

# PNS-Pathology

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Archive

Lecture 1

Neuroscience II  
Pathology

# PNS-Pathology

## Lecture 1

1-Within 12 hours of an irreversible hypoxic-ischemic insult, this cell body shrinks, the nucleus is pyknotic, the nucleolus disappears, the cytoplasm shows intense eosinophilia and Nissl substance is lost. What is this cell type most likely to be?

- a- Astrocyte
- b- Endothelial cell
- C- Neuron
- d- Microglia
- e- Oligodendroglia

Answer : C

2-Activated after injury for scar and repair, this cell undergoes both hypertrophy and hyperplasia, where the nucleus enlarges and the nucleolus becomes prominent. The cytoplasm expands with bright pink hue extending multiple processes. What is this cell type most likely to be?

- a- Astrocyte
- b- Endothelial
- c - Neuron
- d. Microglia
- e- Oligodendroglia

Answer : A

3-A 29 year-old female was biking with her husband. She was experiencing difficulty reading signs and difficulty using her arms while steering her bike, then suddenly she felt severely fatigued. Visual disturbances and weaknesses persisted for-a few days, eventually affecting her productivity at work, prompting a visit to her family physician. MRI findings revealed plaques in the corpus callosum and periventricular white matter. Which of the following mechanisms is most likely responsible for her disease:

- a- Aggregation of Amyloid beta (AB) peptide
- b- Aggregation of Huntingtin
- C- Autoimmune response against components of the myelin sheath



# PNS-Pathology

## Lecture 1

- d- Loss of upper motor neurons in the cerebral cortex
- e- Dopaminergic neurons degeneration

Answer : C

4-related to ACUTE NEURONAL INJURY except :

- A-Shrinkage of the cell body .
- B-pyknosis of the nucleus
- C-distended sol lowen cell membrane
- D-los of nis substance
- E-intense eosinophilia of the cytoplasm

Answer : C

5-optic multiple sclerosis related to:

- A-lens dislocation
- B-optic neuritis"ophthalmic" في رواية اخرى
- C-cataract
- D-glaucoma

Answer : B

سبحان الله وبحمده  
سبحان الله العظيم

### أسئلة خارجية!!

1.The virus that causes demyelinating diseases is :

- a.cosavirus A
- b.coxsachievirus
- c.Hepatitis A
- d.polyomavirus
- e.Hepatitis b

Answer : D

2.the Wrong statement about Multiple Sclerosis (MS):

- a.autoimmune disease.
- b.patchy white matter lesions
- c. affected Female more than male
- d.rare after the age of 50
- e.After the episodes , there is a complete recovery

Answer : E

3.the Wrong statement about Multiple Sclerosis (MS):

- a. In The active stage axons are relatively preserved.
- b.bilateral visual impairment
- c.increased immunoglobulin
- d.motor & sensory impairment
- e.moderate pleocytosis

Answer : B

سبحان الله وبحمده  
سبحان الله العظيم

# PNS-Pathology

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Archive

Lecture 2

Neuroscience II  
Pathology

Corrected by:  
Malaak Al Zaidaneeyen



# PNS-Pathology

## Lecture 2

ROUH ARCH

1- One is true regarding ALZHEIMER DISEASE ?

- A)down syndrome have the disease early than sporadic cases.
- B) Alzheimer's Disease (AD) is a neurodegenerative disease and is the most common cause of bradykinesia amyloid beta secretion.
- C)is toxic for microglial celis.
- D)acumulation of tau protein fundamental abnormality in histology nuriticplaques.

Answer:D

WATEEN ARCH

2- Which of the following disease associated with down syndeome? **Allzeimer disease.**

NABD + WAREED

3- One of the following diseases is associated with early onset in trisomy 21 individuals Down syndrome?

- a- Amyotrophic Lateral Sclerosis
- b- Parkinson Diseas
- c- Wernicke encephalopathy
- d- Huntington Disease
- e- Alzheimer Disease

Ans:e

4- The Wrong statement about alzheimer's disease :

- a. death due to infection
- b. altered mood and behavior.
- c. Macro: cortical atrophy.
- d. intracellular amyloid and extracellular tau
- e.in early life associated with Down syndrome

Answer: D

# PNS-Pathology

## Lecture 2

5- A 69 year old female referred to the specialty memory clinic from neurology with a 2-year history memory loss, and executive function loss. Word finding and reading/writing skills were noted to have deteriorated in the preceding 6 months according to her husband. She also stopped driving her car about 6 months. Magnetic resonance imaging scan revealed mild generalized cortical atrophy. Which of the following mechanisms is most likely responsible for her disease:

- a- Aggregation of Huntington.
- b- Aggregation of Amyloid beta (AB) peptide.
- c- Autoimmune response against components of the myelin sheath.
- d- Loss of upper motor neurons in the cerebral cortex.
- e- Dopaminergic neurons degeneration.

Ans:b

6- The percentage of people expected to develop Alzheimer's disease from the age of 60 to 64 is:

- a. 47%
- b. 1%
- c. 10%
- d. 73%
- e. 20%

Ans:b

لو لم يكن من فائدة العلم والاشتغال به إلا أنه يقطع المشتغل به عن الوسواس المضنية، ومطارح الآمال التي لا تفيد غير الهم، وكفاية الأفكار المؤلمة للنفس، لكان ذلك أعظم داع إليه!  
- ابن حزم الأندلسي

# PNS-Pathology

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Archive

Lecture 3

Neuroscience II  
Pathology

Corrected by:  
Malaak Al Zaidaneeyen



# PNS-Pathology

## Lecture 3

ROUH ARCH

1- AMYOTROPHIC LATERAL SCLEROSIS, one is true:

- A) degeneration of cerebral cortex and spinal cord 22 in chromosome.
- B) mutation in SOD1.
- C) mutant mHTT.
- D) hyperreflexia symptoms to lower motor lesion.
- E) death due to renal failure.

Answer: B

2- Which of the following is a mismatch among accumulated protein // disease? مكرر

- A. Tau // alzheimer disease
- B. Thiamine // wernicke encephalopathy
- C. Alpha-synuclein // parkinsons disease
- D. mHTT // huntington disease
- E. SOD1 // amyotrophic lateral sclerosis

Answer : B

هو مو تراكمي هو بسبب النقصان ليهيك غلط

3- Lewy bodies are form of accumulated proteins inside neural cells causing diseases. Lewy bodies are aggregates of: مكرر

- A. Amyloid
- B. Super oxide dismutase 1
- C. Tau protein
- D. Alpha-synuclein
- E. Glycosylation end products

Answer : D

4- The type of inheritance of huntington disease is: مكرر

- A. Autosomal dominant
- B. Autosomal recessive
- C. X-linked recessive
- D. X-related inheritance
- E. Autosomal dominant & X-linked recessive

Answer : A

# PNS-Pathology

## Lecture 3

### 5-HUNTINGTON DISEASE:

- A. autosomal dominant
- B. autosomal recessive
- C. X-link dominant
- D. X-link recessive

Answer : A

### WATEEN ARCH

- 6- All of the following are associated with wernicke encephalopathy except? **Vit. B12**
- 7- All about korsakoff syndrome is true except: **Acute**

### NABD + WATEEN ARCH

- 8- One of the following is CORRECT about Thiamine Vitamin B1 deficiency?
  - a- Thiamine deficiency result from gastric disorders such as chronic gastritis
  - b- Untreated Korsakoff syndrome leads to the irreversible Wernicke encephalopathy.
  - c- Wernicke encephalopathy is associated with memory impairment.
  - d- Korsakoff syndrome is the acute phase of the encephalopathy.
  - e- Korsakoff syndrome is reversible when treated with thiamine.

Ans:a

- 9- One of the following pairs between the neurodegenerative disease and the main location for the CNS injury is WRONGLY matched:

- a- Wernicke encephalopathy: mammillary bodies
- b- Huntington Disease: Caudate and putamen.
- c- Amyotrophic Lateral Sclerosis: Anterior horn cells.
- d- Parkinson Disease: Striatum.
- e- Alzheimer Disease: Frontal and temporal lobes.

Ans:d

# PNS-Pathology

## Lecture 3

10- One of the following pairs between the disease and anatomic region primarily affected by the disease is **WRONGLY** matched?

- a. Huntington Disease //// Caudate nucleus.
- b. Alzheimer Disease //// Frontal and temporal lobes.
- c. Amyotrophic Lateral Sclerosis //// Betz cells.
- d. Chronic inflammatory demyelinating polyradiculopathy /// Peripheral nerves.
- e. Parkinson Disease //// Striatal neurons

**Ans:e**

11- Anticipation typically occurs with disorders that are caused by a trinucleotide repeat expansion. The number of repeats can change as the gene is passed from parent, which leads to more severe and early- onset signs and symptoms. Which of the following diseases is associated with this Phenomenon:

- a- Alzheimer Disease
- b- Parkinson Disease
- c- Wernicke encephalopathy
- d- Huntington Disease
- e- Amyotrophic Lateral Sclerosis

**Ans:d**

«أخشى إن لم نبادر عاجلاً بالصعود إلى جسر التَّعب؛ أن نصطدم يوماً بتصرُّم العمر دون تحقق شيءٍ من تلك الطَّموحات  
وما أقسى خيبة نهاية التَّفَقُّ» -



# PNS-Pathology

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Archive

Lecture 4

Peripheral neuropathies

Corrected by:  
Raneem Bashtawi

# PNS-Pathology

## lecture 4

1. An 11-year-old boy is referred to the pediatric surgery department with left psoas muscle mass. The histopathologic result confirmed the diagnosis of a Neurofibroma )Psoas biopsy(. The disease started in Childhood with the appearance of multiple hyper pigmented skin macules. Lisch nodules were noticed on the iris of both eyes. This disease represents a major risk factor for development of which of the following tumors:

- a- Meningiomas
- b- Malignant peripheral nerve sheath tumors
- c- Acoustic neuroma
- d- Ependymomas
- e- Schwannomas

Answer: B

2. One of the following pair between the diseases or injuries and their neuropathies anatomic patterns is INCORRECTLY matched:

- a- Blunt trauma affecting radial nerve injury /// Simple mononeuropathy
- b- Carpal tunnel syndrome /// Simple mononeuropathy
- c- Vasculitis /I/ Mononeuritis multiplex
- d- Diabetic Peripheral Neuropathy /// Polyneuropathies
- e- Guillain-Barre Syndrome /// Mononeuritis multiplex

Answer: e

3. chronic inflammatory demyelinating poly(radiculo)neuropathy:

- A. The most common acute acquired inflammatory peripheral neuropathy.
- B. treatment with plasma exchange

Answer: B

4. Choose the correct statement concerning neurofibroma:

- A. Formed of transformed schwann cells and red neurons
- B. Commonly transforms into malignant peripheral nerve sheath tumor
- C. Forms painful skin masses
- D. If it is located superficially, it will be treated by surgical excision

Answer: D

# PNS-Pathology

## lecture 4

### 5) One is true GUILLAIN-BARRE SYNDROME

- A) Acute Inflammatory axonopathy days following are latively benign respiratory illness
- B) usually present
- C) production of antibodies that cross-react with specific gangliosides that are distributed throughout the myelin in the peripheral nervous system
- D) diagnosed by CSF transudate

Answer: c

### 6) One is false about SCHWANNOMA and neurofibromatosis

- A) manifested at 60 years
- B) bilateral hearing loss
- C) Café-au-lait spots
- D) neurological symptoms are uncommon unless the tumor is large
- E) Benign Encapsulated, well circumscribed

Answer: c

### 7. patient with flu-like symptoms:

Guillain-barré syndrome

### 8. Antoni and Verocay body are seen in:

Schwannoma