

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
- ☒ Ticagrelor 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