

Example schedule for

One Day Teaching Program in Ultrasound Guided Fine Needle Puncture for Diagnosis and Therapy in Patients with HCC

Participants are medical doctors with extensive experience in ultrasonography, preferably working with referral centers.

Topics

- Introduction: Definition of today's learning aims
- Rationale of US guided FNP in patients with HCC:
 - Proving HCC by cytology/histology
 - HCC ablation by alcohol injection
- US guided FNP:
 - Physics
 - Machines
 - Techniques
- 1st hands-on training in US guided FNP in training dummies
- Discussing dummy experiences
- Systematic approach: How to handle...
 - ...the probe
 - ...the needle
 - ...the patient
 - ...the specimen
 - ...the injection
- 2nd hands-on training in US guided FNP on tissue models
- Discussing tissue model experience
- Preconditions for US guided FNP:
 - The doctor performing the procedure
 - The patient tolerating the procedure
 - The target in question
 - The pathologist, the bacteriologist, the biochemist etc, confronted with material of FNP

- Hazards in US guided FNP:
 - In general
 - In HCC especially
- 3rd hands-on training in technique:
 - aiming and targeting
 - aspiration
 - smear preparation
 - alcohol injection in dummies
- How to inform...
 - ...the patient and his/her relatives
 - ...the surgeon may be needed
 - ...the personnel for postinterventional care
- Demonstration of aspiration techniques, and injections techniques with alcohol in HCC
- How to monitor results in therapeutic US guided FNP in HCC
 - Alpha-1-fetoproteine
 - US control examinations
 - CEUS (contrast enhanced ultrasonography)
- Test of the participants
- Certificate and final discussion