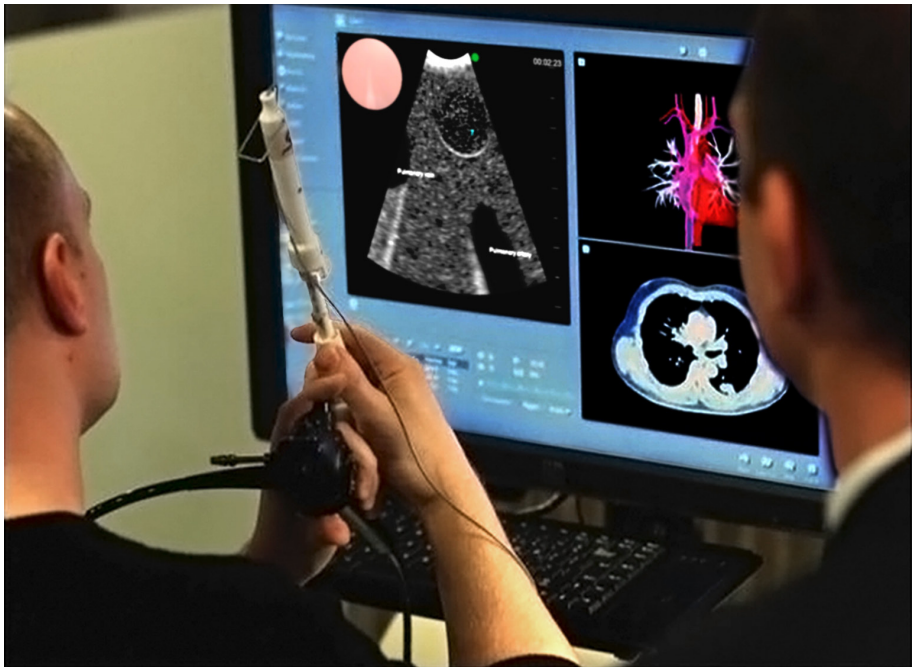
EBUS - Simulation Based Education in Endobronchial Ultrasound

Simulationscenter Rigshospitalet



Safe and proper performance of clinical procedures requires both theoretical knowledge and good technical skills. The latter is traditionally learned as apprenticeship where the trainee practices on patients under supervision. Simulation based training is, however, a good way to ensure that basic skills are acquired before the trainee meets the patient.

The simulation based training programme in endobronchial ultrasound with real-time guided transbronchial needle aspiration (EBUS-TBNA) at the Centre for Clinical Education consists of active training on modern virtual reality simulators and demonstration of a real EBUS endoscope and needles. The educational offer is completed with a certification that can form the basis for further training in the clinical setting. See more about this course at *www.cekusim.dk*.

1 Theoretical Preparation

Each participant receives a practical handbook about EBUS-TBNA and esophageal ultrasound with fine needle aspiration (EUS-FNA). The book represents the theoretical basis for the simulation based training, but can also be used by physicians who are engaged in clinical training. It contains a brief review of the most basic theoretical knowledge that is required to learn the procedure. It is recommended to supplement this with reading scientific journals, textbooks and other resources (see reference list in the book).

2 Introduction

The introduction takes place in the Simulation Centre where the trainee is introduced to the simulators, the equipment, and the training facilities and is conducted by an expert in endosonography. The trainee carries out various procedures under supervision including demonstration of the anatomy and the anatomical landmarks based both on EBUS and computed tomography (CT). Maneuvering of the endoscope and the TBNA technique is practiced in a systematic, step-by-step way using scenarios with enlarged lymph nodes (one hour).

3 Self-training

The trainee practices on the equipment independently, to learn the anatomy and identify and biopsy lymph nodes and other structures. There is constantly a specially trained nurse or medical student with knowledge of the simulator and the procedure present. (Duration dependent on individual skills and experience – expect approximately 4-8 hours.)

4 Testing

A practical simulation-based test will be carried out. The principles of the test and its validity has been explored and published in international journals. If the test is passed a certificate is handed and the trainee can proceed directly to supervised training in the clinical setting (one hour).

Target Group: Pulmonologists, thoracic surgeons, and other specialists going to learn EBUS-TBNA.

Instructor: Paul Frost Clementsen, Consultant, MD, PhD, DMSc.

Location: Simulation Centre Rigshospitalet, CAMES Rigshospitalet, Teilumbygningen 5404, Blegdamsvej 9, 2100 Copenhagen, Denmark.

Price: The course fee is 1,100 €. Physicians from the eastern part of Denmark can participate free of charge, as the course fee is paid by The Capital Region of Denmark.

Registration

To register for the course send an email to *kontakt@cekusim*. Please include your name, personal email address, mobile number, hospital, department and position. Additionally, trainees (non-specialists) need approval from their department before they can register and *must* include the name of the consultant responsible for education in your registration email.

CAMES Copenhagen Academy for Medical Education and Simulation

REGION Region Hovedstaden