Study: Magnetic resonance imaging of the spine (one section)/cervical spine with contrast enhancement.

MRI machine: Philips Achieva 1.5T.

Age: 62.

Sex: Female.

Race: Caucasian.

Brief anamnesis of the disease (complaints): no complaints.

REPORT

The study was performed in comparison with the previous MRI study dated 27.05.2022, presented in DICOM format.

On a series of T1- and T2-weighted MR tomograms in two planes with fat-suppressed /T2-stir/:

Cervical lordosis is straightened with formation of kyphotic deformity at the level of C3-C7 vertebrae.

The cerebellar tonsils are located at the level of the greater occipital foramen.

The craniovertebral junction is featureless. Atlanto-dental distance is 0.2 cm.

Degenerative changes (decrease in height) of C4-C7 discs, (dehydration) of C2-Th1 discs.

The shape and size of the vertebral bodies are normal.

Anterolateral osteophytes in the form of staples at the level of the C4-C7 segment.

Posterior osteophytes of the C5-C7 vertebral bodies.

Slightly pronounced diffuse dystrophic changes in the vertebral bodies at the level of visualization.

The bony spinal canal is narrowed in the sagittal plane at the level of C2, C3 vertebrae, the minimum sagittal size of the bony spinal canal at the level of the bodies: C1 - 2.3 cm; C2 - 1.8 cm; C3 - 1.5 cm; C4-C7 - 1.4-1.5 cm (normal: C1>2.1 cm, C2>2.0 cm, C3>1.7 cm, C4-C7=1.4 cm).

Dorsal disc protrusions:

paramedian left-sided C4-C5 protrusion measuring 0.21 cm, the spinal canal at the level of disc prolapse is not narrowed; the lumen of the radicular canals is not narrowed, without signs of spinal root compression;

discoosteophytic paramedian-foraminal right-sided C5-C6 disc protrusion measuring 0.23 cm, the spinal canal at the level of disc prolapse was not narrowed; the lumen of the radicular canals was slightly narrowed on the right side, without signs of spinal root compression;

median-paramedian bilateral protrusion of C6-C7 measuring 0.22 cm, the spinal canal at the level of disc prolapse is not narrowed; the lumen of the radicular canals is not narrowed, without signs of spinal root compression.

In the spinal cord at the level of C1, C2, C6, and Th1 vertebrae, single foci (increased MR signal on T2 and Stir, isointense on T1) with indistinct contours, elongated shape, maximum length up to 1.0 cm, located in the posterior and lateral sections of the spinal cord were detected. The spinal cord at the level of the above-described changes is not thickened.

No contrast accumulation in the foci was detected on postcontrast tomograms.

Local slit-like dilation of the central canal of the spinal cord at the level of the Th2 vertebrae, up to 0.4 cm in length, with no signs of paramagnetic accumulation, was noted.

Signs of spondyloarthrosis at the level of C2-Th1 segments were revealed.

Pre- and paravertebral soft tissues are unchanged. The fatty tissue surrounding the dural sac is unchanged.

The diameter of V2 segments of vertebral arteries at the level of visualization is asymmetric (D>S), not narrowed.

CONCLUSION

MR sign of single intramedullary foci (specific for demyelinating disease, MS, inactive stage). MR signs of dystrophic changes in the cervical spine. Protrusions of C4-C5, C5-C6, C6-C7 discs. Spondylosis at the level of C4-C7 segment. Spondyloarthrosis at the level of C2-Th1 segments. Cervical kyphosis at the level of C3-C7 vertebrae. Anatomic narrowness of the bony spinal canal at the level of C2, C3 vertebrae. Asymmetry of V2 segments of vertebral arteries (D>S). MR signs of slit-like dilation of the central canal of the spinal cord at the level of Th2 vertebrae (more likely manifestations of local hydromyelia).

Compared to the previous MRI study dated 27.05.2022 submitted in DICOM format: no dynamic changes.

RECOMMENDATIONS.

Consultation of the attending physician.

Year of study and report: 2023