

Preliminary Online Course Program

Online Diploma in Basic Cranial Approaches

Course description

In recent years neurosurgical training has become more difficult, both due to regulations in Europe and the USA that limit the working hours of residents in neurosurgical departments, and to the very high cost of cadaver labs around the world. Therefore, worldwide, neurosurgeons are exposed to a limited number of surgical procedures, both during the training period and during the activity in the wards.

A single surgical approach, even as simple as a pterional approach, is developed differently in different centers with the option to compare them. There is a need to teach a standard surgical approach and to compare the different techniques in the different centers. Many studies show that errors related to surgical procedures can be prevented with a step-by-step checklist of the procedure, therefore a step by step teaching approach is useful.

The Global Neuro Foundation, as one of the leading groups worldwide to offer continuous medical education for neurosurgeons and neurosurgical residents, recognizes this issue and is offering a solution through Online teaching. Taking advantage of its global network of expert faculties in this field, Global Neuro has developed an online training certificate program.

The online certification program will allow participants to learn surgical approaches from masters of Neurosurgery. This will give many neurosurgeons and neurosurgical residents a unique opportunity to acquire educational experience, in order to improve fundamental knowledge to develop basic and advanced decision-making capabilities.

Target participants

This Global Neuro Program has been developed for Neurosurgeons and Neurosurgery residents.

Goals of the Course

At the end of this course, participants should be able to recognize the surgical anatomy related to each approach, recognize the surgical theater setting, to be able to position the patients for different surgical procedures and recognize the basic surgical information to perform a cranial approach such as the preparation of the patient, preparation of the skin and anaesthesiologist setting.

Participants will be better able to perform five different cranial approaches and their basic variants, in particular ventricular shunt, pterional approach, retrosigmoid approach, sub-temporal approach, and decompressing craniectomy.

To recognize the technical difficulties and the possible mistakes related to any single approach and recognize the importance to perform a step-by-step approach to avoid mistakes.

Learning objectives

By completing this course, participants will be better able to:

- Identify the surgical anatomy of the cranial approaches.
- Determine the surgical instruments and the surgical theater setting for each step of the cranial approaches.
- Describe basic surgical information to perform a cranial approach (preparation of the patient, disinfection, anesthesiology setting, skin preparation and incision, as well as skin, muscles, and bone flap preservation during the procedure).
- Determine which cranial surgical procedures and their basic variants, in particular; Ventricular Shunt, Pterional Approach, Subtemporal Approach, Retrosigmoid Approach, and Decompressive Craniectomy best improves the patient's outcomes.
- Assess the technical difficulties and the possible mistakes related to any single approach.
- Recognize the importance of performing the approach step by step to avoid mistakes.
- Identify how to modify an approach and what kind of advantage can be obtained by this change.
- Develop decision-making skills and to formulate which approaches can be performed for a specific case.

Faculty

Course chairs

Dr. Andreas Demetriades	University of Edinburgh	Edinburgh, UK
Dr. Marco Fontanella	University of Brescia ASST	Brescia, Italy

International Faculty

Talat Aziz	University of Glasgow	Glasgow, Scotland
Francesco Belotti	ASST Spedali Civili di Brescia	Brescia, Italy
Florian Bernard	University of Angers	Angers, France
Marco Cenzato	Spedali Civile di Brescia	Brescia, Italy
Hans Clusmann	Uniklinik RWTH Aachen	Aachen, Germany
Corrado Iaccarino	University of Modena and Reggio Emilia	Modena, Italy
Christos Koutsarnakis	University of Athens and Hellenic Center of Neurosurgical Research	Athens, Greece
Jean-Michel Lemée	University hospital of Angers	Angers, France
Andrés Rubiano	University El Bosque	Bogotá, Colombia
Franco Servadei	Humanitas University	Milano, Italy
Karl Schaller	Geneva University Medical Center Switzerland and Faculty of Medicine	Geneve,
Mohammad Zahir Shah	Rifa Medical Complex	Kabul, Afghanistan

Agenda

SUBJECT	SPEAKER
Module 1: Basic technical and surgical information to perform a cranial approach	
M1.C1 Surgical theater setting for cranial procedures	M Fontanella
M1.C2 Anesthesiology setting and preparation of the patient	T Aziz
M1.C3 Basic Surgical Tools for Neurosurgery	A Demetriades and C Koutsarnakis, Drosos
M1.C4 The use of drills	M Zahir Resuli
M1.C5 The use of microscopes	I Tsonis
M1 Exam	
Module 2: External Ventricular Drainage (EVD) and Ventricular-Peritoneal Shunt (VPS)	
M2.C1 Anatomy of ventricular system and peritoneal wall	A Rubiano
M2.C2 Necessary equipment, main entry points and patient positioning (EVD)	A Rubiano
M2.C3 Surgical video demonstrating step by step the VPS procedure	A Rubiano
M2.C4 Technical problems and solutions about the approach	A Rubiano
M2. Exam	
Module 3: Pterional approach	
M3.C1 Anatomy of the pterional region & patient positioning	M Cenzato (voice of Kristy Latour)
M3.C2 Surgical video step by step in the wetlab	M Cenzato
M3.C3 Technical problems and solutions about the approach	M Fontanella (voice of Kristy Latour)
M3. Exam	
Module 4: Subtemporal approach	
M4.C1 Anatomy of the temporal and temporo-basal region	M Fontanella (voice of Kristy Latour)
M4.C2 Patient positioning	M Fontanella (voice of Kristy Latour)
M4.C3 Surgical video demonstrating step by step the procedure in the wetlab	M Fontanella (voice of F Belotti)
M4.C4 Technical problems and solutions about the approach	M Fontanella (voice of Kristy Latour)
M4. Exam	
Module 5: Retrosigmoid approach	
M5.C1 Anatomy of the latero-occipital region and CP angle	F Bernard, K Schaller
M5.C2 Patient positioning in different ways	F Bernard, K Schaller
M5.C3 Surgical video demonstrating step by step the procedure in the wetlab	F Bernard, K Schaller
M5.C4 Technical problems and solutions about the approach	F Bernard, K Schaller
M5. Exam	

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Module 6: Decompressive Craniectomy	
M6.C1 Surgical Management of Brain Edema & Technical problems and solutions	F Servadei
M6.C2 Technical aspects of performing a decompressive craniectomy	H Clusmann
M6.C3 Wetlab: decompressive craniectomy video	Global Neuro video
M6.C4 Bone flap repositioning and different materials for cranioplasty	C Iaccarino
M6.C5 Video of a cranioplasty with a custom implant	owner of the video F Servadei, Text F Belotti (Voice of Daniel Garraty)
M6. Exam	
Final Exam	

Evaluation

Participant's understanding of each lecture's learning objectives will be evaluated with online multiple-choice tests at the end of each module and an online final exam at the end of the course, evaluating the content of the whole program. There is an overall minimum required score of 70%. The final grade will be a sum of the module's exams (50%) and the final exam (50%). The minimum required score for certification will be 7.0 / 10 (70%).

Registration

- Registration fee: USD 250.00
Discounts are available
- To register for the course click the link below:
<https://globalneuro.org/EN/education/event-detail/95.html>