## # [3] Craniocerebral trauma # 2

## [in each question is only one correct answer]

During a game, a friend has thrown a bottle which hits on the lateral part of the head of his 16-years-old friend. During 30 sec. injured friend seemed to be deaf but later was completely recovered. But suddenly he fell into the coma. The sensitivity of the opposite trauma part became weak. In 25 minutes he was delivered to the hospital without reaction to pain. Pulse – 40 beats/min., without arrhythmia. On both hands blood pressure – 170/110 mm Hg, the hypostasis of optic nerve was not find out, but there was a venous stagnation in the ocular fundus. What is the possible diagnosis:

- 1. Epileptic attack.
- 2. Infringement of warm conductivity.
- 3. Increase of intracranial pressure.
- 4. Weakness syndrome.
- 5. Formation of hydrocephaly.

During a game, a friend has thrown a bottle which hits on the lateral part of the head of his 16-years-old friend. During 30 sec. injured friend seemed to be deaf but later was completely recovered. But suddenly he fell into the coma. The sensitivity of the opposite trauma part became weak. In 25 minutes he was delivered to the hospital without reaction to pain. Pulse – 40 beats/min., without arrhythmia. On both hands blood pressure – 170/110 mm Hg, the hypostasis of optic nerve was not find out, but there was a venous stagnation in the ocular fundus. What is the fastest treatment of the young man in the next 4 hours?

- 1. Craniotomy.
- 2. Antihypertensive treatment.
- 3. Installation of rhythm driver.
- 4. Ventriculoperitoneal shunting.
- 5. No epileptic treatment.

A patient has had a heavy craniocerebral trauma 3 months ago – opened right frontal bone fracture. A brain was smashed (wound by an axe). After primary surgical process, the condition of the patient became satisfactory. In the right frontal area was defected of skin and bone, covered with granules with purulent process. What is the best treatment for this patient?

- 1. Conservative treatment.
- 2. Plastic surgery of the defect skull.
- 3. Lumbar punctures.
- 4. Unguent bandages.
- 5. Partial removals of the brain lobes.

A teenager of 14 years old got impact in the parietotemporal region on the right, lost consciousness for a short time. In 45 min. – coma II, pulse – 50 per min., AP - 170/110 mm Hg. The venous congestion was revealed on the eye fundus. Which pathogenetic mechanism could cause such symptoms?

- 1. Epileptic attack.
- 2. Disorder of the cardiac conduction.
- 3. Rising of the intracranial pressure.
- 4. Sick sinus syndrome.
- 5. Closed hydrocephalus.

A patient was delivered to the traumatological department with condition of alcoholic intoxication and psychomotor excitation. In the site of the left temple was revealed hypodermic hemorrhage with constant

flow of liquid from the left external acoustic meatus. The diagnosis of alcoholic intoxication was made. Treatment was carried out in 6 hours after hospitalization. There were attacks of tonic spasms, the mydriasis of left pupil and a condition of deep coma. What is the possible diagnosis?

- 1. Alcoholic intoxication.
- 2. Brain concussion.
- 3. Basal skull fracture with epidural hematoma.
- 4. Acute disorder of blood circulation of the brain.
- 5. Meningoencephalitis.

A patient with a fracture of the left temporal bone was treated on ER department. In 3 hours after a trauma the condition of the patient suddenly became worse, the patient became unconsciousness with breath disorder, periodical tonic spasms, widen pupils reaction, the left pupil was wider than right. What causes the deterioration of the patient condition?

- 1. Meningoencephalitis.
- 2. Acute disorder of blood circulation of the brain.
- 3. Acute epidural hematoma.
- 4. Acute brain abscess.
- 5. Features of current changes in the brain.

A 9 years old boy fell from a tree and hit the occipital part of the head. It was observed a short-term loss of consciousness. The condition of the child was satisfactory, headache. On the skull x-rays it was revealed pressed fragments of the occipital bone in the site of occipital hump. What is the choice of treatment for this patient?

- 1. Anti-inflammatory therapy.
- 2. Operative surgical intervention.
- *3. Haemostatic therapy.*
- 4. Cerebral punctures.
- 5. Complex conservative treatment.

The CT examination cannot indicate small subdural hematoma if:

- 1. It is broken off, and the subdural blood congestion cannot be differentiated from substances of the brain.
- 2. The hematoma gets into the brain from subdural spaces.
- 3. Resolving force of the CT is more than 2 mm.
- 4. The hemorrhage has occurred more than 4 hours ago.
- 5. The patient has widespread atrophy of the brain.

The elderly person suffers from frequent mild head trauma during year. Subsequently develops a progressive dementia over the course of several weeks after the last episode. What kind of pathology is necessary to think?

- 1. An acute subdural hematoma.
- 2. An acute epidural hematoma.
- 3. A chronic subdural hematoma.
- 4. An intracerebral hematoma.
- 5. An intracerebellar hematoma.

Name the main clinical signs of intraventricular brain hemorrhage, except:

- 1. Paresis of extremities.
- 2. Meningeal irritation symptoms.

- 3. Hormetonic syndrome.
- 4. Speech disturbance.
- 5. Loss of consciousness is obligatory and short.
- 6. Hypertension syndrome.

For the subdural hematoma diagnosis more expedient to use:

- 1. Echoencefoloskopy.
- 2. Lumbar puncture.
- 3. CT scanning.
- 4. MRI.
- 5. CT Myelogram.

Specify the additional research receptions which confirm the diagnosis of an intracranial hematoma:

- 1. Craniography, research of fundus of the eye, CT scanning of the brain.
- 2. MRI, CT scanning of the brain, research of fundus of the eye.
- 3. Radiography of spinal cord, craniography, Doppler ultrasound.
- 4. Research of fundus of the eye, neurological examination, EMG.
- 5. EMG, Doppler ultrasound, echoencefoloskopy.

Name the kinds of closed craniocerebral trauma which are treating by surgical method:

- 1. Intracerebral hematoma, concussion of the brain.
- 2. Subdural hematoma, intracerebral hematoma.
- 3. Subdural hematoma, contusion of the brain.
- 4. Concussion of the brain, subdural hematoma.
- 5. Contusion of the brain, an intracerebral hematoma.

A 72-year-old man slipped and fell in the bathroom 1 week ago. He hit the right side of his head, but did not think it was necessary to seek medical attention. He finally goes to his doctor because his son thinks his balance was off. Computed tomography (CT) of the brain may fail to reveal a small subdural hematoma in this patient because:

- 1. The lesion is subacute.
- 2. The hematoma extends into the brain from the subdural space.
- 3. The resolution of the CT machine is greater than 2 mm.
- 4. The subdural hematoma is less than 4 h old.
- 5. The patient has extensive cerebral atrophy.

During a game, a friend has thrown a bottle which hits on the lateral part of the head of his 16-years-old friend. During 30 sec. injured friend seemed to be deaf but later was completely recovered. But suddenly he fell into the coma. The sensitivity of the opposite trauma part became weak. In 25 minutes he was delivered to the hospital without reaction to pain. Pulse -40 beats/min., without arrhythmia. On both hands blood pressure -170/110 mm Hg, the hypostasis of optic nerve was not find out, but there was a venous stagnation in the ocular fundus. The CT scans conducted later than 2 hours after the trauma will show:

- 1. Normal picture of the brain.
- 2. Consolidation of the skull bones.
- 3. Increase density of CSF.
- 4. Changes of the soft tissues.
- 5. Intracranial hematoma.

A 18-year old patient has received a blow on the head with a heavy object. Consciousness is not lost. There

is a contused wound of soft tissues with the damage of aponeurosis up to the periosteum on the left frontal region. On the X-ray of the skull in 2 projections: the destruction of the bone tissue is not present. What kind of damage does the patient have?

- 1. Closed craniocerebral trauma.
- 2. Concussion of the brain.
- 3. Open craniocerebral trauma.
- 4. Contusion of the brain.
- 5. Contused wound of the head.

A patient with a fracture of the left temporal bone was treated on ER department. In 3 hours after a trauma the condition of the patient suddenly became worse, the patient became unconsciousness with breath disorder, periodical tonic spasms, widen pupils reaction, the left pupil was wider than right. What causes the deterioration of the patient condition?

- 1. Meningoencephalitis.
- 2. Acute disorder of blood circulation of the brain.
- 3. Acute epidural hematoma.
- 4. Acute brain abscess.
- 5. Features of current changes in the brain.

During a game, a friend has thrown a bottle which hits on the lateral part of the head of his 16-years-old friend. During 30 sec. injured friend seemed to be deaf but later was completely recovered. But suddenly he fell into the coma. The sensitivity of the opposite trauma part became weak. In 25 minutes he was delivered to the hospital without reaction to pain. Pulse – 40 beats/min., without arrhythmia. On both hands blood pressure – 170/110 mm Hg, the hypostasis of optic nerve was not find out, but there was a venous stagnation in the ocular fundus. The CT scans conducted later than 2 hours after the trauma will show:

- 1. Normal picture of the brain.
- 2. Consolidation of the skull bones.
- 3. Increase density of CSF.
- 4. Changes of the soft tissues.
- 5. Intracranial hematoma.

The injured person of 33 years old received a gunshot wound during hunting. The inlet opening in the right temporal region bleeds moderately. During physical examination: consciousness by a Glasgow Come Scale 12 points, anisocoria D>S, left hand hemiparesis, AP 130/80 mm Hg. Which of medical measures should be carried out first of all?

- 1. Haemostatic therapy.
- 2. Dehydration therapy.
- 3. Primary surgical treatment of the wound.
- 4. Antibiotics.
- 5. First aid, aseptic bandage.

The patient of 42 years old is brought to hospital after a transport accident. Consciousness is confused, by a Glasgow Come Scale 11 points. Psychomotor excitement. The left ear oozes haemorrhagic discharge with admixture of CSF. On the X-ray of a skull: linear fracture of the temporal bone on the left. What is the preliminary diagnosis?

- 1. Concussion of the brain.
- 2. Epidural haematoma.
- 3. Fracture of the base of the skull, subarachnoidal haemorrhage.
- 4. Closed craniocerebral trauma.
- 5. Contusion of soft tissues of the left ear.