

## EAN Spring School

May 9-11, 2019

### Exit Exam, May 11, 2019

(only 1 correct answer per question)

Name: \_\_\_\_\_

#### Karl Matz

Wake-up strokes can be assigned to a time window of about 4.5 hours by means of the following MRI sequences:

- Perfusion, Diffusion
- Flair, Diffusion
- Diffusion DWI, ADC
- Flair, Perfusion

What is **NOT** a risk factor for seizure recurrence after a first post stroke seizure:

- Hemorrhagic transformation
- Hyperperfusion syndrome
- Subcortical lacunar infarct
- Multiple embolic infarctions

Which of the following answers is incorrect:

ASPECTS scores limitations are:

- Only applicable to CT scans
- Unreliable in presence of white matter lesions
- Presence of skull artifacts
- Validated only for the MCA territory

#### Nathan Bornstein

84-year-old hypertensive man had mild RT. Middle Cerebral Artery (MCA) sub-cortical stroke. Duplex examination revealed 85%-90% stenosis in the RT internal carotid artery (ICA). The best management for this patient is:

- Aspirin 325mg once a day.
- Clopidogrel (Plavix) 75mg once a day.
- Aspirin 75mg + Plavix 75mg once a day.
- Carotid Endarterectomy of the RT ICA.
- Rt. carotid Stenting.
- None of the above.

following listed medications are suitable for secondary ischemic stroke prevention except for:

- Aspirin dose between 50-325 mg / day.
- Clopidogrel 75 mg / day.
- Dipyridamole 400+ aspirin (Aggrenox) BID
- Ticagrelol 90 mg BID

Carotid Endarterectomy/stenting should be performed with major complication rate (death and stroke) of less than:

- 5.7%
- 2.8%
- 7.3%
- 6.5%
- 9.5%

### Milija Mijajlovic

For how long is antithrombotic treatment recommended in patients with cervical artery dissection?

- 21 days
- 3 months
- 6-12 months
- life long

„Macaroni sign“ is a typical ultrasound feature for:

- vasculitis
- carotid dissection
- atherosclerotic carotid occlusion
- subclavian steal phenomenon

„String of pearls“ is a typical ultrasound/angiography finding for:

- Moyamoya disease
- Cervical artery dissection
- Takayasu vasculitis
- Fibromuscular dysplasia

### Irena Rektorová

Dysexecutive disorder does NOT include:

- stereotyped, perseverative disorder
- action initiation and sustained alertness
- disinhibition
- frontal ataxia

**Indicate the incorrect answer. The fronto-parietal control network (FPCN):**

- plays a central role in decision-making and cognitive task performance control.
- engages the anterior prefrontal cortex, insula, anterior cingulate, and anterior inferior parietal lobule.
- is involved in mind wandering, and is associated specially with internally directed cognition.
- is thought to play a regulatory role in switching between the default mode network and dorsal attentional network.

**Indicate which test does not evaluate executive functions:**

- Wisconsin Card Sorting Test
- Mini-Mental State Examination
- Tower of London task
- Trail Making Test

**Noa Bregman**

**Which of the following does not characterize apraxia of speech?**

- Impairment of motor planning
- Various off-target productions of the word
- More apparent in production of polysyllabic words
- Patients are usually unaware of their errors

**Patients with impaired lexical semantics/ access to lexical semantics would often:**

- Try to boil a pizza
- Make phonemic paraphasias
- Name a picture of a horse, a "cow"
- Write names even when they cannot retrieve the pronunciation of the names

**A patient with mostly normal naming, mildly impaired fluency, frequent paraphasic errors, intact comprehension and impaired repetition has:**

- Transcortical sensory aphasia
- Wernicke's aphasia
- Conduction aphasia
- Broca's aphasia

**Masud Husain**

**Which one of the following is correct?**

- Working memory refers to a type of episodic memory
- Anterograde memory is often graded following hippocampal lesions
- Short-term memory refers to memory extending over the last day
- Semantic memory is memory for facts and general knowledge

**Transient epileptic amnesia**

- Can be associated with olfactory hallucinations
- Is usually a single, one-off event
- Typically lasts for 12 hrs or more
- Often occurs late in the evening as the patient is going to sleep

## Confabulation

- Is a type of short-term memory impairment
- Has been associated with orbitofrontal damage
- Is typically not observed in Korsakoff's syndrome
- Is usually due to malingering

## Dafin Muresanu

Which of the following sentences is wrong about postlesional brain regulation in ischemia:

- There is an increase in extrasynaptic NMDAR activation
- Increased synaptic NMDAR activity preferentially activates a number of pro-death pathways.
- The mitochondrial membrane potential is disrupted by extrasynaptic NMDAR activity
- It consists in both neuroprotection (the immediate response) and neurorecovery (the late response)

Which of the following sentences is wrong about the intrinsic restorative processes in the CNS activated by stroke:

- There is a vascular remodeling-angiogenesis/arteriogenesis process which drives neurogenesis, axonal and dendritic plasticity and remyelination.
- Neurogenesis in the lateral ventricle appears to play a prime role in neurological recovery post stroke.
- Axonal and dendritic remodeling occurs in both hemispheres and also in the spinal cord.
- The loss of oligodendrocytes in stroke contributes to brain atrophy and ventricular shrinkage.
- Post stroke there is a reduction of select inhibitory glycoproteins, reduction which generate a more permissive environment and improve conditions for plasticity.

The Predict Recovery Potential (PREP) algorithm represents:

- Upper and lower limb outcomes by combining biomarkers in a sequential way
- Lower limb outcomes by combining biomarkers in a sequential way
- Upper-limb functional outcomes by combining biomarkers in a sequential way

## Volker Hömberg

The critical time window for spontaneous recovery after stroke is

- 10 days
- 1 month
- 3 months
- 6 months
- 1 year

**Proportional recovery refers to change in**

- impairment
- function
- handicap
- activities
- participation

**Which of the following rehab strategies is related to restoration rather than compensation?**

- waking up alternative brain regions
- teaching bypass strategies
- using aiding devices
- adapting environment
- teaching care givers

## **Karin Diserens**

**The evaluation of disorders of consciousness (DOC)**

*Please indicate the incorrect answer*

- Concerns the patients minimum 24 hours after stop of sedation
- Is still source of misdiagnosis
- RMI is sufficient to classify the different phases of awakening
- Needs a multi-sensorial evaluation

**The origin of the pitfalls of DOC evaluation**

*Please indicate all correct answers.*

- Bilateral ptosis is only due to the bilateral lesion of the III. cranial nerve
- Bilateral thalamic lesion
- Subcortical lesion
- Bi-occipital lesion

**The neuro-sensorial approach....**

*Please indicate all correct answers.*

- ... is only possible with a patient without communication disorders
- ... enhances the afferent pathways
- ... implicates functional tasks
- ... enhances the recovery of patients with cognitive-motor dissociation and DOC

Points: \_\_\_ out of 27 questions

Evaluation key: 70% correct = 18 correct