

Neuroscience mini-OSCE

First month



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Neuroscience mini-osce:

Note: answers given bellow are suggested answers which may not be precise

Q1: patient suffering of two days duration both lower limbs weakness and urinary incontinence, there is lost of pinprick sensation and brisk reflexes more prominent on right side, two years ago she had an episode of painful eye movement and vision problems on left eye which resolved on its own after 4 weeks:

1. What is the most probable diagnosis:
Multiple sclerosis
2. Where is the lesion localized that explains her current symptoms:
Spinal cord bilaterally but more prominent on right side (right lateral corticospinal tract not sure)
3. What explains her previous episode:
Involvement of optic nerve (optic neuritis)
4. Mention 4 investigations:
 - Brain and spinal cord MRI
 - CSF electrophoresis to investigate presence of oligoclonal bands
 - Chest x-ray to exclude sarcoidosis
 - ESR and CRP to exclude SLE
 - (other investigations mentioned in slides)
5. What would you give to treat her acute symptoms:
High dose steroids
IV/Oral methylprednisolone 1g/d for 3-5 days

Q2: 78-years old patient with diabetes and hypertension presented to ER with 10 hours duration of acute symptoms of left sided weakness and loss of sensations, his CT image shown bellow:



1. Describe the radiological findings:
Ischemic stroke involving right MCA territory compressing the ventricle and causing midline shift
2. Mention 3 findings on physical examination:
 - left side hyperreflexia more prominent on upperlimbs
 - left side hemineglect
 - left Babinski sign
3. Mention 3 imaging types that the patient must undergo:
 - Brain CT
 - Brain MRI
 - Head and neck MRA
4. Mention 3 management steps:
 - stabilize patient by giving glucose with thiamine , hydration and checking O2 saturation
 - give 300mg Aspirin
 - manage risk factors like diabetes and HTN but Blood pressure should not be lowered in the acute phase unless there are complications such as Hypertensive Encephalopathy.
5. patient was referred back to ER after an episode of body stiffening followed by jerky movements which resolved on its own after 2 minutes mention two medications patient should take with proper doses: (not sure!!)
 - phenytoin (15-20 mg/kg)
 - sodium valproate (20-30 mg/kg)