

## **Commission For International Certification In Neurosonology**

Dear Colleagues,

The **ESNCH** in collaboration with the "**Neurosonology Research Group**" of the WFN offers the possibility to get the "**International Certificate in Neurosonology**" during the meeting in **Genova**, proving your competence and skill at teaching level in this field.

You may also want to test your knowledge in: Physics and instrumentation, vascular anatomy, diagnostic criteria and clinical application.

This certification process is independent from the tutorial. Nevertheless participation at the tutorial may be helpful. Following The conditions of participation.

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### **CONDITIONS OF PARTICIPATION 2008 GENOVA**

The aim of International Certification is to elevate the level of quality of diagnostic Neurosonology by awarding those who proved to be able to teach this method in theory and practice.

The following should be the standard format of the certification in Neurosonology:

#### **1. Conditions of participation**

The examinee has to be board certified physician and member of the NSRG or ESNCH. Theoretical and practical knowledge and experience is mandatory.

#### **2. General structure**

The process of certification has two components

1. Multiple choice test (MC-test)
2. Practical examination ("hands on")

Full certification needs both components. It is possible to pass only the theoretical part (MC-test), but for the practical test the MC-test is a precondition either beforehand or in parallel at the same meeting

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### **3. Multiple Choice (MC) Test**

#### **3.1. General considerations and responsibilities**

The international commission of certification has organized the MC test. The certification process requires the following:

#### **3.2. Questions**

- 3.2.1            40 questions should be given to the participants. They relate to neurovascular examinations including the following topics:
- Anatomy
  - Pathophysiology and hemodynamics
  - Physics and instrumentation
  - Diagnostic criteria and interpretation of tests
- 3.2.2            Choice of 4 answers, only one is correct.
- 3.2.3            The threshold to pass the exam is 75 % correct answers (30 of 40 questions).

### **4. Practical Examination**

The participant should be able to use extracranial and transcranial colour duplex sonography in addition to Doppler sonography.

The examinee will be confronted with one of two possible tasks depending on the decision of the local organizer of the test:

#### **4.1 . Unilateral examination of a subject without major pathology, without transmission problems of the skull:**

They must image and document the following arteries of one side, including angle correction for velocity measurements (where applicable):

- Supratrochlear A. (branch of the ophthalmic artery) (CW)
- ICA at the origin and 2-3 cm downstream (Colour Duplex)
- VA (V3 or V0/1) (Colour Duplex)
- MCA (PW or Colour Duplex)

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## **4.2 Examination of a patient with well defined pathology**

The test should focus on to the pathology

## **4.3 Details of the practical examination**

4.3.1 Allotted time for the practical test not more than 30 min.

Each applicant will perform the exam under supervision of two members of the international certification committee (or nominated examiners of equal experience) . not more than 1 examiner should be from the same country as the examinee.

4.3.2 The applicant can familiarize with the devices beforehand and will be given technical support during the exam.

4.3.3 In case of stenosis the participant has to classify the finding into degree of disease (verbal description): low, moderate, severe, near occlusive, total occlusion.

4.3.4 The participant has to present the criteria he is applying for quantification of the neurosonologic test including ECST or NASCET criteria referring to the angiogram.

4.3.5.1. Criterion to pass should be that the participant:

(In case of examining a patient)

- Describes the finding without misclassifying of more then one degree (as described above) of stenosis
- Classifies correctly in occlusion versus stenosis.

(In case of examining a subject:)

- Is able to differentiate and document correctly the above mentioned arteries in the allotted time