

SPECIFIC USE OF ULTRASOUND IN ANAESTHESIA FOR ANAESTHETISTS

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BACKGROUND

From the last 10 years, ultrasound guidance has been highlighted as the most predictable and daily used technical tool for anaesthetists and intensivists. The availability of small, portable, point of care machines has led to the introduction and increasingly widespread use of ultrasound in clinical practice.

Ultrasound guidance is now deeply embedded within anaesthetic practice.

Daily practice use includes:

- Central and peripheral venous line access
- Regional anesthesia
- Thoracic scanning for diagnosis and treatment of pleural effusions and pneumothoraces
- Abdominal scanning (Focused Assessment with Sonography in Trauma - FAST) looking for intra-abdominal fluid
- Transthoracic echocardiography in intensive care unit patients as well as transoesophageal echocardiography

OUR TEAM

Our anaesthetists are fully skilled about all techniques of ultrasound guided blocks. They are teachers in fellowships programs, international key opinion leaders and use ultrasound guidance in daily practice for regional anesthesia techniques in orthopedics, pediatrics and urology.

6,000 single shot blocks and 2,000 continuous nerve blocks are performed every year.

On the other hand, **our team of anaesthetists-intensivists** is fully skilled in the practice of FAST, pleuro-pulmonary echography and echocardiography. In daily practice, all the trauma patients arriving in the trauma unit received a FAST scanning and the majority of patients admitted in the intensive care unit benefited from an echocardiography, a transcranial doppler and a pleuro-pulmonary echography if needed.

800 intensive care patients were admitted every year.

We developed training programs, university diplomas and workshops in order to teach the overall knowledge and skills required for ultrasound guidance in the diagnosis and treatment of patients in anaesthesia, and intensive care.

OUR PROGRAMS

Our Training programs consist of both theoretical and practical aspects, being modular in nature, allowing trainees to reach different levels of competency, depending from the practical skills needed, and most importantly with a multidisciplinary training.

1- ***The trainees have a very large choice*** in the scope of the of theoretical and practical training courses in our operating theatres

- Regional anaesthesia peripheral nerve blocks and catheters
- Regional anaesthesia lumbar plexus and parasacral blocks
- Preprocedural ultrasound imaging of the spine
- Regional anaesthesia in pediatrics
- Central venous and peripheral vascular accesses in anaesthesia

2- ***Theoretical aspects*** include :

- physics of ultrasound,
- equipment and probes,
- Knobology,
- image recording and reporting,
- artefacts and the relevance of other imaging,
- Orientation,
- Imaging,
- basics for each proposed procedure

3- ***Practical training*** include :

- training with phantoms and models
- UGRA in operating theatres
- vascular access
- sonography of the airway
- ultrasound gastric volume assessment
- ultrasound bladder volume assessment

HOW IT WORKS

The trainees are only one or two with ours practitioners during 2 to 3 days to provide a personalized training.

Throughout the day trainees will go together with anaesthesia and/or intensive care specialists.

Explanations concerning the technique and the different procedures are given.

Snacks are taken on site.

A training certificate is awarded at the end of the course.

For any further information concerning your registration, please contact us at the following email address : o-choquet@chu-montpellier.fr)

OUR ANAESTHESIA AND INTENSIVE CARE TEAM DEVOTED TO THE PROGRAM

Professor X. Capdevila
Head of Department

Dr O Choquet

Dr D Morau

Dr P Biboulet

Dr N Bernard

Dr M Kassim

THE PROGRAM

UGRA

Level 1 practice

Superficial and intermediate cervical plexus block

Interscalene brachial plexus block

Suprascapular block

Axillary plexus block

Blockade of the terminal peripheral nerves arm and forearm

Rectus sheath block

Ilio-inguinal / iliohypogastric block

Transversus Abdominis Plane block (TAP)

Femoral nerve block

Obturator nerve block

Saphenous nerve block

Lateral cutaneous nerve of thigh block

Sciatic sub-gluteal nerve block

Popliteal sciatic nerve block

Epidural – assessment of spinal level, epidural depth and direction

Catheter techniques

Level 2 practice

Supraclavicular block
Infraclavicular block
Paravertebral block / intercostal nerve block
Lumbar plexus block
Sciatic parasacral nerve block
Real-time ultrasound-guided spinal anaesthesia

VASCULAR PROCEDURES-

Level 1 practice

Cannulation of internal jugular vein
Cannulation of femoral vessels: vein and artery
Cannulation of peripheral veins and arteries

Level 2 practice

Cannulation of axillary and subclavian vein

SONOGRAPHY OF THE AIRWAY

ULTRASOUND GASTRIC VOLUME ASSESSMENT

ULTRASOUND BLADDER VOLUME ASSESSMENT

PRACTICAL INFORMATION

We recommend accommodation in Montpellier during your stay.

The Lapeyronie hospital is just 20 minutes by Tram from “Gare Saint Roch” railway station in Montpellier and by taxi from Montpellier Airport.

Hôtel reservation in Montpellier
Direct access by TRAM from
Mercure hotel Montpellier Centre
218 rue bastion Ventadour
34000 MONTPELLIER

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