

021 Neurology Slides

Correction File

By

Ibrahim Sudqi



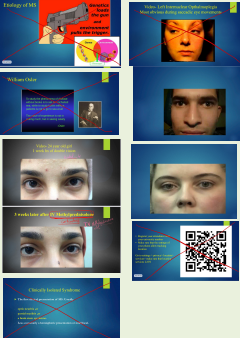
Under each Rotation are the things that need to be changed by that rotation.

So Don't Rely on any other Rotation changes , **ONLY YOURS** 😊

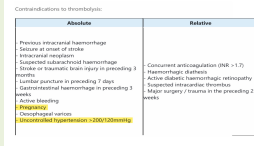
SEM.1-ROTATION 1

1- Neurological Examination: **No Changes!!!**

2- Multiple Sclerosis:

Delete Slides (٩)	New Slides (5)	Adds on the slide
	Slide 15 Slide 18 Slide 34+35 Slide 38	Slide 3 → Plaques are due.... + Pictures Slide 7 → الكلام بجانب الصورة Slide 8 → Lifetime Risk.... + New Picture instead of the old one. Slide 16 → (Changed the Picture on the right) Slide 17 → (Last 3 Symptoms are New) Slide 23 → Over-diagnosed...!!!

3- Stroke:

Delete Slides (1)	New Slides (9)	Adds on the slide
	Slide 18+19+20 Slide 24 Slide 39-43	Slide 38 → (Last Point is New)

4- Headache: The changes are massive (there is a big difference between the 2 semesters slide for this lecture), so I suggest downloading the new one directly (ارحلکم بکتیبیر)

5- Seizures & Epilepsy:

New Slides (1)	Adds on the slide
Slide 11	Slide 14 → Treatment: Ethosuximide, Lamotrigine, Sodium Valporate

6- MDs & Dementia: **Not in Slides**

Feature	Parkinson's Disease	Parkinsonism (Secondary)
Initial onset	Gradual onset	From beginning associated with cognitive impairment
Commonness	Most common	Less common
Prognosis	Better prognosis	Worse prognosis and faster progression
Symmetry	Asymmetrical	Symmetrical
Cause	No secondary cause	Secondary cause present
Dominant symptom	Tremor	Often other symptoms; tremor may not dominate
Laterality	Usually unilateral onset	Can be bilateral from beginning

7- Emergency:

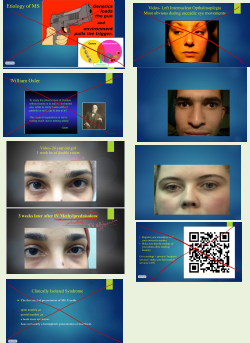
Slide 89 → The Picture



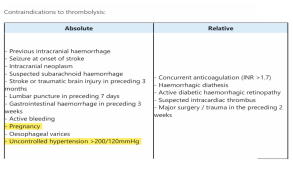
SEM.1-ROTATION 2

1- Neurological Examination: **No Changes!!!**

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	<p>Slide 15</p> <p>Slide 18</p> <p>Slide 34+35</p> <p>Slide 38</p>	<p>Slide 3 → Plaques are due.... + Pictures</p> <p>Slide 7 → الكلام بجانب الصورة</p> <p>Slide 8 → Lifetime Risk.... + New Picture instead of the old one.</p> <p>Slide 16 → (Changed the Picture on the right)</p> <p>Slide 17 → (Last 3 Symptoms are New)</p> <p>Slide 23 → Over-diagnosed...!!!</p>

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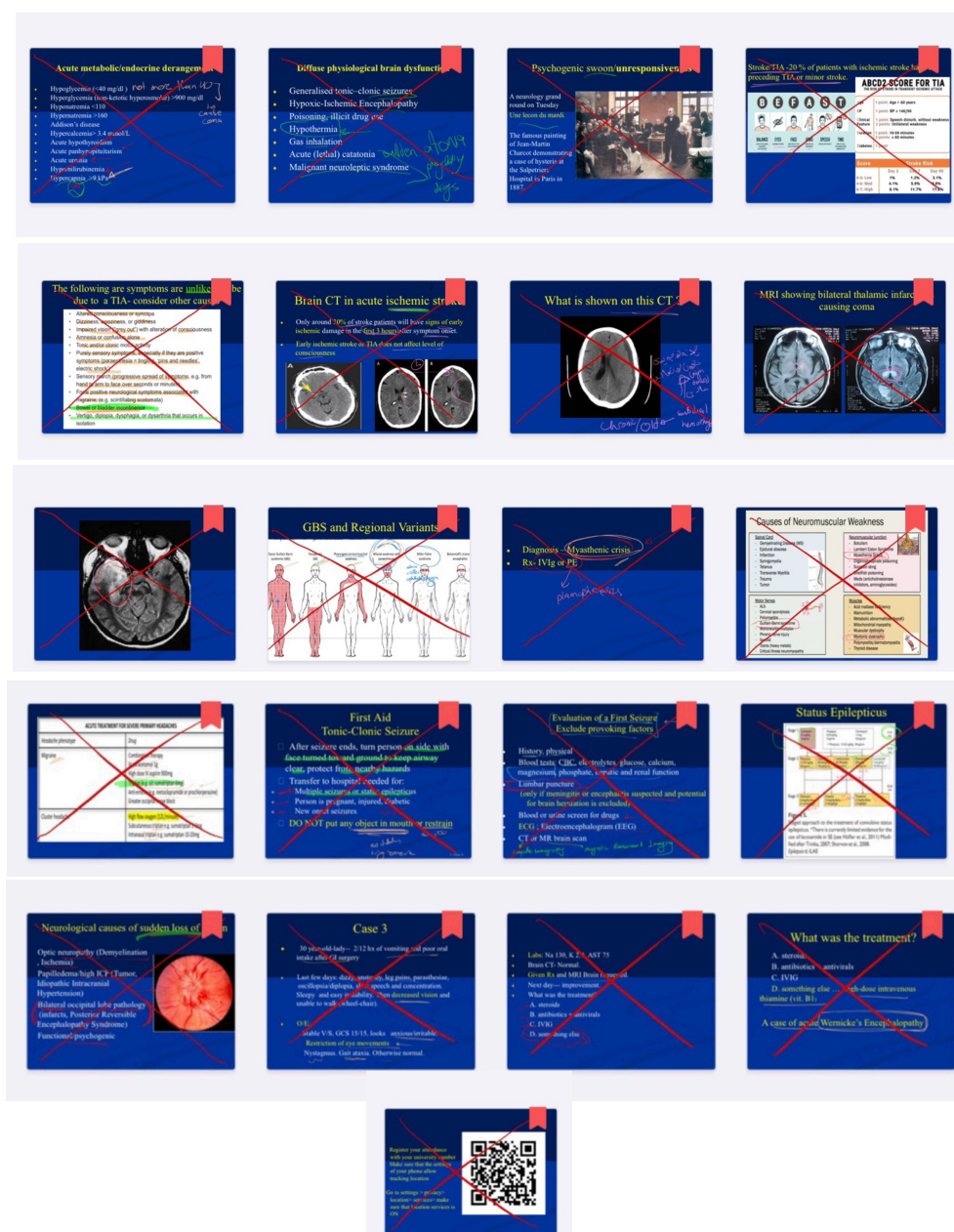
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Delete Slides (21)	New Slides (21)	Adds on the slide
	Slide 12+13	Slide 2 → The Last 2 points (Between the brackets)
	Slide 15	
	Slide 43	Slide 8 → The Picture
	Slide 45	Slide 14 → The Picture
	Slide 47	Slide 16 → The Picture
	Slide 51+52+53	Slide 38 → In practice....
	Slide 60-67	Slide 39 → Most cases.....
	Slide 73	Slide 40 → Neuroimaging....
	Slide 78	Slide 50 → Sensory (mild)... + Extra.....
	Slide 81+82	Slide 55 → Vaccination
		Slide 57 → Twenty five percent.....
		Slide 85 → The Picture
		Slide 89 → The Picture



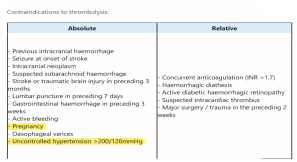
SEM.1-ROTATION 3

1- Neurological Examination: **No Changes!!!**

2- Multiple Sclerosis:

New Slides (2)	Adds on the slide
Slide 15 Slide 38	Slide 17 → (Changed the Picture on the right)
Delete Slides in next page !!!! (12)	

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New Slides (19)

Adds on the slide

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Slide 15

Slide 43

Slide 45

Slide 51+52+53

Slide 60-67

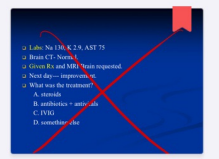
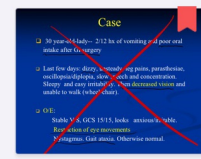
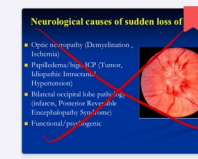
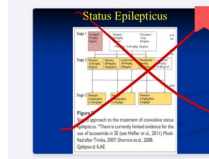
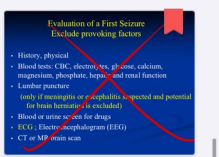
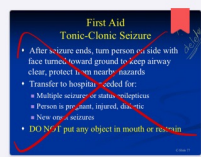
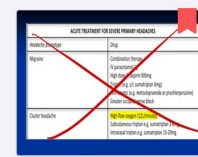
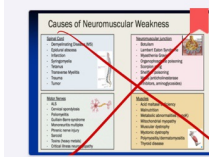
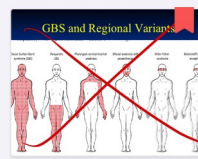
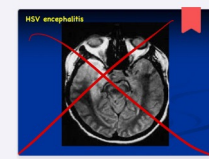
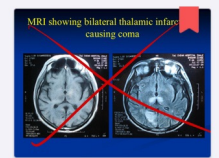
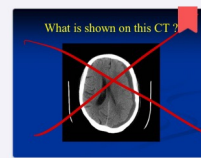
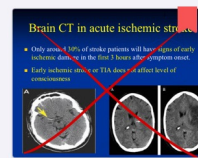
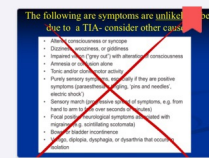
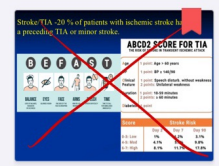
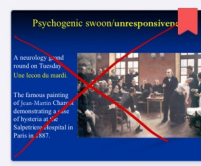
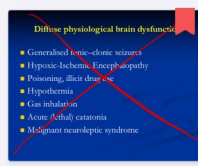
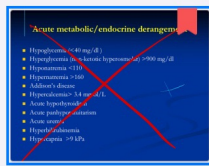
Slide 78

Slide 81+82

Slide 50 → Sensory (mild)... + Extra.....

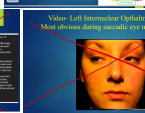
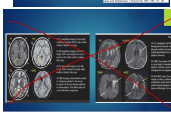
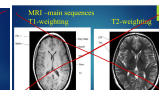
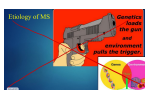
Slide 55 → Vaccination

Slide 85 → The Picture



Headache

Delete:
(12)



SEM.1-ROTATION 4

1- Neurological Examination: **No Changes!!!**

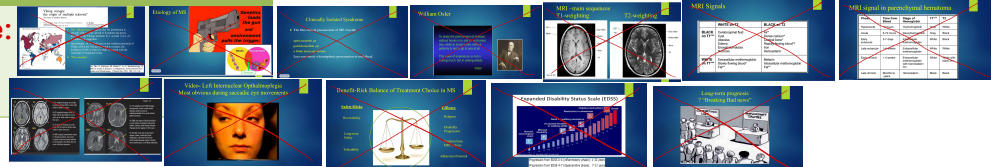
2- Multiple Sclerosis:

New Slides (2)

Slide 15

Delete:
(12)

Slide 38



3- Stroke:

Delete Slides (1)

New Slides (9)

Adds on the slide

Contraindications to thrombolysis:

Absolute	Relative
<ul style="list-style-type: none"> Previous intracranial haemorrhage Seizure at onset of stroke Intracranial neoplasm Suspected subarachnoid haemorrhage Stroke or traumatic brain injury in preceding 3 months Lumbar puncture in preceding 7 days Gastrointestinal haemorrhage in preceding 3 weeks Active bleeding Preexisting Oropharyngeal varices Uncontrolled hypertension >200/120mmHg 	<ul style="list-style-type: none"> Concurrent anticoagulation (INR >1.7) Haemorrhagic diathesis Active diabetic haemorrhagic retinopathy Suspected intracardiac thrombus Major surgery / trauma in the preceding 2 weeks

Slide 18+19+20

Slide 24

Slide

39+40+41+42+43

Slide 38 → (Last Point is New)

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Slide 11

Slide 14 → Treatment: Ethosuximide, Lamotrigine, Sodium Valproate

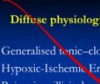
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	Slide 45	
	Slide 51+52+53	
	Slide 60-67	
	Slide 78	
	Slide 81+82	

- Hypophosphatemia <40 mg/dL
- Hypercalcemia for acute hypercalcemia >900 mg/dL
- Hyponatremia <110
- Hypernatremia >160
- Addison's disease
- Hypercalcemia> 3.4 meq/dL
- Acute hypothyroidism
- Acute parathyroiditis
- Acute uremia
- Hyperkalemia
- Hypokalemia >9 kPa



Diffuse physiological brain dysfunction

- Generalised tonic-clonic seizures
- Hypoxic-Ischemic Encephalopathy
- Poisoning, illicit drug use
- Hypothermia
- Gas inhalation
- Acute lethal carotonia
- Malignant neuroleptic syndrome

Psychogenic swoon/unresponsiveness

A neurology round round on Tuesday
Une leçon du mardi.

The famous painting of Jean-Martin Charcot demonstrating a state of hysteria at the Salpêtrière hospital in Paris in 1887.



Stroke/TIA - 20 % of patients with ischemic stroke have a preceding TIA or minor stroke.

ABCD2 SCORE FOR TIA
The table is used to estimate likelihood of stroke

BEFAST

- BALANCE
- EYES
- FACE
- ARM
- LEG
- TIME

1 point: Age > 60 years
2 points: BP > 140/90

1 point: Speech: Slurred, not understood
2 points: Unilateral weakness

1 point: 10-15 minutes
2 points: > 15 minutes

Stroke risk is about

Score	Stroke Risk
0-4	Low
5-6	Low
7-8	High
9-10	Very High


Stroke/TIA

The following are symptoms are unlikely due to a TIA- consider other causes


- Altered consciousness or syncope
- Dizziness, swooniness, or giddiness
- Headache (TIA's rarely with attentional consciousness)
- Annesia or confusion state
- Tonic and/or clonic motor activity
- Purely sensory symptoms, especially if they are positive symptoms (paresthesias, numbness, "pins and needles", electric shock)
- Sensory march (progressive spread of symptoms, e.g. from hand to arm to leg over seconds or minutes)
- Focal positive neurological symptoms associated with migraines (e.g. scintillating scotomata)
- Non focal disorder incoherence
- Head up, diplopia, dysphagia, or dysarthria that occurs in isolation

Brain CT in acute ischemic stroke

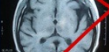
- Only around 40% of stroke patients will have signs of early ischemic damage in the first 3 hours after symptom onset.
- Early ischemic stroke or TIA does not affect level of consciousness




What is shown on this CT ?



MRI showing bilateral thalamic infarct causing coma



HSV encephalitis







GBS and Regional Variants

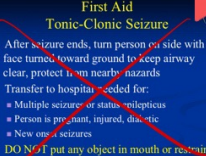
Spot diagnosis !

~~Bilateral facial weakness (facial diplegia)~~

Causes of Neuromuscular Weakness

Central Cx	Motor Cx	Neuromuscular Junction	Muscle
<ul style="list-style-type: none"> Demyelinating diseases (MS) Cerebral atrophy Infection Spongiform Trauma Transverse Myelitis Tumor 	<ul style="list-style-type: none"> ALS Cervical spondylosis Genetic Guthrie Bone dysplasia Hypomyelination Phrenic nerve injury Sarcoid Stroke Critical illness neuropathy 	<ul style="list-style-type: none"> Bouton Lambert Eaton syndrome Myasthenia Gravis Organophosphate poisoning Snake bite Drug poisoning Anticholinesterase inhibitors, antimuscarinics 	<ul style="list-style-type: none"> Acid base imbalance Malnutrition Metabolic disorders Mitochondrial myopathy Muscular dystrophy Myositis Myotonic disorders Paragonitis/dysmetabolism Spinal disease 

ACUTE TREATMENT FOR SEVERE PRIMARY HEADACHES	
Headache trigger	Drug
Migraine	Combination therapies 1st paracetamol High-dose triptan 50mg 2nd triptan e.g. sumatriptan 10mg 3rd triptan e.g. metoprolol or prochlorperazine Greater analgesic block
Custer headache	High flow oxygen 2-3 litres Subcutaneous triptan e.g. sumatriptan 10-20mg Intranasal triptan e.g. sumatriptan 10-20mg

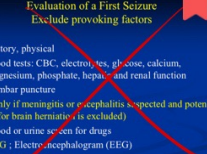


First Aid Tonic-Clonic Seizure

- After seizure ends, turn person on side with face turned toward ground to keep airway clear, protect from nearby hazards
- Transfer to hospital, needed for:
 - Multiple seizure or status epilepticus
 - Person is pregnant, injured, diabetic
 - New on seizure
- **DO NOT** put any object in mouth or restrain

Seizure

© 2008-12



Evaluation of a First Seizure

Exclude provoking factors

- History, physical
- Blood tests: CBC, electrolytes, glucose, calcium, magnesium, phosphate, hepatic and renal function
- Lumbar puncture
(only if meningitis or encephalitis is suspected and potential for brain herniation is excluded)
- Blood or urine screen for drugs
- ECG / Electroencephalogram (EEG)
- CT or MP brain scan


Status Epilepticus

Step	First Line	Second Line	Third Line	Notes
Step 1	Benzodiazepines			1-2 mg/kg IV
Step 2	Antiepileptics	Antiepileptics		1-2 mg/kg IV
Step 3	Antiepileptics	Antiepileptics	Antiepileptics	1-2 mg/kg IV

Figures
 Stepwise approach to the treatment of convulsive status epilepticus. *There is currently limited evidence for the use of barbiturates in SE (see Hoeller et al., 2011) Modifiable Trials, 2007; Shorvon et al., 2008.
 Epilepsia © IAE

Neurological causes of sudden loss of

- Optic neuropathy (Demyelination, Ischemia)
- Psychomotor/High ICP (Tumor, Idiopathic Intracranial Hypertension)
- Bilateral occipital lobe pathology (infarcts, Posterior Reversible Encephalopathy Syndrome)
- Functional/psychogenic



Case

- ❑ 30 year old lady - 2/12 has of vomiting and poor oral intake after GI surgery
- ❑ Last few days: dizzy, unsteady, leg pains, paraesthesiae, oscillopsia/diplopia, slow speech and concentration.
Sleepy and easy irritability. Non decreased vision and unable to walk (wheezy chair).
- ❑ O/E:
 - Stable V/S, GCS 15/15, looks anxious, unstable.
 - Rest of exam of eye movements.
 - Vestibular. Gait ataxia. Otherwise normal.

- Labs: Na 130, K 2.9, AST 75
- Brain CT - Norm.
- Given Rx and MRI - Brain requested.
- Next day - improvement.
- What was the treatment?
 - A. steroids
 - B. antibiotics + antivirals
 - C. IVIG
 - D. something else



Register your attendance
with your university number
Make sure that the settings
of your phone allow
tracking location

Go to settings > privacy >
location > services: make
sure that location services is
ON

SEM.2-ROTATION 1

1- Neurological Examination: **No Changes!!!**

2- Multiple Sclerosis:

New Slides (2)

Slide 15

Delete:
(12)

Slide 38



3- Stroke: **No Changes!!!**

4- Headache:

Delete Slides (5)

New Slides (1)

Slide 50



5- Seizures & Epilepsy:

New Slides (1)

Adds on the slide

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Delete Slides (12)

New Slides (24)

Adds on the slide

Same as:

SEM.1-ROTATION 4

Slide 12+13

Slide 15

Slide 43

Slide 45

Slide 51+52+53

Slide 60-67

Slide 78

Slide 81+82

Slide 50 → Sensory (mild)... + Extra.....

Slide 55 → Vaccination

Slide 85 → **The Picture**

SEM.2-ROTATION 2

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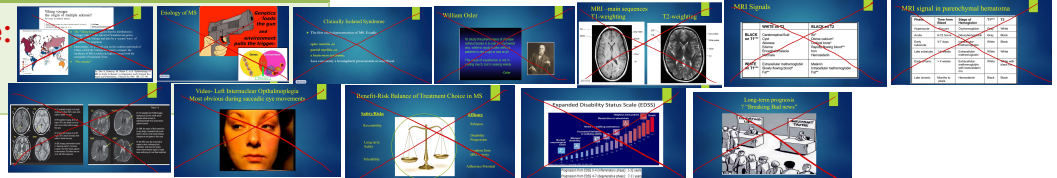
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Slide 15

Delete:

Slide 38



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4- Headache:

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New Slides (1)

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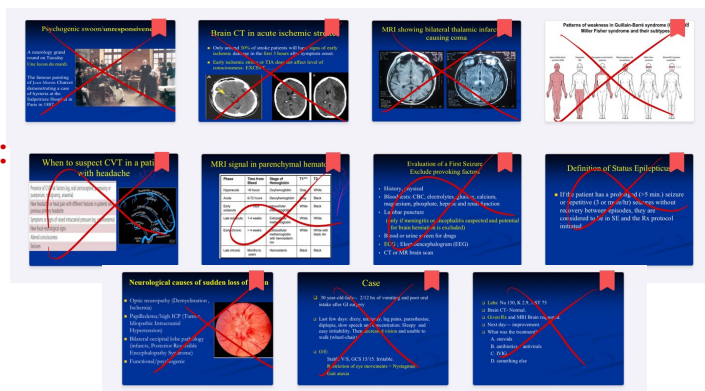
7- Emergency:

New Slides (5)

Slide 61

Slide 63+64+65+66

Delete:
(ii)



SEM.2-ROTATION 3

1- Neurological Examination: **No Changes!!!**

2- Multiple Sclerosis:

New Slides (2)

Slide 15

Delete:

Slide 38



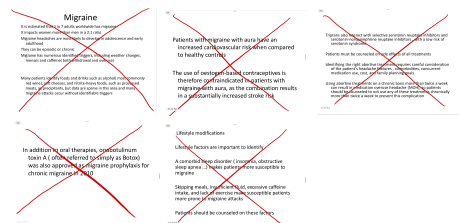
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4- Headache:

Delete Slides (5)

New Slides (1)

Slide 50



5- Seizures & Epilepsy:

New Slides (1)

Adds on the slide

Slide 11

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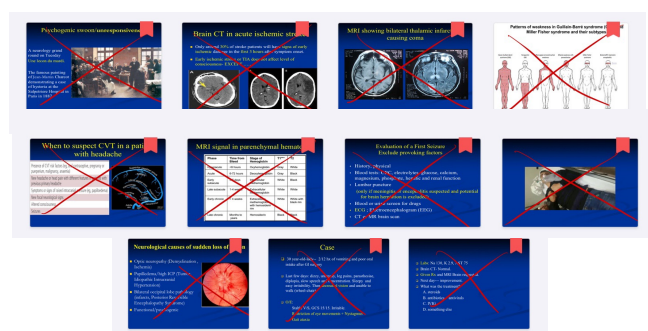
Feature	Parkinson's Disease	Parkinsonism (Secondary)
Initial onset	Gradual onset	From beginning associated with cognitive impairment
Commonness	Most common	Less common
Prognosis	Better prognosis	Worse prognosis and faster progression
Symmetry	Asymmetrical	Symmetrical
Cause	No secondary cause	Secondary cause present
Dominant symptom	Tremor	Often other symptoms; tremor may not dominate
Laterality	Usually unilateral onset	Can be bilateral from beginning

7- Emergency:

Adds on the slide

Slide 65 → The Picture

Delete:
(11)



SEM.2-ROTATION 4

1- Neurological Examination: **No Changes!!!**

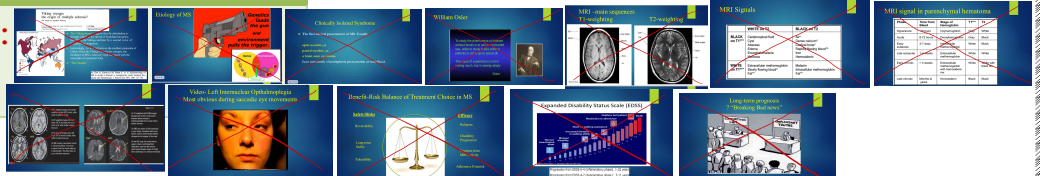
2- Multiple Sclerosis:

New Slides (2)

Slide 15

Delete:
(12)

Slide 38



3- Stroke: **No Changes!!!**

4- Headache:

Delete Slides (5)

New Slides (1)

Slide 50



5- Seizures & Epilepsy:

New Slides (1)

Adds on the slide

Slide 11

Slide 14 → Treatment: Ethosuximide, Lamotrigine, Sodium Valproate

6- MDs & Dementia: **Not in Slides**

Feature	Parkinson's Disease	Parkinsonism (Secondary)
Initial onset	Gradual onset	From beginning associated with cognitive impairment
Commonness	Most common	Less common
Prognosis	Better prognosis	Worse prognosis and faster progression
Symmetry	Asymmetrical	Symmetrical
Cause	No secondary cause	Secondary cause present
Dominant symptom	Tremor	Often other symptoms; tremor may not dominate
Laterality	Usually unilateral onset	Can be bilateral from beginning

7- Emergency:

Adds on the slide

Slide 65 → The
Picture

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