NEUROSURGERY FUNDAMENTAL SKILLS WORKSHOP

Trauma, Hydrocephalus and Biopsy - Fundamental course

May 2-3-4, 2019
Ghent, Belgium

Course Directors

Dr. Pablo Gonzalez, Department of Neurosurgery, Hospital General Universitario of Alicante, Spain
Prof. Stefan Wolfsberger, Department of Neurosurgery, Medical University of Vienna, Austria

Faculty

TBD
Dr. Kemal Ahmet, United Kingdom

Accreditation

An application for accreditation will be submitted with UEMS/EACCME and RIZIV

Modules

Modules will be based on case scenarios as follows:
Module 1: Trauma: 1. Epidural hematoma, 2. diffuse cerebral swelling, 3. chronic subdural hematoma
Module 2: Hydrocephalus: 1. Acute hydrocephalus, 2. Chronic hydrocephalus, 3. Obstructive hydrocephalus due to a third ventricle lesion
Module 3: Biopsy: 1. Cortical tumors, 2. Deep supratentorial lesions, 3. Brainstem & posterior fossa lesions

Thursday, May 2, 2019

Venue: Orsi Academy, Ghent, Belgium

8:00 Welcome & Objectives of the training - Prof. Wolfsberger & Dr. Gonzalez
8:15 Course introduction, goals and expectations - Prof. Wolfsberger & Dr. Gonzalez
8:45 Ask the expert Q&A session: anatomy, disease state, indications, OR workflow review - Prof. Wolfsberger & Dr. Gonzalez
Module 1: Trauma procedures: from planning to cranial closure – Dr. Gonzalez & Dr. Ahmet
9:45 Introduction to trauma procedures: assessment and procedure planning followed by access and patient monitoring, based on 3 different case scenarios – Dr. Gonzalez
10:15 Coffee break
10:30 Hands-on assessing and planning the procedure: how much planning and assessment is there in a trauma-case? – Dr. Gonzalez
11:00 Hands-on cranial access: choosing the right tool in Trauma cases, MR drills for cranial procedures: motors, basic attachments and dissecting tools – Dr. Ahmet

12:30 Lunch

13:30 Hands-on Cranial access, free hand burr holes, burr holes with cranial perforator, craniotomy, craniectomy, subdural hematoma - Dr. Gonzalez, Prof. Wolfsberger, Dr. Ahmet
15:30 Coffee break
15:45 Eggshell dissection & practice (competition) - Dr. Gonzalez, Prof. Wolfsberger, Dr. Ahmet
16:15 Hands-on cranial access: subdural evacuating systems - Dr. Gonzalez, Prof. Wolfsberger, Dr. Ahmet
17:45 Q&A and Recap day 1
18:15 End of program day 1

20:00 Group dinner

Friday, May 3, 2019

Venue: Orsi Academy, Ghent, Belgium

8:15 Review and Quiz day 1 - Dr. Gonzalez, Prof. Wolfsberger
8:30 Troubleshooting and pitfalls, case-based presentations – Dr. Gonzalez
9:15 Cranial closure and patient monitoring lecture, closing techniques and practice: osteosynthesis, suturing techniques in ICP monitoring – Dr. Gonzalez

9:45 Review of module 1: Trauma: from planning to cranial closure - Dr. Gonzalez, Prof. Wolfsberger, Dr. Ahmet
10:30 Coffee break

Module 2: Hydrocephalus: from planning to implant and cranial closure

10:45 Introduction to Hydrocephalus: plan, access, navigate and close, what you need to know about hydrodynamic principles and ICP, choosing the right procedure/shunt for the right patient, based on 3 different scenarios – Dr. Gonzalez
11:45 Planning the procedure: the basics of navigation in a Hydrocephalus/shunt procedure: Exams import, Surgical navigation system planning, patient registration, introduce surgical navigation system merge, models, trajectories – Prof. Wolfsberger

12:15 Lunch

13:15 Hands-on cranial access and navigated shunt placement: choosing the right tool for the procedure, valves, catheters, reservoirs, ports, navigated shunt procedure Stealth EM - TBD
14:30 Troubleshooting & pitfalls, knowing what to do when the shunts do not work – TBD
15:00 Coffee break
15:15 Infection control, procedure related infections and device related infections, intracranial infections epidural & subdural empyema, meningitis and brain abscesses - Dr. Gonzalez, Prof. Wolfsberger
16:45 Review of module 2: Hydrocephalus: from planning to cranial closure - Dr. Gonzalez, Prof. Wolfsberger

17:15 End of program day 2

Saturday, May 4, 2019

Venue: Orsi Academy, Ghent, Belgium

8:00 Review and Quiz day 2

Module 3: Biopsy: from planning to cranial closure – Prof. Wolfsberger

8:15 Introduction to cranial biopsy procedures: plan, access, navigate and close, based on 3 different case scenarios - Prof. Wolfsberger
9:00 Hands-on navigated biopsy procedure: basics of navigation, navigated procedures and multimodality imaging, exams import, Surgical navigation system planning, patient registration, introduce surgical navigation system merge, models, trajectories – Prof. Wolfsberger
10:30 Coffee break
10:45 Hands-on cranial access and biopsy extraction ctd.: choosing instruments for the biopsy procedure, navigated biopsy, biopsy trajectory kits and orientation aiming device – Prof. Wolfsberger
11:45 Navigation troubleshooting in Biopsy procedures, how to correct flipped images, Line of sight issues, intermittent tracking, metal interference – Prof. Wolfsberger

12:45 Lunch

13:45 Review of module 3: Biopsy: from planning to cranial closure - Prof. Wolfsberger, Dr. Gonzalez
14:15 Course conclusion: bringing it all together: cranial procedures from planning to closure
15:30 Closing Q&A and Quiz related to all modules

16:00 End of program