IV EDITION OF THE THEORETICAL AND PRACTICAL WORKSHOP FOR UPDATE IN ULTRASOUND AND MULTIDISCIPLINARY APPROACH FOR VASCULAR ACCESS

April 8-9, 2014
Sabadell, Barcelona
Introduction and objectives

The progressive incorporation of ultrasound for early diagnosis of vascular access pathology requires a multidisciplinary approach (nephrologists, vascular surgeons, radiologists, & nurses) to optimize resources.

The course is aimed at nephrologists, vascular surgeons, radiologists and specialists-in-training who have experience in ultrasound for vascular access or who have completed the previous course on ultrasound for vascular access.

It will help professionals bring their knowledge up to date and improve their skills.

We also offer a symposium after the workshop, the 1st Parc Taulí International Vascular Access Symposium. The Symposium has three main objectives: to review the current state of the evidence in main issues related to vascular access, to highlight the trending topics by international experts, and to give professionals of different areas of interest the opportunity to present their experiences with abstract submissions.

Methodology

1. Review of the theory of the physical principles of ultrasound applied to different hemodynamic models of vascular access.

2. Theoretical and practical sessions on ultrasound mapping and diagnosis of vascular access pathology. From the simple to the complex.

3. Representative clinical cases and clinical cases for students to solve in the interactive electronic student self-assessment sessions.

4. HANDS-ON SESSIONS on vascular access ultrasonography
   From classroom simulation to ultrasound examinations done by students. Hands-on practice with patients with normal vascular access and with different types of pathology (stenosis, thrombosis, aneurysms, deep veins, etc.), giving students the opportunity to apply the theoretical knowledge they have acquired. Different models of ultrasound devices will be used.

5. On previously mapped vascular access, surgery transmitted live from the operating room.

6. HANDS-ON SESSIONS on ultrasound-guided venipuncture.
   Study of cervical and femoral human anatomy in patients. From classroom simulation to the examinations done by students. Ultrasound-guided puncture for central line placement on simulation models. Review of techniques and approaches. (human torso, phantom, and biological models such as turkey,). Temporary and tunneled catheter placement, from puncture to the tunnel creation.
**Organization committee**
José Ibeas, MD, PhD. Nephrology
Joaquim Vallespín. MD. Vascular Surgery
José Ramón Fortuño, MD. Interventional Radiology
Hospital de Sabadell, Corporació Sanitària Parc Taulí. Sabadell, Barcelona

**Scientific coordination**
José Ibeas, MD, PhD.
Nephrology
Hospital de Sabadell, Corporació Sanitària Parc Taulí

**With support of:**
- Centro de Educación Médica basada en la Simulació. Parc Taulí Sabadell, Hospital Universitari
- Catalanian Society of Nephrology and its Working Group of Vascular Access
- Spanish Society of Nephrology and its Working Group of Vascular Access
- Catalanian Society of Angiology, Vascular and Endovascular Surgery
- Spanish Society of Angiology and Vascular Surgery
- Vascular Access Society
- European Renal Association – European Dialysis and Transplantation Association
- International Society of Nephrology
**Accreditation**

has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME) to provide the following CME activity for medical specialists. **12 European CME credits** (ECMEC).

**Accommodation**

Gran Hotel Verdi ****
C/ Francesc Macià, 62
08206 – Sabadell

Room /day: 75 eur + VAT (breakfast included)
Reservations and payment for accommodation must be made through the course secretary.

**Course venue**

Auditorium Taulí nou
Corporació Sanitaria Parc Taulí
Parc Taulí, 1
08208 Sabadell
Course secretariat

Ester Freixa
Fundació Parc Taulí
E-mail efreixa@tauli.cat

Registration

For the Registration, send an e-mail efreixa@tauli.cat

Price in Euros (VAT not included)

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Includes:

- Course attendance, documentation pendrive, coffee breaks, lunch and certificate of attendance.

- *Membership in the Vascular Access Society for a year, which includes electronic subscription to the Journal of Vascular Access.*

Limited, to 24 students. Places will be assigned in function of the order of registration.

Cancelation:

Up to 10 days before the course starts, after this date, the registration fee will not be refunded.

Payment

Bank transfer to: Banc de Sabadell
IBAN: ES69-0081-5154-22-0002103622
SWIFT: BSABESBB
PROGRAM
APRIL 8

07:45 – 08:00 h  Registration

08:00 – 09:00 h  Welcome and opening of the course
Joan Martí López, MD
Executive Director Hospital de Sabadell and Albada
Corporació Sanitària Parc Taulí

Introduction and course objectives
José Ibeas López, MD, PhD

Ultrasonography in vascular access: from innovation to a fundamental tool
Manuel García García, MD, PhD

Multidisciplinary management of vascular access: the importance of resource management
Antonio Giménez Gaibar, MD

Clinical application of second-generation screening methods in the diagnosis of the vascular access stenosis
Ramón Roca Tey, MD, PhD

09:00 - 10:30h  From the physical principles of Color Doppler ultrasound to technical optimization. Adaptation to vascular access hemodynamics
Jana Merino Raldúa, MD, PhD

Practical use:
- B Mode
- Color Doppler and Power Doppler
- Spectral Doppler
- Settings: from PRF to SVP
- Flow measurement: how to avoid mistakes
- Clinical Cases
- Clinical problems: how to avoid mistakes, Self-assessment

10:30 – 11:00 h  Ultrasonography, from theory to clinical practice: tips, tricks, and a quiz
Simon van Hooland, MD

11:00 – 11:30 h  Coffee break
11:30 – 13:00 h  Presurgical mapping:
   
   Joaquim Vallespín Aguado, MD
   
   - Ultrasound anatomy of arterial and venous vascular tree: outline of systematic mapping
   - From the morphological study to the hemodynamics
   - Mapping for the first AVF
   - Mapping of patients with complex vascular beds
   - Mapping oriented to VA reconstruction
   - Indications for angiography
   - Clinical cases and Self-assessment

13:00 – 14:30 h  The pathological vascular access
   
   José Ibeas López, MD, PhD
   
   - Outline of the systematic physical examination of the VA
   - Outline of the systematic ultrasound study of the pathological VA
   - Diagnosis of stenosis: from moderate to critical
   - Diagnosis of thrombosis: Approach to the identification of candidates for treatment
   - Value of flow in decision making
   - Mapping strategy for dysfunctional AVF puncture awaiting treatment
   - The AFV with moderate stenosis: conservative management approach by US surveillance
   - Clinical Cases
   - Clinical problems: Self-evaluation

14:30 – 15:30 h  Lunch

Workshop

15:30 – 16:30 h  Simulation Lab applied to arteriovenous fistula

16:30 – 20:00 h  Hands On. Ultrasound VA assessment in patients

   1. Pathological and Nonpathological VA
      - Developing arteriovenous fistula
      - Medium Flow arteriovenous fistula
      - High flow arteriovenous fistula
      - Arteriovenous fistula stenosis
      - Graft
      - Aneurysms
      - Deep Veins
2. Presurgical mapping

- Candidate for first AVF with vessels preserved
- Candidate for first AVF with arteriopathy
- Candidate for AVF with poor venous bed
- Candidate for VA reconstruction

**APRIL 9**

**09:00 – 13:00 h** Workshop discussion based on the case.
Discussion of clinical cases and live surgery in parallel
1. Clinical cases
2. Live surgery

**13:00 – 14:00 h** Lunch

**14:00 – 15:00 h** Ultrasound-guide puncture in central vessels. Review of techniques and approaches

*José Ibeas López, MD, PhD*

- Review to optimize the use of ultrasound in the puncture of central lines
- Vascular anatomy. Anatomic variants
- Ultrasound-guided puncture: different approach techniques:
  - In plane and out of plane
  - Combinations of longitudinal, transverse, and oblique approaches

**15:00 – 16:00 h** Simulation Lab: ultrasound-guided catheter placement

**16:00 – 19:00 h** Workshop ultrasound practice on real patients and simulation models

- Exploration in anatomical human model:
  - Normal anatomy and variants
  - Jugular and femoral areas
  - Complex approach
- Training on simulation models. Ultrasound-guided puncture in:
  - Simulated Human Torso
  - Phantom
- Training in ultrasound-guided short-term and tunneled catheter placement with different approaches:
  - Biological model (turkey)
- Training in ultrasound-guided catheter placement and temporary tunneled catheter with different approaches:
  - Plane
  - Out of plane
  - Combination of transverse and oblique

19:30 h  Workshop closing
Faculty

Loreley Ana Betancourt, MD. Nephrology. Corporació Sanitària Parc Taulí

Mª Isabel Bolos, MD. Nephrology. Corporació Sanitària Parc Taulí

Jordi Branera, MD. Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí

Ivan Constenla, MD. Vascular Surgery. Corporació Sanitària Parc Taulí
Certificate of noninvasive vascular diagnosis (CDVNI) of the Spanish Society of Angiology and Vascular Surgery.

Eva Criado, MD. Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí

José Ramón Fortuño, MD. Interventional Radiology. UDIAT. Corporació Sanitària Parc Taulí

Manuel García, MD, PhD. Chief of Nephrology Department. Corporació Sanitària Parc Taulí


Sol Otero, MD, PhD. Nephrology. Corporació Sanitària Parc Taulí


M.Pau Valenzuela, MD. Nephrology. Corporació Sanitària Parc Taulí


Simon Van Hooland, MD. Departament of Nephrology, AZ St. Lucas. Ghent, Belgium.