NEUROSURGERY
FINAL PAST PAPERS

COLLECTED BY:
Lejan 021

SPECIAL THANKS ☺

020 Final:

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Notes before we start

1. This file contains all the available P.Ps regarding Neurosurgery rotation up to 020 batch (Exam May 2025) by topics.

2. "Functional & Epilepsy Neurosurgery" lecture doesn't have any Qs since it is the first time given this year.

3. You'll find some Questions that are not really in slides as an information but the concept is related so they were put in (Anything unrelated I didn't include at all) Highlighted in **Red**.

4. "ICP" lecture have new slides (instead of Dr.Walid's), Qs Highlighted in **Blue** are not in the new slides.

5. Some questions I didn't actually find a topic for it so I put it at the beginning under names "Neuroanatomy" & "Meningitis" (though they are P.Ps).

6. If you find any Q has a wrong answer (لا سمح الله), please do tell **ASAP.**

الدعاء بالرحمة للزميل عمر عطية المرابي

اللَّهُمَّ، اغْفِرْ له وَارْحَمْهُ، وَاعْفُ عنه وَعَافِهِ، وَأَكْرِمْ نُزُلَهُ، وَوَسِّعْ مُدْخَلَهُ، وَاغْسِلْهُ بِمَاءٍ وَثَلْجٍ وَبَرَدٍ، وَنَقِّهِ مِنَ الخَطَايَا كما يُنَقَّى الثَّوْبُ الأَبْيَضُ مِنَ الدَّنَسِ.

Outlines

دعاء قبل المذاكرة

اللَّهُمَّ إِنِّي أَسْأَلُكَ فَهْمَ النَّبِيِّينَ، وَحِفْظَ الْمُرْسَلِينَ وَالْمَلَائِكَةِ الْمُقَرَّبِينَ،
اللَّهُمَّ اجْعَلْ أَلْسِنَتَنَا عَامِرَةً بِذِكْرِكَ، وَقُلُوبَنَا بِخَشْيَتِكَ، وَأَسْرَارَنَا بِطَاعَتِكَ،
إِنَّكَ عَلَى كُلِّ شَيْءٍ قَدِيرٌ، وَحَسْبُنَا اللَّهُ وَنِعْمَ الْوَكِيلُ..

Neuroanatomy

1. Which is a wrong combination:

A. Corneal reflex: CN V & CN VII

B. Cough reflex: CN X

C. Gag reflex: CN IX & X

D. Vestibulo-ocular reflex: CN II & III

E. Salivary reflex: CN VII

Answer: D

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2. With the eyeball adducted (turned inward), the depression or downward movement of the eyeball is mediated through:

A. Superior oblique muscle

B. Inferior oblique muscle

C. Inferior rectus muscle

D. Medial rectus muscle

E. Lateral rectus muscle

Answer: A

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3. Which of the following is not a branch from the external carotid artery?

A. Ophthalmic artery

B. Ascending pharyngeal artery

C. Lingual artery

D. Facial artery

E. Superior thyroid artery

Answer: A

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4. The part of the neuron that receives messages from other cells is called:

A. Axon

B. Soma

C. Schwann cell

D. Dendrites

E. End plate

Answer: D

5. All of the following are complications of vagal nerve stimulation, except:

A. Dysphonia

B. Dysphasia

C. Dyspnea

D. Cough

E. Hoarseness

Answer: B

---

6. Nerve supply of abductor pollicis brevis

A. Median

B. Ulnar

C. Radial

D. Musculocutaneous

E. Axillary

Answer: A

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7. Which one of the following cranial nerves carry parasympathetic fibers?

A. Facial nerve VII

B. Vestibulocochlear nerve VIII

C. Hypoglossal nerve XII

D. Abducens nerve VI

E. Trochlear nerve IV

Answer: A

---

8. All can cause dilated nonresponsive pupil, except:

A. Optic nerve injury

B. Brain stem herniation

C. Oculomotor nerve injury

D. Abducent nerve injury

E. Sympathetic tone loss

Answer: D & E

9. One of the following is correct about cerebral circulation:

A. Cerebral circulation is controlled mainly by ANS

B. Cerebral vasoconstriction occurs when blood pressure rises

Answer: A

Meningitis

1. In a patient with a high clinical suspicion of acute bacterial meningitis which of the following is NOT a contraindication for doing lumbar puncture when brain neuroimaging is not available?

A. Daily aspirin use

B. Papilledema

C. Seizures occurring during the illness

D. Right sided hemiparesis developing during the illness

E. Decreased level of consciousness

Answer: A

---

2. A lumbar puncture showing a clear CSF with normal pressure, 20 WBC (mainly lymphocytes), protein = 63 mg%, glucose = 65 mg% (blood sugar = 105 mg%) and a negative gram stain is in favor of which of the following?

A. Viral meningitis

B. Fungal meningitis

C. Tuberculous meningitis

D. Subarachnoid hemorrhage

E. Bacterial meningitis

Answer: A

---

3. Which one of the following leads to fever/confusion with neck stiffness and a lumbar puncture showing 9 WBC with a lymphocyte predominance, protein = 63 mg% and glucose = 65 mg% (blood sugar = 105 mg%) and a negative gram stain?

A. Fungal meningitis

B. Subarachnoid hemorrhage

C. Viral meningoencephalitis

D. Bacterial meningitis

E. Tuberculous meningitis

Answer: C

4. Bacterial brain abscesses are usually treated by:

A. Empiric antibiotics without biopsy

B. Oral antibiotics for four weeks

C. Radical surgical excision

D. A two-week course of antibiotics

E. Stereotactic aspiration followed by 4–6 weeks of IV antibiotics

Answer: E

---

5. Wrong about meningitis:

Answer:

Treatment of meningitis should be deferred until the results of culture and sensitivity are back

---

6. Signs of meningism, increased protein, low glucose in the CSF, polymorphic neutrophils, RBC:

Answer:

Bacterial meningitis

Head Injury 1

1. Head trauma in RTAs is:

A. 20%

B. 40%

C. 60%

D. 80%

E. 90%

Answer: C

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2. The best modality for evaluation of head injury:

A. CT scan

B. MRI

C. MRA

D. Cerebral angiography

E. Plain film radiographs

Answer: A

---

3. Cephalohematoma is a:

A. Subcutaneous hematoma

B. Subaponeurotic hematoma

C. Subperiosteal hematoma

D. Subdural hematoma

E. Subtentorial hematoma

Answer: C

---

4. In cephalohematoma in infants, infants might have shock due to:

A. Low blood volume

Answer: A

---

5. MRI is better than CT by all except:

A. Detecting hair fracture at temporal bone

Answer: A

6. All are signs of basal skull fracture involving the anterior fossa except:

A. Battle's sign

B. CSF rhinorrhea

C. Epistaxis

D. Blindness

E. Raccoon's eyes

Answer: A

---

7. Regarding fractures of the skull, all of the following are true except:

A. Basilar skull fractures are more likely to injure cranial nerves than vault fractures

B. Linear fractures do not require treatment unless associated with complications

C. Pond fractures of babies do not require elevation

D. Compound depressed skull fractures require emergency treatment

E. A growing skull fracture is a complication of linear fractures in adults

Answer: E

---

8. Regarding fractures of the skull, all of the following are true except:

A. Linear fractures do not require treatment unless associated with complications

B. Compound depressed skull fractures require emergency treatment

C. Basilar skull fractures are more likely to injure cranial nerves than vault fractures

D. All basilar skull fractures will develop CSF leak

E. Pond fractures of babies usually do not require elevation

Answer: D

---

9. Depressed fracture — do not elevate if:

A. Less than the thickness of adjacent bone

B. Cosmetic

Answer: A

10.What is an absolute indication for surgery in skull fracture?

Answer:

Compound depressed fracture

11. Fracture that causes otorrhea:

Answer:

Temporal bone petrous part

---

12. The management of a skull fracture is highly dependent on the type and location of the fracture. Which of the following statements is true concerning skull fractures?

A. Simple non-depressed linear skull fracture is of no significant consequence

B. All depressed fractures require surgery to elevate the depressed bone regardless of neurologic status

C. Basal skull fractures involve the base of the calvarium and suggested by bruising about the eye or the ear

D. CSF rhinorrhea associated with a basal skull fracture requires prompt surgical exploration and repair of the defect

E. Prophylactic antibiotics are not indicated in all basal skull fractures associated with CSF rhinorrhea otorrhea

Answer: C

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13. Brain contusions:

A. Less likely to happen in children

B. Frontal lobe most commonly

C. Acceleration-deceleration

Answer: A

---

14. Causes of secondary brain injury except:

A. Counter coup injury

B. Hematoma

C. Brain shifting

Answer: A

---

15. The most prognostic sign in acute head injury is:

Answer:

Glasgow coma scale

16. Patient comes to the ER after RTA, he has normal CT initially, later shows white tract hemorrhages, brain stem punctate hemorrhage, his GCS was 5, most likely diagnosis?

A. Diffuse axonal injury

B. Epidural hematoma

C. Subdural hematoma

D. Brain contusion

Answer: A

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17. Transition from prolonged coma to a stable or a transient vegetative state is seen after:

A. Brain concussion

B. Diffuse axonal injury of the brain

C. Brain tumour

D. Subgaleal hematoma

E. Epidural hematoma

Answer: B

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18. A patient has moderate head injury; the Glasgow Coma Scale is:

A. Below 6

B. Below 8

C. 9–13

D. 13–15

E. 14–15

Answer: C

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19. According to Glasgow Coma Scale, a severe craniocerebral traumatic injury would score:

A. 1–2 Points

B. 3–7 Points

C. 8–10 Points

D. 11–13 Points

E. 14–15 Points

Answer: B

20. A patient with head injury has a GCS of 14/15, which of the following shouldn't be part of his management?

A. Endotracheal intubation and hyperventilation

B. Admission for ICU for observation

C. Urgent CT scan of the brain

D. Mild analgesia to relieve the pain

Answer: A

---

21. Patient presented with a moderate craniocerebral injury, GCS was 10, which of these isn't part of the management plan?

A. Administering corticosteroids

B. Admit the patient to the ICU

Answer: A

---

22. Management options in the treatment of intracranial hypertension secondary to trauma include all of the following except:

A. High dose cortical steroids

B. Mild sedation

C. External ventricular drainage

D. Use of osmotic diuretics

E. Decompressive craniectomy

Answer: A

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23. In severe cranio-cerebral injuries, the recommended measure to reduce increased pressure, in their order of safety are:

A. Barbiturate coma, intermittent mannitol, hyperventilation, and hypothermia

B. Hyperventilation, barbiturate coma, hypothermia, and intermittent mannitol

C. Hypothermia, hyperventilation, barbiturate coma and intermittent mannitol

D. Mannitol, hyperventilation, barbiturates, hypothermia, decompressive craniotomy

E. Hyperventilation, mannitol, barbiturate, hypothermia, craniotomy

Answer: D

24. A 19-year-old man was brought to the ER after being involved in a road traffic accident.

Examinations showed that his Glasgow coma score was 15/15, with no abnormal neurological signs. His blood pressure, pulse rate and respiration were normal. Examination of all systems was negative.

The patient drew the attention of the examining doctor to the fact that when he bent his head, some clear fluid came down his left nostril. Testing the fluid for beta 2 transferrin proved that it was CSF. The diagnosis of basal skull fracture and CSF was made.

The next step would be:

A. Prescribe broad spectrum antibiotics for 2 weeks and ask the patient to come to OPD afterwards

B. Admit the patient and take the patient to the operating theatre and close the site of the leak. Give post-operative antibiotics

C. Discharge the patient and ask him to take appointment with the ENT department

D. Ask for ENT consultation so that the nasal cavity be examined to try to detect the site of the leak

E. Admit the patient, give broad spectrum antibiotics, and wait for the leak to stop spontaneously

Answer: E

---

25. During an emergency surgery for a traumatic brain injury, the brain was found to be edematous and tense, so the surgeon decided not to replace back the cranial bone flap in an attempt to decrease the intracranial pressure, this procedure is called:

A. Cranioplasty

B. Skull base repair

C. Decompressive craniectomy

D. Elevation of depressed fracture

E. Craniotomy

Answer: C

Head Injury 2

1. Causes of secondary brain injury except:

A. Counter coup injury

B. Hematoma

C. Brain shifting

D. Hypoxia

E. Ischemia

Answer: A

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2. All are early complication in head injury except:

A. Epilepsy

B. Brain edema

C. CSF leak

D. Intracranial hematoma

E. Hyponatremia

Answer: B

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3. Head trauma with rhinorrhea, otorrhea, which is wrong?

A. Treatment of choice is LP shunt

B. Do lumbar drain

C. Most of them resolve spontaneously

D. Diagnosed as CSF leak by B2 transferrin

E. Usually occurs due to skull base fracture

Answer: A

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4. Acute intracranial hematomas are those which form during the first:

A. 7 Days

B. 14 Days

C. 10 Days

D. 3 Days

E. 21 Days

Answer: D

5. Acute traumatic intracranial hematomas frequently manifest with:

A. Hypersalivation

B. Hyperhydrosis

C. Seizures

D. Acute adrenal failure

E. Toxic shock

Answer: A

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6. Bradycardia, hypertension, hemiparesis and anisocoria, classic presentations of:

A. Carotid cavernous fistula

B. Arnold-Chiari malformation

C. Spinal cord tumor

D. Compression vascular neuropathy

E. Traumatic intracranial hematoma

Answer: E

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7. Most common source for the formation of epidural hematomas:

A. Cerebral arteries and veins

B. Choroid plexus of the 4^{th} ventricle

C. Galen's vein

D. Diploic vessels of the cranial bones

E. Middle meningeal arteries

Answer: E

---

8. The commonest site for extradural hematoma is:

A. Subfrontal region

B. Parietal region

C. Parafalcine region

D. Temporal region

E. Posterior fossa

Answer: D

9. Wrong about epidural hematoma:

A. Most common source of bleeding is the middle meningeal artery

B. Most commonly in the frontal region

C. Can occur due to a fracture line

D. Lucid interval corresponds to the period of accumulation of blood

E. Occurs mainly in population below the age of 40

Answer: B

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10. Epidural hematoma, what is the least affected age group?

A. 15–30

B. >60

C. Mid age men

D. Mid age women

Answer: B

---

11. Extradural hematoma is due to bleeding from all the following sources except:

A. Straight sinus

B. Transverse sinus

C. Diploic veins

D. Middle meningeal artery

E. Superior sagittal sinus

Answer: C

---

12. The typical appearance of an acute extradural hematoma on non-contrasted CT scan of the head is:

A. Hypodense lens shape

B. Hypodense crescentric shape

C. Hyperdense crescentric shape

D. Hyperdense lens shape

E. Isodense lens shape

Answer: D

13. Epidural hematomas are usually limited by:

A. Cerebral cortex

B. Choroid plexuses

C. Falciform processes

D. Tentorium cerebelli

E. Skull sutures

Answer: E

---

14. In which type of post traumatic intracranial hemorrhage a "lucid interval" is most likely to be seen?

A. Cerebral contusion

B. Brain concussion

C. Epidural hematoma

D. Subdural hematoma

E. Subarachnoid hemorrhage

Answer: C

---

15. Extradural hematoma, True:

A. The most affected artery is the middle meningeal

B. Have lucid interval

C. The treatment is evacuation

D. All of the above are true

Answer: D

---

16. All of the following facts are correct about extradural hematoma (EDH) except:

A. Skull fracture associated with EDH are three times as common in adults when compared to children

B. The mortality rate is around 75%

C. The best time of operation is before the ensuing of the second loss of consciousness which denotes herniation

D. Most EDHs are arterial in nature

E. When compared to acute subdural hematoma, the outcome of EDH is much better

Answer: B

17. Concerning epidural hematoma, all the following statements are true except:

A. Characteristic biconvex shape

B. Represent 3% of all head injuries

C. Rare to be seen before 2 years and those older than 60 years

D. Have the characteristic lucid interval in 2/3 of cases

E. Most common in the parietal lobe

Answer: E

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18. Source for formation of subdural hematoma:

A. Anterior choroidal artery

B. Pial/bridging veins

C. Choroid plexus of the lateral ventricles

D. Choroid plexus of the 4^{th} ventricle

E. Arteries of the circle of Willis

Answer: B

---

19. Character of subdural hematoma:

Answer:

Does not cross suture lines

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20. Which of the following is true?

A. Subdural is associated with more severe injury

B. Epidural presents with lucid interval in more than 60% of patients

Answer: A

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21. All are <u>false</u> about acute subdural hematoma <u>except</u>:

A. The blood clot is found between the skull and meninges

B. Most of the manifestations are due to the presence of the blood clot

C. It is more dangerous than extradural hematoma

D. Treatment is by removal of the hematoma and excision of the affected brain area using burr hole

Answer: C

22. Regarding acute subdural hematoma, which is wrong?

A. The blood clot develops between the brain and outer layer of the meninges

B. The blood clot makes the major contribution to the clinical picture

C. In general, has a worse prognosis than extradural hematoma

D. The surgical treatment includes mainly evacuation of the hematoma and excision of the lacerated brain via a craniotomy

E. The source of bleeding is the bridging veins

Answer: B

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23. In spite of the best treatment, the highest mortality is associated with:

A. Extradural hematoma

B. Acute subdural hematoma

C. Chronic subdural hematoma

D. Subacute subdural hematoma

E. Traumatic SAH

Answer: B

---

24. Acute subdural hematomas have more mortality and morbidity than acute extradural hematomas because:

A. They are usually bigger than extradural hematomas

B. Because they always originate from the large superior sagittal sinus

C. Because they are always bilateral

D. Because they are usually associated with severe brain injury

E. Because they are nearer to the cortex than extradural hematomas

Answer: D

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25. Which of the following is NOT a characteristic of subacute subdural hematoma?

A. Compression of the lateral ventricle on the side of the hematoma

B. Effaced sulci

C. White matter buckling

D. Thick cortical mantle

E. Insular ribbon sign

Answer: D

26. Long clinical scenario about a patient who came with head trauma and GCS 6, on CT he was found to have subdural hematoma, which of the following is an inappropriate step in the management?

A. Administer cyclocapron (tranexamic acid) to prevent clot lysis

B. Plan for urgent evacuation of the hematoma

Answer: A

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27. Patient post RTA mild head injury with dementia the following few weeks:

A. Chronic subdural hematoma

B. Intracerebral hematoma

Answer: A

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28. The proper method for surgical removal of a chronic subdural hematoma in an adult patient is:

A. Burr hole and subdural drain insertion for evacuation

B. Craniotomy and evacuation

C. Endovascular removal

D. Stereotactic removal

E. Puncture and needle aspiration

Answer: A

---

29. Which of the following is correct regarding chronic subdural hematoma?

A. Can appear either hyperintense, isointense, or hypointense on MRI

B. Associated with brain atrophy

C. Mostly can be drained by burr holes

D. All of the above

Answer: D

---

30. Patient with craniotomy cerebral injury, which of the following is true about complications?

A. Hydrocephalus if occurs is usually communicating type

B. If patient doesn't develop seizures in the first week he is unlikely to develop seizures later

C. CSF otorrhea more common than rhinorrhea

Answer: A

31. Most common symptom of intracranial hemorrhage:

Answer:

Seizure

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32. Epilepsy occurs post trauma can occur due to all of the following, except:

A. Depressed fracture

B. Intracranial hematoma

C. Dural tear

D. Brain contusion

E. Diffuse axonal injury

Answer: C

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33. The following are causes of epilepsy except:

A. Cerebral hematoma

B. Cerebellar hematoma

C. Cortical contusion

D. Suprasellar tumor

E. Hydrocephalus

Answer: B

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34. Which of the following antiepileptics is the most teratogenic? Final 020

Answer:

Valproate

Brain Tumors

1. Percentage of brain tumors within all body tumors:

A. 2%

B. 4%

C. 6%

D. 8%

E. 10%

Answer: A

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2. Most common type of tumor to metastasize to the brain:

A. Lung

B. Prostate

C. Breast

D. Leukemia

E. Lymphoma

Answer: A

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3. All the tumors are more common in males except:

A. Glioblastoma multiforme

B. Astrocytoma

C. Medulloblastoma

D. Pineocytoma

E. Ependymoma

Answer: D

---

4. All tumors have male predominance, except:

A. Neuroma

B. Ependymoma

C. Medulloblastoma

D. Glioblastoma multiforme

E. Astrocytoma

Answer: A

5. A patient with headache, blurring of vision, rt homonymous hemianopia with loss of light reflex. The lesion is in: Slide 17

A. Frontal

B. Temporal

C. Parietal

D. Occipital

E. Corpus callosum

Answer: D

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6. Intracranial lesion (mass lesion) can present with: Slide 17

A. Increased intracranial pressure

B. Motor deficits

C. Fits

D. Cranial nerve lesion

E. All of the above

Answer: E

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7. Decerebrate rigidity/posture results because of a lesion in: Slide 17

A. Midbrain

B. Pons

C. Cerebellum

D. Medulla oblongata

E. Diencephalon

Answer: A

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8. Concerning the non-surgical treatment of brain tumor, all of the following statements are true except: Slide 24

A. Antiepileptics

B. Analgesia

C. Diazepam

D. Head elevation 30 degrees (patient with increased ICP)

E. Dexamethasone

Answer: C

9. Which of the following is considered an absolute contraindication for a lumbar puncture?

A. High blood pressure

B. Pregnancy

C. Acute urinary retention

D. Brain space occupying lesion

E. Lumbar disc prolapse

Answer: D

---

10. Child comes with vomiting and nausea of 3 months duration and has cerebellar signs and otitis media 2 weeks ago. Slide 23

What is the differential diagnosis & What is the next step?

Answer:

Abscess Cerebellar tumor, CT scan

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11. Choose the incorrect answer:

A. Neuroblastoma is most common CNS tumor

Answer: A

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12. All are true regarding neurofibromas, except:

A. Usually occurs in motor roots

B. Arise from lateral or posterior side of spinal cord

C. May lead to an increase of intravertebral foramen

Answer: A

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13. Concerning brain tumors, all of the following data are true except:

A. The prevalence of brain tumors is between 5–18/100,000 population

B. They are slightly more common in males than females

C. Median age of presentation is 38–42

D. In Jordan, the prevalence is 10/100,000 population

E. Malignant brain tumors rarely metastasize outside CNS

Answer: D

15. Concerning brain tumors, all of the following data are true except:

A. The prevalence of brain tumors is between 5–18/100,000 population

B. Glioblastoma is the most common pediatric brain tumor

C. Meningioma is the most common primary brain tumor

D. In Jordan, the prevalence is 5/100,000 population

E. Meningioma can be cured with surgical resection

Answer: B

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16. Chondromas are tumors arising from remnants of:

A. Ectopic cord tissue

B. Notochord tissue

C. Rathke's pouch

D. Ectopic lymphatic tissue

E. Endoderm tissue

Answer: B

---

17. Not neuroepithelial origin:

Answer:

Hemangioblastoma

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18. The most common primary brain tumor in adult is:

A. Glioblastoma

B. Ependymoma

C. Meningioma

D. Medulloblastoma

E. Pituitary adenoma

Answer: A

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19. Which of these is a benign brain tumor

A. Anaplastic astrocytoma

B. Who grade 3 meningioma

C. Hemangioblastoma

Answer: C

20. What is the most common posterior fossa tumor in adults

A. Ependymoma

B. Astrocytoma

C. Vermis medulloblastoma

D. Hemangioblastoma

Answer: D

---

21. Which of the following CNS tumors has chicken wires appearance on histology?

A. Oligodendroglioma

B. Meningioma

Answer: A

---

22. One of the following tumors, most common tumor with calcifications?

A. Pituitary adenoma

B. Anaplastic astrocytoma

C. Oligodendroglioma

D. Ependymoma

E. Medulloblastoma

Answer: C

---

23. Wrong about brain tumors:

Answer:

Ependymoma is the most common cancer in adults

---

24. The most common posterior fossa tumor with calcification is:

A. Ependymoma

B. Medulloblastoma

C. Pilocytic astrocytoma

D. Choroid plexus papilloma

Answer: A

25. Wrong statement regarding cranial tumor:

Answer:

Ependymoma more common than astrocytoma

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26. A 4 year old boy, mass in posterior fossa, appears blue on microscope and showing homer wright rosettes?

A. Meningioma

B. Ependymoma

C. Pilocytic astrocytoma

D. Medulloblastoma

E. Hemangioblastoma

Answer: D

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27. Which of the following brain tumors can disseminate through CSF (drop metastasis) to the spine?

A. Oligodendroglioma

B. Pilocytic astrocytoma

C. Diffuse astrocytoma

D. Medulloblastoma

E. Vestibular schwannoma

Answer: D

---

28. About medulloblastoma, which is wrong?

A. Resistant to Ctx

B. Occurs in children < 15 years old

C. CSF seeding

Answer: A

---

29. Wrong about medulloblastoma:

A. Most common primary in children

B. More in females

C. In posterior fossa

Answer: B

30. The most common primary brain tumor in children is

A. Medulloblastoma

Answer: A

---

31. Drop metastases seen in:

Answer:

Medulloblastoma

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32. Which of the following brain tumors is known to seed through the CSF?

Answer:

Medulloblastoma

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33. Medulloblastoma wrong:

A. Radiosensitive

B. Radiate whole cord

C. Chemo-resistant

Answer: C

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34. Case history of a child with medulloblastoma. He has hydrocephalus. Which of the following is wrong about the management:

A. Total and axial radiotherapy

B. Chemotherapy

C. Repeat surgery for residual mass

D. Drainage procedure

Answer: D

---

35. Medulloblastoma, which is not a sign of poor prognosis:

Answer:

No evidence of residual tumor after resection

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36. About meningioma wrong:

A. Metastasis is common

B. Estrogen receptors

Answer: A

37. According to who classification, which of the following is grade ii:

A. Anaplastic astrocytoma

B. Glioblastoma multiforme

C. Diffuse fibrillary astrocytoma

D. Atypical meningioma

E. C + D

Answer: E

---

38. Cranial meningiomas arise from:

A. Dura

B. Neuroblast

C. Pia matter

D. Periosteum

E. Arachnoid cap cells

Answer: E

---

39. Most common location of intracranial meningioma:

Answer:

Parasagittal

---

40. All are risk factors of meningioma except

A. Recurrent meningitis

B. Trauma

C. Radiation

D. Female

Answer: A

---

41. About meningioma, which is not true:

A. Usually metastasizes

B. History of radiation

Answer: A

42. Which of the following cannot be caused by a suprasellar mass:

A. Anosmia

B. Fits

C. Headache

D. Motor deficits

Answer: D

---

43. Which of the following brain tumors has the best prognosis in general?

A. Glioblastoma

B. Ependymoma

C. Astrocytoma

D. Meningioma

E. Medulloblastoma

Answer: D

---

44. Concerning pituitary tumors all of the following statements are true except:

A. Transsphenoidal approach is the most common surgical approach

B. Prolactinoma is the most common secreting pituitary tumor

C. The visual field deficit is usually due to invasion of the cavernous sinuses on both sides of sella turcica

D. Macroadenoma include all pituitary adenomas size with more than 10 mm

E. They represent about 8–14% of all brain tumors

Answer: C

---

45. Concerning pituitary tumors all of the following statements are true except:

A. Transsphenoidal approach is the most common surgical approach

B. GH secreting adenoma is the most common secreting pituitary tumor

C. Medical treatment is available for prolactin secreting tumors

D. Macroadenoma include all pituitary adenomas size with more than 10 mm

E. They represent about 8–14% of all brain tumors

Answer: B

46. Concerning pituitary tumors all of the following statements are true except:

A. Transsphenoidal approach is the most common surgical approach

B. Prolactinoma is the most common secreting pituitary tumor

C. Medical treatment is available for prolactin secreting tumors

D. Macroadenoma include all pituitary adenomas size with more than 10 mm

E. They represent about 1–2% of all brain tumors

Answer: E

---

47. Galactorrhea–amenorrhea syndrome is most commonly caused by:

A. Chromophobe adenoma

B. Prolactinoma

C. Chorionic carcinoma

D. Basophil adenoma

E. Astrocytoma

Answer: B

---

48. Surgery is usually not the primary treatment option in:

A. Prolactinoma

B. Microadenoma with acromegaly

C. Nonfunctioning pituitary adenoma

D. Invasive pituitary adenoma

E. Microadenoma with Cushing

Answer: A

---

49. Cushing's syndrome can be due to all except:

A. Adrenal tumor

B. Pituitary tumor

C. Lung tumor

D. Breast carcinoma

E. Teratogenic

Answer: E

50. Wrong about pituitary adenoma:

A. Microadenoma less than 1 cm

B. Prolactinoma is the most common type of pituitary adenoma

C. More common in 40–60 year old

Answer: C

---

51. A 10 year old boy, short stature, complaining of bitemporal hemianopia, on MRl shows a mass that is calcified and shows cholesterol crystals. Most likely?

A. Craniopharyngioma

B. Pituitary adenoma

C. Rathke's cyst

Answer: A

---

52. One of these symptoms isn't consistent with a diagnosis of vestibular schwannoma (Question wording is bad, I think it means which is not always there and what its not there at all):

A. Ataxia

B. Hydrocephalus

C. Hearing loss

D. Vertigo

Answer: B

---

53. Associated with vestibular schwannoma >2 cm but <4cm:

A. Facial nerve palsy

B. Hydrocephalus

Answer: A

---

54. Not an intramedullary tumor:

Answer:

Schwannoma

55. Patient has ring enhancing lesion in frontal lobe, papilledema on the right, normal optic disc on left, and positive pronator drift on the left. He is an IV drug abuser. Most likely cause: Final 020

A. Otitis media

B. Endocarditis

C. Dental abscess

D. Lung abscess

Answer: B

Increased ICP

1. Intracranial pressure is:

A. Systolic + cerebral perfusion pressure (CPP)

B. Systolic – cerebral perfusion pressure

C. Mean arterial + CPP

D. Mean arterial – CPP

Answer: D

---

2. A patient's blood pressure is 120/60 mmHg and ICP reading is 30 mmHg. What is his cerebral perfusion pressure (CPP)?

A. 50 mm Hg

B. 30 mm Hg

C. 90 mm Hg

D. 60 mm Hg

E. 70 mm Hg

Answer: A

---

3. One of the following is not seen in increased intracranial pressure:

A. Erosion of posterior clinoid

B. Thumb-eaten appearance (X-ray)

C. Erosion of dorsal sella

D. Shallow posterior fossa

E. Widening of sutures

Answer: D

---

4. In increased intracranial pressure, all of the following are present except:

A. Thumb impression (X-ray)

B. Wide sutures

C. Skull enlargement

D. Erosion of posterior clinoid

E. Enlargement of sella turcica

Answer: C

5. All of the following are correct about the ICP except:

A. Loss of consciousness is a late sign of increased ICP

B. The relation between the pressure inside the skull and its volume is a linear relationship

C. The ICP will only rise after all compensatory mechanisms have been exhausted

D. A chronic high ICP could be detected on plain skull x-rays

E. Lumbar puncture cannot be used to measure the ICP if the brain CT scan is abnormal

Answer: B

---

6. Which of the following is NOT a sign indicating raised intracranial pressure?

A. Sutural diastasis

B. Beaten silver appearance

C. Erosion of posterior clinoid process

D. Bone vascular invagination

E. Intracranial calcification

Answer: E

---

7. Not a sign of increased intracranial pressure:

Answer:

Absent dural sinuses on CT

---

8. Which of the following is false about high ICP?

Answer:

Loss of consciousness is an early sign of high ICP

---

9. Trans-tentorial herniation at level of midbrain will affect all except:

A. Pupillary size

B. Motor system

C. Respiratory system

D. Eye movement

E. Level of consciousness

Answer: C

10. A 50-year-old male presents with sudden onset morning headache and vomiting, and the headache was occipital. Which of the following is correct?

A. The nature of headache is tension-like

B. Consider migraine prophylaxis

C. This patient has papilledema

D. If there is neck stiffness, maybe he is having meningitis

Answer: C

---

11. The most common location for spontaneous intracerebral hemorrhage secondary to hypertension is:

A. Cerebellum

B. Cerebral white matter

C. Basal ganglia

D. Brainstem

E. Cerebral gray matter

Answer: C

---

12. Cushing's triad in relation to raised intracranial pressure includes:

A. Headache, vomiting and visual loss

B. Pupillary dilatation, hypotension, and tachycardia

C. Decerebration, hypotension, and tachycardia

D. Pupillary dilatation, hemiplegia, altered sensorium

E. Bradycardia, bradypnea, and hypertension

Answer: E

---

13. Which statement is wrong regarding head trauma?

A. Normal ICP is 10 mmHg

B. A cerebral perfusion pressure of 70 mmHg is associated with bad outcome

C. Cushing reflex will cause bradycardia and hypotension

D. The midbrain passes through the aperture of tentorium

E. The uncus is the medial part of the temporal lobe

Answer: C

14. All of the following are radiological signs of chronic increased ICP except:

A. Midline shift

B. Erosion of the posterior clinoid processes as seen on plain skull x-rays

C. Widening of the interhemispheric fissure

D. Effacement of the brain sulci on CT or MRI

E. Compressed small ventricles

Answer: C

---

15. General measures that are used to lower intracranial pressure include all of the following, except:

A. Head up 30 degrees

B. Avoid hypotension

C. Avoid jugular venous outflow constriction

D. Induce hyperventilation

E. Intubate patient with GCS < 8 or with respiratory distress

Answer: D

---

16. All the following sites may be used for ICP (intracranial pressure) monitoring except?

A. Subdural

B. Diploic (skull)

C. Brain parenchyma

D. Epidural

E. Intraventricular

Answer: B

---

17. One site we don't monitor ICP:

Answer:

Skull

---

18. ICP monitoring, what is wrong?

A. There are 4 types of waveforms A, B, C, D

B. Complications are infections and hemorrhage, in that order

Answer: A

19. Which one of the following best describes Lundberg (A) ICP (intracranial pressure) waves?

A. Periodic self-limited increase in ICP (20–50 mmHg) occurring every 1 to 2 minutes and lasting several seconds

B. Periodic self-limited increase in ICP (50 mmHg) lasting for 5 to 20 minutes

Answer: A

---

20. Methods to decrease the ICP except:

Answer:

Allow hypotension

---

21. Wrong about idiopathic benign cranial hypertension:

A. No neurological signs except for 6^{th} nerve palsy

B. Normal MRV

Answer: B

---

22. In idiopathic intracranial hypertension, which is false?

A. Intracranial pressure is > 20

B. Papilledema is always present

C. There is a space-occupying lesion in most cases

D. Carbonic anhydrase inhibitor is part of the treatment

E. LP shunt is effective

Answer: C

---

23. A patient was diagnosed with idiopathic intracranial hypertension, which of these symptoms do you suspect?

A. Transient visual obscuration

B. Diplopia

C. Dizziness

Answer: A

24. A patient with benign (idiopathic) intracranial hypertension, Not true?

A. OCPs is a risk factor of BIH

B. The patient may be treated by acetazolamide for 6 weeks

C. The coperitoneal shunt is preferred over VP shunt because the ventricles are small

D. Diagnosis follows Dandy criteria

Answer: B

---

25. All are true about idiopathic intracranial hypertension except:

A. High CSF opening pressure

B. High CSF protein

C. Young obese females

D. Best treatment is by LP shunt

E. CT shows small or normal-sized ventricles

Answer: B

---

26. Case with bradycardia, mydriasis and ……, Dx is:

Answer:

Intracranial hematoma

Subarachnoid Hemorrhage (SAH)

1. Cerebral aneurysm of grade 1 after 3 months, incidence of death is:

A. 2–5%

B. 0–1%

C. 25%

D. 3.5%

Answer: A

---

2. An aneurysm in which of the following is most likely to cause unilateral 3rd cranial nerve palsy:

A. Anterior communicating artery

B. Posterior communicating artery

C. Middle cerebral artery

Answer: B

---

3. Berry aneurysms are usually located in the circle of Willis. The commonest site is:

A. The basilar tip

B. The posterior cerebral artery

C. The anterior communicating artery

D. The middle cerebral artery bifurcation

E. The internal carotid artery bifurcation

Answer: C

---

4. The most common type of intracranial aneurysm is:

A. Saccular

B. Mycotic

C. Pseudoaneurysm

D. Traumatic

E. Fusiform

Answer: A

5. Patients who have survived a subarachnoid hemorrhage from a ruptured intracranial aneurysm are at risk for all except:

A. Re-hemorrhage

B. Cerebral artery vasospasm

C. Ischemic stroke

D. Hydrocephalus

E. Cardiac arrhythmia

Answer: C

---

6. All are prognostic factors of cerebral aneurysm except:

A. Age

B. General medical status

C. Size

D. Hess and hunt

E. Fischer

Answer: E

---

7. Not a risk factor for saccular aneurysm:

A. Marfan

B. Down

C. HTN

D. Atherosclerosis

Answer: B

---

8. Incidence of rupture cerebral aneurysm is:

A. 15–20/100000/year

B. 10–15/100000/year

C. 6–12/100000/year

Answer: C

---

9. Most common site of berry aneurysm is:

Answer:

Anterior communicating artery

10. Which is correct about saccular aneurysm:

A. Most common aneurysm

B. Multiple in 20% of cases

C. Pathology is defective external lamina

D. Mostly at bifurcation of arteries in the base of the brain

E. 90% in anterior circulation

Answer: D

11.Saccular aneurysm wrong:

Answer:

External lamina defect

---

12. In subarachnoid hemorrhage, one of the following is wrong:

Answer:

Berry aneurysm is symptomatic in most cases

---

13. Which of the following is true about vasospasm post SAH?

A. Appears 1–3 days post ictus

B. Ideally treated with nimodipine

C. Best treated with restricted water intake

D. Best treated with triple H therapy

E. It can show up in 20% of angiograms

Triple-H therapy is NO LONGER recommended as a whole, Only the "HYPERTENSION" part is still used

Answer: B?

---

14. Patient has SAH WFNS grade 5?

A. Managed in the ICU

B. GCS is 9–13

C. 65% rate of survival post surgery

D. Good candidate for clipping surgery

Answer: A

15. A lady came complaining of the worst headache of her life, CT was done and showed nothing but her history is consistent with SAH, what is your next step to confirm the diagnosis?

A. Lumbar puncture to confirm the diagnosis

Answer: A

---

16. Percentage of radiographic evidence of vasospasm post SAH is:

A. 20%

B. 30%

C. 40%

D. 50%

E. 60%

Answer: E

---

17. Not an early complication of SAH is:

A. Re-bleeding

B. Vasospasm

C. Hydrocephalus

D. Hyponatremia

Answer: B

---

18. Late complication of SAH (not occurring before 72 hours) is:

A. Hypernatremia

B. Vasospasm

C. Rebleeding

Answer: B

---

19. One is not a manifestation of subarachnoid hemorrhage:

A. Headache

B. Neck stiffness

C. Loss of consciousness

D. Vertigo

E. Vomiting

Answer: D

20. A 50-year-old female presented to ER with sudden onset severe headache and photophobia, on exam neck stiffness, what is your top differential diagnosis?

A. Subarachnoid hemorrhage

B. Meningitis

C. Migraine

D. Idiopathic intracranial hypertension

Answer: A

---

21. Regarding spontaneous SAH, all are correct except:

A. Rebleeding may occur in following 3–10 days

B. Vasospasm may occur in the following 1–3 days

C. Conservative management is recommended in stage 1

Answer: B

---

22. Which is incorrect about subarachnoid hemorrhage?

A. Occurs only in adults

B. Associated with sudden onset headache

C. Aneurysmal hemorrhage has poorer prognosis than AVM

D. Surgery is not done for stage 4

Answer: A

---

23. About SAH, which is not true?

A. F > M

B. Rebleeding mostly occurs in the first 3 days

C. Surgery aims at preventing rebleeding

D. Rebleeding partly occurs due to fibrinolytic activity in CSF

E. The only way to demonstrate blood in CSF is by LP

Answer: E

---

24. Fisher scale for diffuse SAH of 1 mm thickness:

Answer:

Grade 3?

up-to-date (2025) Fischer scale is 3 thick SAH (≥ 1 mm), no IVH, but the one in slides is >1, so not sure

25. If the clinical picture is highly suggestive of subarachnoid hemorrhage and initial CT brain was normal, second step to confirm diagnosis will be:

A. Serum fibrinogen

B. Conventional cerebral angiogram

C. B2-transferrin in the serum

D. Lumbar puncture

E. CT angiogram

Answer: D

---

26. Acute onset of the "worst headache of my life" is typical of:

A. Intracerebral hemorrhage

B. Subarachnoid hemorrhage

C. Cerebellar hemorrhage

D. Temporal arteritis

E. Brain abscess

Answer: B

---

27. All of the following arteries are branches of the basilar artery except:

A. Pontine arteries

B. Middle cerebral artery

C. Posterior cerebral artery

D. Superior cerebellar artery

E. AICA

Answer: B

---

28. Which of the following symptoms is NOT typical for subarachnoid hemorrhage in rupture of arterial aneurysm of cerebral vessels?

A. Kernig's symptom

B. Brudzinski's symptom

C. Occipital stiffness

D. Paresis of the oculomotor nerve

E. Horner's syndrome

Answer: E

29. One of the following must be evaluated by a conventional cerebral angiogram:

A. Meningitis

B. Cerebellar tumor

C. Cerebral tumor

D. Spinal tumor

E. Spontaneous subarachnoid hemorrhage

Answer: E

---

30. The approximate 2-hour mortality in spontaneous subarachnoid hemorrhage is:

A. Less than 5%

B. 30–50%

C. More than 90%

D. 10–14%

E. 60–80%

Answer: B

---

31. All of the following are complications for SAH except:

A. Rebleeding

B. Vasospasm

C. Hydrocephalus

D. Septic meningitis

E. Electrolyte disturbances

Answer: D

---

32. All of the following are complications for SAH except:

A. ECG changes

B. Hydrocephalus

C. Electrolyte disturbances

D. Vasospasm

E. Cerebrospinal fluid fistula

Answer: E

33. Arteriovenous malformations of the brain are most commonly seen in the distribution of:

A. Anterior cerebral artery

B. Basilar artery

C. Middle cerebral artery

D. Posterior cerebral artery

E. Vertebral artery

Answer: C

---

34. Which of the following is NOT true concerning subarachnoid hemorrhage?

A. A large amount of hemorrhage in the basilar cisterns could be a ruptured aneurysm

B. Subarachnoid hemorrhage most commonly occurs over the cerebral convexity

C. Subarachnoid hemorrhage can occur adjacent to a cerebral contusion

D. On CT, the hemorrhage appears as focal hypodensity in sulci and fissures

E. Subarachnoid hemorrhage occurs with injury of small arteries or veins on the surface of the brain

Answer: D

---

35. A fifty-four old female patient presented to the emergency department with sudden onset headache associated with repeated vomiting. Her level of consciousness was 14/15 according to gcs. She had a significant neck stiffness, which of the following steps is wrong:

A. Urgent ct-scan of the brain

B. Endotracheal intubation and hyperventilation

C. Lumbar puncture if the ct-scan revealed no abnormal findings

D. Ophthalmological examination may be normal

E. Admission to an intensive care unit for observation

Answer: B

---

36. We use cerebral angiography in which of the following condition:

Answer:

Subarachnoid hemorrhage

37. All the following are causes of loss of consciousness in subarachnoid hemorrhage except:

A. Increase of intracranial pressure beyond cerebral perfusion pressure

B. Destruction of important areas of the brain stem

C. Hypovolemia

D. The occurrence of seizures

E. Lateral transtentorial herniation

Answer: C

---

38. About aneurysm management:

Answer:

Antifibrinolytics prevents rebleeding

---

39. Sudden onset headache, seizure, no loc, twice vomiting, dx?

Answer:

SAH

---

40. True regarding subarachnoid hemorrhage (SAH):

Answer:

Saccular aneurysm origin of SAH is worse than AVM

Hydrocephalus

1. All are true regarding the CSF except:

A. The total volume is replaced three times daily by the continuous process of secretion and absorption

B. The volume of CSF in an adult human being is 150 cc

C. The normal CSF has a salty taste

D. The CSF protein concentration is less than that of plasma

E. The secretion of CSF is mainly the function of the arachnoid granulations

Answer: E

---

2. About CSF, all the following are correct except:

A. It's formed solely by choroid plexus

B. Protein concentration is about 40 mg/dL

Answer: A

---

3. Cerebrospinal fluid is formed by:

A. Active secretion

B. Filtration

C. Both, active secretion and filtration

D. Physical osmosis

E. Diffusion

Answer: C

---

4. Which of the following causes communicating hydrocephalus?

A. Bacterial meningitis

B. 3rd ventricle papilloma

Answer: A

---

5. Which of the following causes communicating hydrocephalus:

Answer:

Choroid plexus papilloma

6. The most common cause of hydrocephalus in children is:

A. Congenital aqueductal stenosis

B. Choroid plexus papilloma

C. Temporal lobe lesion

Answer: A

---

7. All of the following can cause communicating hydrocephalus except:

A. Meningeal carcinomatosis

B. Subarachnoid hemorrhage

C. Bacterial meningitis

D. Choroid plexus papilloma

E. Colloid cyst of the third ventricle

Answer: E

---

8. All causes communicating hydrocephalus except:

A. Meningitis

B. Aqueductal stenosis

C. Encephalocele

D. Normal pressure hydrocephalus

E. Subarachnoid hemorrhage

Answer: B

---

9. All of the following can cause non-communicating hydrocephalus except?

A. Fourth ventricle ependymoma

B. Colloid cyst of the third ventricle

C. Choroid plexus papilloma of the lateral ventricle

D. Cerebellar pilocytic astrocytoma

E. Brain stem glioma

Answer: C

---

10. One isn't a non-communicating hydrocephalus:

Answer:

Choroid plexus tumor

11. All can cause non-communicating hydrocephalus except:

A. SAH

B. Craniopharyngioma

Answer: A

---

12. About dandy-walker malformation which is not true

A. Absent or hypoplastic cerebellar vermis

B. Posterior fossa cyst communicates with 4th ventricle

C. Associated with hydrocephalus

D. Small posterior fossa

E. Can be associated with polydactyly

Answer: D

---

13. Dandy walker wrong:

A. Small posterior fossa

Answer: A

---

14. The compression of the pretectal area in cases of hydrocephalus will cause:

A. Diabetes insipidus

B. Failure of upward gaze

C. Mental retardation

D. Cardiorespiratory arrest

E. Seizure disorders

Answer: B

---

15. In children "setting sun" is most commonly seen in:

A. Craniopharyngiomas

B. Medulloblastoma

C. Hydrocephalus

D. Head injuries

E. Brain abscess

Answer: C

16. One of the following symptoms raises suspicion of hydrocephalus in newborns:

A. Increased motor activity

B. Flaccidity

C. Disproportional increase in the size of the infant's head

D. Increased excitability

E. Good feeding

Answer: C

---

17. Head circumference of full-term baby at birth:

Answer:

35 cm (range 33–36)

---

18. Sign of hydrocephalus:

Answer:

Disproportion of head of baby

---

19. In a 4-day old with hydrocephalus and suspected aqueductal stenosis how to confirm with best modality?

A. Trans-fontanel US

B. MRI

C. CT

D. X-Ray

MRI confirms the cause (aqueductal stenosis); US only detects hydrocephalus. (slide 39)

Answer: B?

---

20. Endoscopic third ventriculostomy connects the third ventricle with which of the following:

A. Lateral ventricles

B. Aqueduct of sylvius

C. 4th ventricle

D. Pineal recess

E. Interpeduncular cistern

Answer: E

21. Which is/are acceptable procedures for the treatment of hydrocephalus?

A. Endoscopic third ventriculostomy

B. Ventriculoperitoneal shunt

C. Ventricular access device with frequent tapping

D. External ventricular drain

E. All of the above

Answer: E

---

22. Not a treatment modality for non-communicating hydrocephalus:

A. Lumboperitoneal shunt

B. VP shunt

C. Ventriculostomy

D. Endoscopic third ventriculostomy

E. Removal of the obstruction

Answer: A

---

23. Which one of the following is not a shunting procedure for hydrocephalus?

A. Ventriculo-cystic shunt to the urinary bladder

B. Ventriculo-peritoneal shunt to the peritoneal cavity

C. Ventriculo-pleural shunt to the pleural space

D. Ventriculo-atrial shunt to the heart

E. Ventriculo-subarachnoid shunt to the subarachnoid space

Answer: A

---

24. One of the following is a known method for treatment of hydrocephalus?

A. Perforation of the septum pellucidum

B. Dissection of the cerebellar vermis

C. Puncture of the corpus callosum

D. Ventriculoperitoneal shunt

E. Arteriovenous shunting

Answer: D

25. All of the following is indicated for hydrocephalus:

A. VP shunt

B. Third ventricle fenestration

C. Intermittent drainage

D. All of the above

Answer: D

---

26. A 2-year-old male child, known case of hydrocephalus, presented to the ER with fever and hypoactivity. He had an operation for a ventriculoperitoneal shunt insertion one month ago. Sampling of the cerebrospinal fluid was done from the valve, the laboratory results were WBC 450/mm^3, protein 135 mg/dL, sugar 5 mg/dL. The next step will be:

A. Reassurance and referral to outpatient clinic

B. Admission to hospital for parenteral antibiotics and shunt removal

C. Do the covid 19 swab for the fever

D. Keep under observation till you get the results of the CSF culture and sensitivity

E. Discharge home on oral antibiotics

Answer: B

---

27. A child had VP shunt surgery when he was 40 days old, presented with fever and hypoactivity, which of the following is true?

A. Once infection is established, oral antibiotics are enough

B. Parenteral antibiotics is the only effective treatment in this case

C. CT scan has a diagnostic role to exclude infection

D. Do CSF examination if other causes of fever are excluded

Answer: D

---

28. All are true regarding shunt complications in hydrocephalus except:

A. Meningitis

B. Shunt rejection

C. Ventriculitis

D. Subdural hematoma

E. Epilepsy

Answer: B

29. One of the following isn't a complication of vp shunt:

A. Infection

B. Electrolyte imbalance

C. Displacement

Answer: B

---

30. Wrong about shunt infections:

Answer:

The most common causative organisms are gram negative

---

31. One of these options is incorrect when dealing with shunt infection

A. Oral antibiotics for 2 weeks

B. Insertion of an EVD

C. Remove the shunt

D. Reinsert the shunt after at least 2 normal CSF results

Answer: A and D

---

32. Wrong about ventriculoperitoneal shunt infection management

A. Replacement by lumbo-peritoneal shunt

B. Start antibiotics

C. Remove the shunt

Answer: A

---

33. Wrong about the management of shunt infections:

A. Immediate replacement of the shunt

B. External ventricular drain

C. Systemic antibiotics

D. Intraventricular antibiotics

E. Endoscopic third ventriculostomy

Answer: A

34. What statement better describes normal pressure hydrocephalus (NPH)?

A. NPH is a common condition of newborns and never occurs in teenagers

B. Patients with NPH, the ventricles enlarge but the pressure of the CSF is less than normal range

C. NPH is a life-threatening condition and should be treated as an emergency

D. Diagnostic criteria are easily applied due to knowledge of the underlying pathophysiology

E. The symptom might improve with shunting is incontinence then gait disturbance and lastly dementia

Answer: E

---

35. The two lateral ventricles are separated by:

A. Falx cerebri

B. Septum pellucidum

C. Cavum vergae

D. Corpus callosum

E. Tentorium

Answer: B

---

36. Inferior sagittal sinus drains into:

A. Sigmoid sinus

B. Inferior petrosal sinus

C. Transverse sinus

D. Straight sinus

E. Superior sagittal sinus

Answer: D

Spinal Tumors

1. Most common first presentation of spinal tumors in children:

A. Gait

B. Sensory deficit

C. Pain

D. Motor deficit

E. Sphincter problem

Answer: C

---

2. Which one of the following is true about spinal tumors?

A. Schwannomas are considered intramedullary tumors

B. The most common spinal tumors are metastases

C. Most prostatic metastases occur in the thoracic spine

D. Ependymomas are usually of high grade

E. Meningiomas tend to be associated with NF1

Answer: B

---

3. Which of the following is wrong about spinal tumors?

A. The commonest tumor is metastases

B. Meningiomas tend to be associated with neurofibromatosis type I

C. Ependymomas are more common than astrocytomas

D. Schwannomas are more easily excised than neurofibromas

E. Most prostatic metastases occur in the lumbar spine

Answer: B

---

4. All of the following are intramedullary spinal tumors except:

A. Plasmacytoma

B. Ependymoma

C. Astrocytoma

D. Hemangioblastoma

E. Lipoma

Answer: E

5. One of the following spinal cord tumors is most likely to be found in an intradural intramedullary location:

A. Ependymoma

B. Schwannoma

C. Meningioma

D. Metastasis

E. Osteoma

Answer: A

---

6. A 60-year-old woman came to the OPD complaining of long-standing dorsal pain and gradual onset of sensory and motor manifestations in her lower limbs progressing over three months. Examination showed paraparesis grade 3/5, increased tone, exaggerated reflexes, extensor plantar reflexes, and sensory level at T10. The most likely diagnosis would be:

A. Metastatic spinal compression

B. Schwannoma at the left T10 root

C. Syringomyelia

D. Filum terminale ependymoma

E. Dorsal meningioma

Answer: E

---

7. 45 year old woman, diagnosed with NF2, has foot drop, power 3/5 in lower limb, MRI shows enhancing mass that is intradural extramedullary at the level of L5–S1:

A. Meningioma

B. Ependymoma

C. Schwannoma

D. Astrocytoma

Answer: A

---

8. A lady came to you with 2-year history of lower limb weakness, the most likely diagnosis is:

A. Breast cancer

B. Spinal meningioma

C. Schwannoma

Answer: B

9. A 60-year-old man developed back pain followed by paraparesis then progressed to paraplegia over 6 hours.

On CXR he had a hilar mass. Which of the following is most likely the diagnosis:

A. Extradural extramedullary neoplasm

B. Extramedullary intradural neoplasm

C. Intramedullary intradural neoplasm

D. Hematomyelia

E. Transverse myelitis

Answer: A

---

10. A 45-year-old female patient was admitted because of progressive dorsal pain, paraparesis, and lower limb hypoesthesia of two-year duration. The most likely diagnosis is:

A. Spinal neurofibroma

B. Spinal epidural breast metastases

C. Transverse myelitis

D. Spinal meningioma

E. Spinal arteriovenous malformation

Answer: D

---

11. Image showing an intradural intramedullary tumor, sausage shaped:

A. Ependymoma

B. Schwannoma

C. Neurofibroma

D. Lipoma

Answer: A

---

12. Most common spinal tumor:

A. Extradural metastasis

B. Ependymoma

C. Astrocytoma

D. Meningioma

Answer: A

13. The most common route of metastasis in spinal tumors is:

A. Spinal seeding through meninges

B. Batson plexus (hematogenous spread)

C. Direct spreading

D. Lymphatic spread

Answer: B

---

14. One is false about Froin's syndrome:

A. Increase cell in CSF

B. Increase protein

C. Xanthochromic

D. Clots

Answer: A

---

15. What's wrong statement?

Answer:

A Female with benign spine tumor, it's most commonly due to schwannoma.

---

16. A 60-year-old female patient with gradual pain over the past 2 months:

Answer:

Spinal meningioma

---

17. Spinal tumor in female intradural extramedullary:

Answer:

Meningioma

Spina Bifida

1. Not related to myelomeningocele:

A. Chiari malformation

B. Syringomyelia

C. Dandy walker

D. Hydrocephalus

E. Neurogenic bladder

Answer: C

---

2. Wrong about a myelomeningocele:

A. Surgery can reverse the neurological deficits

B. Management includes dressing, antibiotics and closure within 48–72 hours

C. It usually develops in the first month of pregnancy

D. Can be prevented by taking folic acid supplementation prior to pregnancy

E. It is usually associated with hydrocephalus

Answer: A

---

3. After a successful repair of a lumbar myelomeningocele, the chance of developing hydrocephalus is approximately:

A. 10%

B. 80–90%

C. 20–50%

D. 100%

E. 50–70%

Answer: B

---

4. Incidence of myelomeningocele is:

A. 0.5–2/1000 birth

B. 2–5/1000 birth

C. 5–15/1000 birth

D. 15–25/1000 birth

E. 25–35/1000 birth

Answer: A

5. Which of the following lesions is not one of the cutaneous stigmata of occult spinal dysraphism?

A. Midline lumbar capillary hemangioma

B. Focal hairy patch over the thoracolumbar spine

C. Dermal sinus located above the midsacrum

D. Café-au-lait spot over the thoracolumbar spine

E. Midline subcutaneous lipoma

Answer: D

---

6. Myelomeningoceles are congenital malformations of the spinal cord. Which of the following findings are not commonly associated?

A. Mandatory urinary incontinence

B. Chiari II malformation

C. A midline dorsal spinal mass easily noted at birth

D. Skin, bone, and dural defects superficial to the neural placode

E. Hydrocephalus

Answer: A

---

7. After the antenatal diagnosis of a myelomeningocele in a pregnant woman, one of the following steps is false:

A. Planning for the mode of delivery

B. Supplement with folic acid can correct the anomaly in the fetus

C. Psychological support for the family

D. In some centers in-utero surgery can be offered

E. The alpha fetoprotein is usually raised in the serum of the pregnant mother

Answer: B

---

8. Myelomeningoceles are congenital malformations of the spinal cord, which of the following findings is not commonly associated with it?

A. Hydrocephalus

B. Chiari II malformation

C. A midline lumbar or lumbosacral mass easily noted at birth

D. Skin, bone and dural defects superficial to the neural placode

E. Upper limb weakness

Answer: E

9. Wrong about myelomeningocele:

A. Associated with agenesis of corpus callosum

B. Associated with Arnold-Chiari malformation

C. 85% associated with aqueductal stenosis

D. Main pathology is the absence of vertebral arch

E. Associated with tethered cord

Answer: C

---

10. One of these is not associated with chiari malformation ii:

A. Hydrocephalus

B. Myelomeningocele

C. Syringomyelia

D. Small posterior fossa

E. Atresia of canal of luschka

Answer: E

---

11. Which of the following is not seen in association with type ii chiari malformations?

A. Myelomeningocele

B. Hydrocephalus

C. Syringomyelia

D. Cerebellar herniation through foramen magnum

E. A large posterior fossa cyst in communication with the fourth ventricle

Answer: E

---

12. Not with Arnold chiari syndrome:

A. Syringomyelia

B. Myelomeningocele

C. Large 4th ventricle

D. Hydrocephalus

E. Cerebellar herniation

Answer: C

13. Meningomyelocele, all of the following are aims of treatment except:

A. Plastic appearance

B. Decrease CSF leak

C. Prevent infection

D. Prevent further neurological deficit

Answer: D

---

14. Regarding myelomeningocele which is incorrect:

A. Associated with hydrocephalus in 80% of cases

B. Male predominance

C. Occurs during the first month of pregnancy

D. Associated with diastematomyelia

Answer: B

---

15. A question about myelomeningocele: what is wrong:

A. 85% of myelomeningocele has hydrocephalus

B. 15% of meningocele have hydrocephalus

C. Most of patient with myelomeningocele have Arnold Chiari II

D. All of the above are correct

Answer: D

---

16. One is false about meningocele:

A. Cystic cavity of CSF lined with meninges or skin with no neural tissue

B. More common than myelomeningocele

C. Transillumination is helpful

Answer: B

---

17. Newborn known to have Mongolian spot what to do?

A. Reassurance

B. Spinal MRI

C. Prepare for surgery

Answer: A

18. A child was found to have a tuft of hair in his lower back which is false:

A. Assure family that it's normal and nothing is wrong

Answer: A

---

19. A pregnant lady was informed that her baby has myelomeningocele in an antenatal care clinic, which of the following is not true:

A. Folic acid supplementation may reverse this condition

Answer: A

---

20. What is the management of newborn found to have myelomeningocele and hydrocephalus?

A. Simultaneous repair and shunt

Answer: A

Degenerative Spinal Disease

1. All the following can cause spinal canal stenosis except

A. Multiple osteophytes

B. Ligamentum flavum hypertrophy

C. Facet joint hypertrophy

D. Denticulate ligament hypertrophy

E. Multiple disc bulges

Answer: D

---

2. All can indicate the level of disc prolapsed except

A. Muscle weakness

B. Absent reflex

C. Absent Babinski

D. Radiation of pain

E. Dermatomal distribution of sensory loss

Answer: C

---

3. Pure radicular clinical manifestation will include all these except

A. Weakness

B. Sciatica

C. Muscle atrophy

D. Babinski sign

E. Decreased deep tendon reflexes

Answer: D

---

4. The commonest cause of sciatica after successful lumbar disc surgery is:

A. Spinal instability

B. Recurrence of disc prolapse

C. Postoperative disc space infection

D. Spinal epidural hematoma

E. Adjacent segment degeneration

Answer: B

5. The percentage of low-risk back pain patients who will improve with conservative non-surgical treatment in one month is:

A. 30%

B. 60%

C. 100%

D. 90%

E. 10%

Answer: B

---

6. In a patient with cervical disc prolapse, one of the following physical signs is suggestive for cervical myelopathy:

A. Torticollis

B. Positive spurling test

C. Atrophy of the shoulder muscles

D. Hoffman sign

E. Inverted supinator jerk

Answer: D

---

7. A right-sided disc herniation at the L5-S1 level typically may cause:

A. Low back pain and right sciatica

B. Weakness of dorsiflexion of the right foot

C. A diminished or absent left ankle jerk

D. Diminution of sensation over the medial aspect of the right foot, including the great toe

E. Weakness of dorsiflexion of the left foot

Answer: A

---

8. Which of the following is not a component of lower motor neuron lesion?

A. Disuse atrophy

B. Absent deep tendon reflexes

C. Fasciculations and fibrillations

D. Hypotonia

E. Hyporeflexia

Answer: A

9. The definition of low back pain in epidemiological studies is which one of the following statements:

A. Is any pain between T12 and the sacrum

B. Is any midline pain between the sacroiliac joints and the superior margin of L1

C. Is any pain between T10 and the sacrum

D. Is any midline pain between T12 and the sacroiliac joints

E. Is any pain between the costal margin and the buttock crease

Answer: E

---

10. A prolapsed intervertebral disc at L3-L4 level in a far lateral direction will produces?

A. L4 radiculopathy

B. L3 radiculopathy

C. L5 radiculopathy

D. L2 radiculopathy

E. Cauda equina syndrome

Answer: B

---

11. Which of the following nerve roots is involved in the ankle jerk?

A. L1

B. L4

C. S3

D. S1

E. L5

Answer: D

---

12. About the anatomy of the spine, all are true except:

A. The ligamentum flavum covers the interlaminar space

B. The disc is named after the vertebrae above and that below

C. Ligamentum flavum is absent in the cervical spine

D. The disc prolapse usually compresses the traversing nerve root at the same level

E. The foramen is named after the exiting nerve root

Answer: C

13. A 36-year-old man developed neck and left arm pain. He noted paresthesia in the left index and long fingers. He was found to have weakness of the left triceps muscle and a diminished left triceps jerk. His left-sided disc herniation is most likely to be at:

A. C3-C4

B. C4-C5

C. C5-C6

D. C6-C7

E. C7-T1

Answer: D

---

14. About the anatomy of the spine, which is true?

A. The ligamentum flavum covers the anterior vertebral bodies

B. The disc is named after the vertebrae above

C. Ligamentum flavum is absent in the cervical spine

D. The disc prolapse usually compresses the exiting nerve root at the same level

E. The foramen is named after the exiting nerve root

Answer: E

---

15. The percentage of low-risk back pain patients who will improve with conservative non-surgical treatment in one month is:

A. 30%

B. 60%

C. 100%

D. 90%

E. 10%

Answer: B

---

16. Modic type two changes are:

A. Low signal T1 and high signal T2

B. Low signal T1 and low signal T2

C. High signal T1 and high signal T2

D. High signal T1 and low signal T2

E. High signal T1, high signal STIR, and low signal T2

Answer: C

17. A 41-year-old male presents with neck pain that was radiating to the left arm of 4 weeks duration. On examination there is weakness of triceps and wrist flexion. Which level is the pathology likely to be at?

A. C4/5

B. C6/7

C. C5/6

D. C7/T1

E. T1/2

Answer: B

---

18. A 35-year-old male patient presented to the ER with one day history of severe low back pain that was radiating to the right lower limb pain down to the big toe and associated with paresthesia. The power in his right ankle dorsiflexion was 1/5 (MRC scale). The best investigation should be:

A. Nerve conduction study and EMG

B. Lumbar spine CT

C. Myelogram

D. Lumbar spine MRI

E. Lumbosacral X-ray

Answer: D

---

19. The indications for surgery in disc prolapse include:

A. Cauda equina syndrome

B. Progressive motor deficit

C. Pain affecting the quality of life

D. All of the above

Answer: D

---

20. Old man with neck pain radiating to medial arm reaching index, has absent biceps reflex, normal triceps reflex

A. C7 radiculopathy

B. C6 radiculopathy

C. Cervical canal stenosis

Answer: B

21. Woman with trauma to spine has small disc prolapse at L5 S1 and large L3 L4 disc prolapse affecting the nerve beyond the nerve foramen has weakness on knee extension and absent knee reflex, numbness on the medial thigh. Affected nerve is?

A. L5

B. L3

C. S1

D. L4

Answer: B

---

22. Regarding far lateral prolapsed intervertebral disc, the following are true, except:

A. Pain is more severe than medial disc

B. Fragmented disc is more common

C. Tilting to the opposite side reproduce pain

D. Affecting nerve at the same level of the lesion

Answer: C

---

23. Wrong about L4–L5 disc prolapse

A. The most common disc prolapse

B. The nerve root affected is L5

C. Most often, the management is conservative

D. Ankle reflex is absent or decreased in most cases

Answer: A & D

---

24. In lateral herniation the structure damaged is:

A. Uncus

B. Tonsils

C. Brainstem

D. Cerebellum

Answer: A

25. Which of the following is caused by mass:

A. Sensory

B. Motor

C. Hydrocephalus

D. All of the above

Answer: D

---

26. Disk prolapse at L4-L5 which of the following will happen?

A. Knee reflex absent

B. Dorsiflexion of the foot weaker

C. Positive Babinski

Answer: B

---

27. L4-L5 disc prolapse true except:

A. Affected the nerve of that level

B. Decreasing the pain when tilting to the opposite side

C. Treated conservatively

Answer: A

---

28. Complication of lumbar disc surgery except:

A. Gynecological injury

B. Not the level of the affected disc

C. Hit an artery

Answer: A

---

29. Positive Romberg sign means the lesion is in:

A. Dorsal column

B. Cerebellar midline

C. Cerebellar hemisphere

Answer: A

30. An old lady presented with lower back pain, that is increased upon flexion of the back (clinical scenario of spinal canal stenosis), what is the most appropriate next step

A. Order MRI to confirm the diagnosis

B. Rest and analgesia

Answer: A

---

31. Patient complain of paresthesia extend to the knee what is the nerve root that is affected:

A. L4 in L4-L5 far lateral disc

Answer: A

---

32. A patient with L4/L5 disc prolapse and the prolapse is far lateral, what is the neurological manifestations associated with it?

Answer:

L4 radiculopathy

---

33. Neck pain, how to confirm disc:

Answer:

Cervical MRI

---

34. Wrong about spinal canal stenosis:

Answer:

Neurological symptoms are common

---

35. Common site of lumbar canal stenosis:

Answer:

L5-S1

---

36. Surgery for cervical prolapse:

Answer:

Microscopic anterior discectomy with fusion

37. Not a feature of spinal cord hemisection:

Answer:

Contralateral paralysis

---

38. A patient with neck pain, weakness of biceps muscle, power is 3/5, what is the best next step?

Answer:

Anterior discectomy with fusion

---

39. Knee reflex root:

Answer:

L4

---

40. Which of the following is true about ligamentum flavum?

Answer:

It is attached to the inner part of the lamina above (the anterior surface) and the outer part of the lamina below (upper border)

Spinal Cord Injury

1. A patient comes to the ER 30 minutes after an RTA. He has signs of C7 radiculopathy. Which of the following is appropriate in his management:

A. Cervical immobilization with cervical collar

B. Cervical x-ray

C. Cervical MRI

D. Cervical CT with 3D reconstruction of C1 & C2

E. All of the above

Answer: E

---

2. Not with cauda equina syndrome:

A. Hyporeflexia

B. Saddle anesthesia

C. Positive Babinski

D. Retention

E. Incontinence

Answer: C

---

3. In complete spinal cord transection, all are expected except:

A. Spinal shock

B. Loss of sphincteric tone

C. Paraplegia below the level of the injury

D. Hypothermia

E. Bradycardia with hypotension

Answer: D?

---

4. Which one of the following is not a component of Horner's syndrome?

A. Miosis

B. Enophthalmos

C. Anhidrosis

D. Exophthalmos

E. Correctible ptosis

Answer: D

5. One of the following is LEAST common clinical presentation of conus medullaris syndrome:

A. Urinary incontinence

B. Knee jerk hyporeflexia

C. Severe back pain

D. Erectile dysfunction

E. Perianal numbness

Answer: B

---

6. 60/70 Year old Male, DM, IHD stented, dyslipidemia, history of disc surgery 20 years ago, presented with acute sudden lower limb pain and paresthesia no motor deficit, not relived by NSAID nor morphinine, the dx:

A. Acute disc prolapse

B. Spinal stenosis

C. Degenerative spondylolisthesis

D. Acute arterial insufficiency

E. Acute compression fracture

Answer: D

---

7. In unconscious patient the spinal injury is assessed by one of the following:

A. Spinal tenderness

B. Absence of response to painful stimulus

C. Absence of deep reflexes

D. Inspection of the back of patient

E. Moving upper and lower limbs of the patient

Answer: C

---

8. All the following indicate injury at S1 level except:

A. Weakened plantar flexion of the ankle

B. Weakened dorsiflexion of the four lateral toes

C. Upgoing plantar (extensor) reflex

D. Hypoesthesia on the lateral border of the foot

E. Absent ankle reflex

Answer: C

9. Which one of the following results from a lesion of the common peroneal nerve at the fibular head?

A. Weakness of foot plantar flexion

B. Absent ankle jerk

C. Weakness of foot inversion

D. Weakness of knee flexion

E. Weakness of foot dorsiflexion at the ankle (foot drop)

Answer: E

---

10. Which of the following statements is true?

A. The usual symptomatic lumbar disc herniation occurs in a far lateral direction

B. Approximately 95 percent of lumbar disc herniations occur at the L5-S1 or L2-L3 level

C. Sciatica is a term used to denote pain felt along the distribution of the sciatic nerve

D. Weakness of dorsiflexion of the foot is a mechanical sign of a lumbar disc herniation

E. X-ray films of the lumbosacral spine are obtained to demonstrate the presence and location of a lumbar disc herniation

Answer: C

---

11. Which spinal cord injury should undergo surgical treatment?

A. Concussion

B. Contusion

C. Compression

D. Complete anatomic rupture

E. Hematomyelia

Answer: E

---

12. What is the most common incomplete spinal cord injury type?

A. Anterior cord

B. Central cord

C. Posterior cord

D. Cauda equina

E. Brown Sequard

Answer: B

13. Which of the following is not a characteristic of the Brown-Sequard syndrome?

A. Contralateral loss of temperature sensation 2–3 segments below the lesion

B. Ipsilateral loss of position and vibratory sense below the lesion level

C. Contralateral paralysis below the lesion level

D. Ipsilateral pyramidal signs

E. Ipsilateral complete loss of sensation at the lesion level

Answer: C

---

14. A patient presented to the ER after sustaining an RTA. On examination, he was found to have significant bilateral upper limb weakness and normal lower limbs. The patient is most likely suffering from:

A. Hemi transection of the cord

B. Spinal shock

C. Anterior cord syndrome

D. Central cord syndrome

E. Cauda equina syndrome

Answer: D

---

15. Which of the following is not a feature of the cauda equina syndrome?

A. Flaccid paresis

B. Hypo-reflexia

C. Hyper-reflexia

D. Symmetric neurological signs

E. Muscle atrophy

Answer: C

---

16. MOST COMMON vertebrae involved in RTA:

A. Cervical

B. Thoracolumbar

C. Lumber

D. Thoracic

Answer: A

17. A 56-year-old man who sustained a road traffic accident, presented to the emergency department with neck pain and left sided body weakness, his physical examination revealed lost positional sensation on the left side with impaired pain and temperature sensation on the right side of his body, this clinical picture fits with:

A. Anterior cord syndrome

B. Brown-Sequard syndrome

C. Complete spinal cord injury

D. Posterior cord syndrome

E. Central cord syndrome

Answer: B

---

18. Which of the following is NOT transmitted via the dorsal column system?

A. Position

B. Vibration

C. Pain

D. Fine touch

E. Pressure

Answer: C

---

19. The most common cervical injury is:

A. Degenerative

B. Transverse myelitis

C. Spondyloarthropathies

D. Traumatic

Answer: D

---

20. Which nerve fibers share in the control of normal bladder function:

A. Vagal and sacral efferent only

B. Sacral and lumbar only

C. Sacral, lumbar, and descending cortical

D. Thoracic, lumbar, and cervical fibers only

Answer: C

21. Associated with high velocity pelvic fracture:

A. Head injury

B. Liver injury

C. Peripheral nerves injury

D. Spleen injury

Answer: C

---

22. Patient with complete block at T5 compression in jugular vein and release of pressure during LP:

A. Rapid increase and rapid fall

B. Rapid increase and no fall

C. No increase and rapid fall

D. No increase and no fall

Answer: B

---

23. Most common affected cranial nerve by injury:

A. Olfactory

B. Abducent

C. Facial

D. Vagus

Answer: B

---

24. Which of the following are indications for disk surgery:

A. Cauda equina compression

B. Progressive deficit

C. Severe pain affecting life

D. All of the above

Answer: D

---

25. Jefferson fracture:

A. Is a fracture of C1 vertebra

B. Fracture of odontoid

C. Fracture of C7

Answer: A

26. Wrong about muscle strength:

A. 0 → No muscle contraction

B. 1 → Fasciculation of the muscle

C. 2 → Against gravity

D. 5 → Full strength

Answer: C

---

27. Which of the following does not cause cauda equina syndrome:

A. Transverse process fracture

B. Central disc prolapses

C. Hematoma developing after laminectomy

Answer: A

---

28. Most common indication for surgery

A. Neurological deficit

B. Intractable sciatica

C. Cauda equina surgery

Answer: A

---

29. Cause of cervical myelopathy in age above 50?

A. Vitamin B12 deficiency

B. Cervical spondylosis

C. Infarct to spinal cord

Answer: B

---

30. Brown-Sequard at T6 wrong:

A. Loss of pain sensation 2 levels above lesion

B. Dissociative sensation

C. 90% can walk

Answer: A

31. A man comes after trauma complaining of numbness in C7 distribution following trauma, what can be done to see the cause:

A. Neck X-ray

B. CT scan C1–T1

C. All of the above

Answer: C

---

32. Which of the following isn't a complication of neurogenic shock?

A. Bradycardia

B. Hypotension

C. Tachycardia

Answer: C

---

33. Patient has hyperreflexia in the knee with saddle anesthesia and urinary incontinence, prolapse shown at L1 L2?

A. Conus medullaris

B. Cauda equina

C. Radiculopathy

Answer: A

---

34. Not associated with GBS

A. Hyperreflexia

B. High and low blood pressure

Answer: B

---

35. About spinal cord, all the following are correct except:

A. Denticulate ligament is formed by condensation of subarachnoid matter

B. Artery of Adamkiewicz supplies the thoracic vertebrae

Answer: A

---

36. A feature of conus medullaris syndrome:

A. Anal areflexia

Answer: A?

37. Not a feature of cauda equina:

A. Pyramidal signs

Answer: A

---

38. Not true regarding spinal cord injury:

Answer:

More common in pediatrics

---

39. Which of the following does not cause foot drop?

Answer:

Femoral nerve injury

---

40. Brown-Sequard syndrome, which of the following correctly describes it?

Answer:

Ipsilateral loss of motor function with contralateral loss of pain and temperature sensation

تم بحمد الله

إن أصبنا فمن الله وإن أخطأنا فمن أنفسنا.

بالتوفيق جميعًا، لا تنسونا من صالح دعائكم