

## # [7] Tumours of the Spinal Cord

Classification of tumors of the spinal cord to their localization [2]:

- a) *subtentorial*
- b) *supratentorial*
- c) *extramedullar*
- d) *intramedullar*
- e) *vertebral tumors*

Symptoms of extramedullar spinal cord tumor [3]:

- a) *disturbances of sensitivity on polyneuritis type*
- b) *hemianopsia*
- c) *protein-cell dissociation in the cerebrospinal fluid*
- d) *syndrome of Brown-Sequard*
- e) *radicular pain*
- f) *pseudobulbar syndrome*

Symptoms of intramedullar spinal cord tumor [3]:

- a) *disturbances of sensitivity on polyneuritis type*
- b) *Argyll-Robertson syndrome*
- c) *segmental violation sensitivity*
- d) *central paresis below the location of the tumor*
- e) *alternating syndromes*
- f) *peripheral segmental paresis*

With which diseases need to differentiate tumor of spinal cord [3]:

- a) *polyneuropathy*
- b) *myelopathy*
- c) *encephalopathy*
- d) *family spastic paraplegia Shtryumpelya*
- e) *spinal form of multiple sclerosis*
- f) *Huntington's chorea*

Additional methods that are used for the diagnosis of spinal tumors [3]:

- a) *myelography*
- b) *spondylography*
- c) *angiography*
- d) *CSF-dynamic Queckenstedt and Stookey tests*
- e) *electroencephalography*
- f) *echoencephalography*

Changes in the cerebrospinal fluid of spinal cord tumors [2]:

- a) *neutrophilic CSF pleocytosis*
- b) *pronounced lymphocytic CSF pleocytosis*
- c) *cell-protein dissociation*
- d) *protein-cell dissociation*
- e) *CSF with blood elements*

A 13-year-old patient came to the doctor with complaints of pains in the cervical-occipital region, persistent numbness and weakness in the extremities, compelled position of the head, in the mornings he has vomiting, expressed instability of walking, general muscular atrophy, flaccid upper paraparesis and spastic lower one.

What is the preliminary diagnosis [1]?

- a) *tumour of the posterior cranial fossa*
- b) *intracerebral tumour of the spinal cord in the cervical part*
- c) *intracerebral tumour of the spinal cord in the thoracic part*
- d) *myelitis*

*e) spondylogenous myelopathy*

Which nerve formations affects in syringomyelia [3]:

- a) posterior horns of the spinal cord*
- b) anterior horns of spinal cord*
- c) intercostal nodes*
- d) peripheral nerves*
- e) lateral horns of the spinal cord*

A patient came to the doctor with the complaints of a girdle pains in the thoracic part of the spine in the area of the sixth-eighth thoracic roots, which gradually became worse 5 months ago. There were weakness in the legs, difficulty in urination. Objective data: the low paraparesis, hypalgesia from the level of D<sub>6</sub>-D<sub>8</sub> segments. What is the preliminary diagnosis [1]?

- a) spondylogenous myelopathy*
- b) extraspinal tumour of the spinal cord*
- c) intraspinal tumour of the spinal cord*
- d) acute disorder of the spinal cord circulation*
- e) lumbosacral radiculitis*

A 50-year-old patient has been complaining of persistent weakness in the left arm, pain in the region of the left shoulder joint without restriction of motility for year. Besides he has weakness in the left leg, hemihypesthesia on the right. Observation data: a flaccid upper and spastic lower paraparesis. CSF revealed hyperalbuminosis, the CSF dynamic tests revealed a partial blockade. What is the clinical diagnosis [1]?

- a) myelopolyradiculoneuritis*
- b) intramedullar tumour of the spinal cord*
- c) extramedullar tumour of the spinal cord*
- d) spondylogenous myelopathy*
- e) pathology of intervertebral discs*

The main clinical signs of siringobulbia [3]:

- a) pseudobulbar syndrome*
- b) dysphagia, dysarthria, dysphonia*
- c) amaurosis*
- d) atrophy of the tongue muscles*
- e) dissociated disorders of sensitivity in Zelder`s areas*
- f) cerebellar ataxia*

A patient complains of stable burning pains in the lumbar region, in the anus, in the low extremities intensifying in the horizontal position. The pelvic disorders of peripheral type joined increasing motor and sensitive distresses; the active incontinence of urine and feces is replaced by regular one. What is the preliminary diagnosis [1]?

- a) tumour of the thoracic part of the spine*
- b) tumour of the cauda equina*
- c) tumour of the cervical spine*
- d) secondary lumbosacral radiculitis*
- e) spondylogenous myelopathy*

A 23-year-old patient has been having an increasing pain in the lower thoracic and lumbar regions for 3 months as well as a progressive lower paraparesis with the expressed muscular atrophy. Position in bed is compelled with the extremities to the trunk. The functions of pelvic organs are delayed. There is hypalgesia from the level of D<sub>11</sub>-D<sub>12</sub> segments on either side, swelling of the soft tissues at this level. X-ray revealed the destruction of the body of D<sub>10</sub>. Your preliminary diagnosis [1].

- a) the spondylogenous myelopathy*
- b) the extracerebral tumour of the spinal cord*
- c) the intracerebral tumour of the spinal cord*

- d) *sharp disorder of the spinal blood circulation*
- e) *a tumour of the spine with a compression of the spinal cord (malignant)*

The patient has symptoms of spinal cord lesions at the level of Th<sub>4</sub> vertebra. To clarify the process nature of the patients underwent lumbar puncture and CSF-dynamic sample in which was revealed CSF-dynamic block, in the study of cerebrospinal fluid - the protein-cell dissociation (increasing the amount of protein). What preliminary diagnosis can be made to the patient [1]:

- a) *spinal cord tumor*
- b) *multiple sclerosis*
- c) *arahnomyelitis*
- d) *osteochondrosis*
- e) *syringomyelia*

A patient came to the doctor with the complaints of increasing weakness in the legs, first the feet, then in calves and thighs. On admission there was a girdle pain in the hypochondrium. The low spastic paraparesis, hypalgesia from the level of segments Th<sub>6</sub>-Th<sub>8</sub>. What is the patient's preliminary diagnosis [1]:

- a) *tumour of the spinal cord*
- b) *tumour of the brain*
- c) *acute disorder of the spinal cord circulation*
- d) *discirculatory encephalomyelopathy*
- e) *myelitis*

A patient came to the doctor with the complaints of acute – within 24 hours – persistent weakness in the legs, a difficult urination. Paresthesias, numbness in the lags on the background of megalgia in the thoracic department of the spine appeared later. The patient was operated on 6 months ago because of carcinoma of the mediastinum, he has received a radiation therapy. What is the preliminary diagnosis [1]:

- a) *spondylogenous myelopathy*
- b) *metastatic lesion of the spine with a compression of the spinal cord*
- c) *disorder of the spinal cord circulation*
- d) *tumour of the spinal cord*
- e) *myelitis*

Disease, which differentiate syringomyelia [1]:

- a) *myelopathy*
- b) *family spastic paraplegia Shtryumpelya*
- c) *discogenic myelopathy*
- d) *intramedullary spinal cord tumor*
- e) *amyotrophic lateral sclerosis*

During the last 6 months a patient began to feel difficulties on walking; weakness in the legs, numbness, and paresthesia has developed. Pains in the low-thoracic and lumbar levels of the spine became worse and intensified at night. The muscle tone in the legs, the tendon reflexes of the legs are increased and there is clonospasm of the feet. What disease is supposed to be [1]:

- a) *tumour of the brain*
- b) *tumour of the spinal cord*
- c) *spondylogenous myelopathy*
- d) *lumbosacral radiculitis*
- e) *osteomyelitis of the lumbar part of the spine*

A patient came to the doctor with complains of the girdle pains in the chest area of the spine along the sixth-eighth thoracic nerves, mainly at night, increasing weakness in the legs, difficulties in urination. Tendon reflexes of the legs are increased, polykinetic with the expanded zone, the Babinsky symptom is observed on either side. A zone of hypesthesia on the level of the umbilicus. What is the preliminary diagnosis of the patient [1]:

- a) *a spondylogenous myelopathy*

- b) *an extracerebral tumour of the spinal cord*
- c) *an intracerebral tumour of the spinal cord*
- d) *acute disorder of the spinal blood circulation*
- e) *discogenous radiculoneuritis*

A patient began to experience difficulties on walking, weakness in the legs, numbness in them, paresthesias for the last six months. It was difficult for him to go upstairs. Pains in the lower chest and lumbar regions of the spine have been growing, getting worse at night. The muscular tone in the legs is increased, tendon reflexes of the legs are increased, polykinetic, clonus of the feet. What kind of the disease does the patient have [1]?

- a) *tumour of the brain*
- b) *tumour of the spinal cord*
- c) *spondylogenous myelopathy*
- d) *discogenous lumbosacral radiculitis*
- e) *osteomyelitis of the lumbar department of the spine*

A patient came to the doctor with complaints of acute progressive weakness in the legs with difficult urination for several days. Then an intense pain in the chest area of the spine followed, increasing on movement, paresthesias and numbness in legs. 9 months ago the operation was performed for carcinoma of the right lung. He received a postoperative course of radiation therapy. What is a preliminary diagnosis [1]?

- a) *the spondylogenous myelopathy*
- b) *metastatic affection of the spine with a compression of the spinal cord*
- c) *disorder of the spinal blood circulation*
- d) *a tumour of the spinal cord*
- e) *acute disorder of the spinal blood circulation*

Patient 34 years old complains of constant pain in the interscapular region, especially the left, which is enhanced in the recumbent position and sudden movements. Pain when coughing becomes shooting nature, is distributed in the subscapular area on the left. On percussion of spinous process Th<sub>5</sub> - pain is getting worse. Month so there was a weakness in the legs, numbness in the feet, lower legs. Violations of sensitivity are ascending in nature. What is the best possible diagnosis [1]?

- a) *osteochondrosis*
- b) *neuralgia*
- c) *spinal cord tumor*
- d) *arahnomyelitis*
- e) *syringomyelia*

The patient 36 years lower spastic paraparesis, hemiplegia at the level of Th<sub>4</sub> segments on the wire type. When lumbar puncture - CSF pressure - 80 mm H<sub>2</sub>O, during CSF-dynamic sample - full CSF-dynamic block, CSF gyperalbuminosis. What is the disease most likely [1]?

- a) *syringomyelia*
- b) *myelitis*
- c) *vascular process (myelopathy)*
- d) *spinal tumor*
- e) *osteochondrosis*

A 13-year-old patient was struck by a ball into the cervical area of the spine. He saw the doctor in a week with pains in the cervicooccipital area tinnitus in the ears, numbness and slight weakness in the hands. In two months he had persistent weakness in the legs, instability on walking, general muscular atrophy. The languid increasing upper paraparesis, the spastic lower paraparesis, the compelled position of the head and pain in the neck persisted, there was vomiting in the mornings. There are congested papilla of the optic nerves on either side. What is your preliminary diagnosis [1]?

- a) *tumour of the posterior cranial fossa*
- b) *an intracerebral tumour of the spinal cord in the cervical department*
- c) *an intracerebral tumour of the spinal cord in the chest department*

- d) *fracture of the spinal column with a compression of the spinal cord*
- e) *spondylogenous myelopathy*

A 57-year-old patient has been complaining of gradually increasing pain and weakness in the left hand, the pain in the region of the left humeral joint without restriction of the mobility for a year. Then weakness in the left leg and sensitive disorders in the right leg, later in the right hand have developed. Objective data: a languid upper and spastic lower paraparesis. X-ray of the spine revealed expansion of the vertebral canal in the cervical department, hyperalbuminosis in CSF, CSF dynamic tests have revealed the partial block. The clinical diagnosis is [1]:

- a) *myelopolyradiculoneuritis*
- b) *intracerebral tumour of the spinal cord*
- c) *extramedullar tumour of the spinal cord*
- d) *spondylogenous discirculatory myelopathy*
- e) *pathology of the intervertebral discs*

A patient complains of the pain in the cervical part of the spine, weakness, paresthesia in the arms. About one month ago there appeared ptosis, miosis and enophthalmos on the left. Sometimes nystagmus is marked. Corneal and pharyngeal reflexes are reduced. There is a lower spastic paraparesis. Which syndrome does the patient have [1]?

- a) *syndrome of the transversal lesion of the spinal cord*
- b) *Claudt-Bernar-Horner syndrome*
- c) *Foster-Kennedy syndrome*
- d) *Burdenko-Cramer syndrome*
- e) *Sluder syndrome*

In a patient of 43 years there is a lower spastic paraparesis, hypesthesia from the level of Th<sub>6</sub> segment after the conductive type, imperative feeling of urination. In lumbar puncture, the CSF pressure is 85mm H<sub>2</sub>O, at CSF dynamic tests - partial block. What disease can be suspected in the patient? What methods of checkup is it necessary to apply first of all for making a correct diagnosis [1]?

- a) *tumour of the posterior cranial fossa, CT*
- b) *extraspinal tumour of the spinal cord in the cervical part, MRI*
- c) *tumour of the spinal cord in the thoracic part, MRI*
- d) *myelitis, MRI*
- e) *spondylogenous myelopathy, CT & MRI*

A patient of 25 years complains of persistent pain in the interscapular area. At sneezing and coughing the pain attains a shooting nature. A lower spastic paresis takes place. At percussion on the spinal process Th<sub>7</sub> the pain aggravates. What disease can be suspected in the patient? What methods of checkup is it necessary to apply first of all for making a correct diagnosis [1]?

- a) *tumour of the posterior cranial fossa, CT*
- b) *extraspinal tumour of the spinal cord in the cervical part, MRI*
- c) *tumour of the spinal cord in the thoracic part, MRI*
- d) *myelitis, MRI*
- e) *spondylogenous myelopathy, CT & MRI*

A patient of 43 years has been complaining of the pain for 12 months. The pain irradiates into the lower extremities. During the last month, the patient has been noting an increase of weakness in the lower extremities, during the last week there has appeared dysfunction of the pelvic organs. However, treatment on account of osteochondrosis of the lumbar part of the spine in- or out-patiently is ineffective. After balneotherapy was used the patient's stated aggravated. What is the most probable cause of the disease [1]?

- a) *tumour of the brain*
- b) *tumour of the spinal cord in the lumbar part*
- c) *spondylogenous myelopathy*
- d) *discogenous lumbosacral radiculitis*
- e) *osteomyelitis of the lumbar department of the spine*

In a patient there appeared torpor of the right toes and weakness in the left foot, in 3 months there appeared torpor of the left foot and weakness in the right foot. Sensitive disorders spread upwards, weakness in the lower extremities aggravated, there appeared retention of urine. What preliminary diagnosis can be made in this case [1]?

- a) *tumour of the spinal cord*
- b) *tumour of the brain*
- c) *acute disorder of the spinal cord circulation*
- d) *discirculatory encephalomyelopathy*
- e) *myelitis*

In a patient in the neurological status there takes place a lower spastic paraplegia, patellar and Achilles reflexes are high, pathological Babinsky's, Gordon's symptoms from both sides. Hypesthesia after the conductive type from the level of D<sub>5</sub> segment. From the anamnesis it is known that the given pathology had been aggravating gradually for 1,5 years. What preliminary diagnosis can be made in this case [1]?

- a) *spondylogenous myelopathy*
- b) *extraspinal tumour of the spinal cord in the thoracic part*
- c) *intraspinous tumour of the spinal cord in the thoracic part*
- d) *acute disorder of the spinal cord circulation*
- e) *lumbosacral radiculitis*

In a boy of 9 years there appeared progressive scoliosis of the thoracic part of the spine. During the year he was being treated in a special boarding school, but ineffectively, scoliosis was progressing. There appeared a radicular pain in the upper thoracic part of the spine, weakness in the lower extremities. An orthopedic operation on account of scoliosis of the spine. During the year the patient stopped walking because of the lower paraplegia, there takes place complete analgesia after the conductive type from the level of Th<sub>5</sub> segment, retention of urine. Of auxiliary methods of checkup roentgenography was only used. What disease can be suspected in the patient? What methods of checkup is it necessary to use first of all for making a correct diagnosis [1]?

- a) *tumour of the posterior cranial fossa, CT*
- b) *extraspinal tumour of the spinal cord in the cervical part, MRI*
- c) *tumour of the spinal cord in the thoracic part, MRI*
- d) *myelitis, MRI*
- e) *spondylogenous myelopathy, CT & MRI*

A patient of 45years is troubled with weakness in the lower extremities, more apparent in the right leg, difficulties in walking, a feeling of stupor in the left leg from the foot to the inguinal area, a feeling of crawling small ants in the right leg from the foot to the level of the middle 1/3 of the right thigh. Has been ill for about a year. What disease can be suspected in the patient? What methods of checkup is it necessary to use first of all for making a correct diagnosis [1]?

- a) *extraspinal tumour of the spinal cord, CT & MRI*
- b) *tumour of the brain, CT*
- c) *acute disorder of the spinal cord circulation, MRI*
- d) *discirculatory encephalomyelopathy, CT & MRI*
- e) *myelitis, MRI*

A patient of 36 years is troubled with pains in the area of the lumbus which irradiate to the lower extremities. The pains aggravate in a horizontal position, because of which the patient cannot lie. Has been ill for about 2 years, is being treated on account of osteochondrosis, lumbosacral radiculitis in- and out-patiently. He has just come from the sanatorium where balneotherapy had been used, after which the state aggravated. Make a preliminary diagnosis [1].

- a) *tumour of the thoracic part of the spine*
- b) *tumour of the cauda equina*
- c) *tumour of the cervical spine*
- d) *secondary lumbosacral radiculitis*

e) *spondylogenous myelopathy*

A patient came to the doctor with the complaints of a girdle pains in the thoracic part of the spine in the area of the sixth-eighth thoracic roots, which gradually became worse 5 months ago. There were weakness in the legs, difficulty in urination. Objective data: the low paraparesis, hypalgesia from the level of D<sub>6</sub>-D<sub>8</sub> segments. What is the preliminary diagnosis [1]?

- a) *spondylogenous myelopathy*
- b) *extraspinal tumour of the spinal cord*
- c) *intraspinal tumour of the spinal cord*
- d) *acute disorder of the spinal cord circulation*
- e) *lumbosacral radiculitis*

During the last 6 months a patient began to feel difficulties on walking; weakness in the legs, numbness, and paresthesia has developed. Pains in the low-thoracic and lumbar levels of the spine became worse and intensified at night. The muscle tone in the legs, the tendon reflexes of the legs are increased and there is clonuspasm of the feet. What disease is supposed to be [1]?

- a) *tumour of the brain*
- b) *tumour of the spinal cord*
- c) *spondylogenous myelopathy*
- d) *lumbosacral radiculitis*
- e) *osteomyelitis of the lumbar part of the spine*

A 50-year-old patient has been complaining of persistent weakness in the left arm, pain in the region of the left shoulder joint without restriction of motility for year. Besides he has weakness in the left leg, hemihypesthesia on the right. Observation data: a flaccid upper and spastic lower paraparesis. CSF revealed hyperalbuminosis, the CSF dynamic tests revealed a partial blockade. What is the clinical diagnosis [1]?

- a) *myelopolyradiculoneuritis*
- b) *intramedullar tumour of the spinal cord*
- c) *extramedullar tumour of the spinal cord*
- d) *spondylogenous myelopathy*
- e) *pathology of intervertebral discs*