

DIFFERENTIAL DIAGNOSIS AND PATHOGENESIS OF THE DEVELOPMENT OF CICATRICAL ADHESIVE EPIDURITIS IN THE POSTOPERATIVE PERIOD

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ABSTARCT:

One of the most difficult tasks in neurosurgery is the problem of differential diagnosis of cicatricial adhesive epiduritis and recurrent disc herniation in the postoperative period. Our studies show that the use of the STIR mode in MRI studies can effectively distinguish between compression epiduritis and recurrent disc herniation.

KEYWORDS: cicatricial adhesive epiduritis, clinical picture, diagnosis, pathogenesis.

INTRODUCTION:

The increase in the number of surgeries for osteochondrosis of the spine is becoming increasingly important to the problem of differential diagnosis of cicatricial adhesive epiduritis and recurrent disc herniation of the lumbar spine. According to the literature, postoperative cicatricial adhesive epiduritis is diagnosed in 8–14% of patients who did not have adhesive changes in the epidural space during the primary operation (J. Brotchietal., 1999).

MATERIALS AND METHODS:

The analysis of observations of 237 patients with a herniated disc of the lumbar

spine who were operated on in the neurosurgical department of the Andijan branch of the RSCEMPS from 2018 to 2020 is presented. 27 of them (11.4%) repeatedly consulted a neurosurgeon due to persistent pain syndrome. All patients underwent an MRI scan of the lumbar spine with a GyroscanIntera 1.0 T device from Philips. Scanning was performed in sagittal and axial projections in T1 and T2-B / I sequences. A fat suppression sequence, STIR, was also used.

RESULTS AND ITS DISCUSSION:

The most common complaint of a patient with cicatricial adhesive epiduritis (RSE) in the postoperative period, complicated by secondary stenosis of the spinal canal in the lumbar region, is chronic lower back pain radiating to one or both legs. Lumboischialgia has a remitting course. Pains of a predominantly postural nature, accompanied by dysesthesia, a feeling of heat or cold. Some patients have lightning-fast shooting pains in the legs, transient short-term weakness in them. Over time, the syndrome of one- or two-sided intermittent claudication joins.

Constantly determined by the limitation of the mobility of the spine, especially in the morning. Patients cannot sleep while lying on their

stomach. Symptoms of Lasegue, Wasserman are absent or mild. Asymmetric muscle wasting, hyporeflexia, hypesthesia of the polyradicular or pseudo-polyneuritic type appear several years after the onset of the disease. With local ESR with root compression, a monoradicular syndrome is observed, which is difficult to distinguish from lateral disc herniation. In the late stage of the disease, urinary and fecal incontinence with physical exertion is occasionally noted.

The study of wound healing and other fibrosing processes made it possible to put forward the concept of autoregulation of connective tissue growth based on the interaction of cellular elements (fibroblasts and macrophages) and collagen [1]. The morphological manifestations of the first phase of healing, i.e. traumatic edema caused by necrotization of adjacent tissues and blood residues in the operating field includes vascular hyperemia, increased serous exudation, neutrophilic infiltration, alternating macrophage reaction [2]. This phase lasts from 2 to 7 days. The influence of neutrophils and macrophages in the operating field is associated not only with their function of wound cleansing by phagocytosis of erythrocytes, fat cells, necrotic masses, but also with the secretion of specific substances by them, which enhance the proliferation of fibroblasts. Other cellular elements that appear in the wound during aseptic inflammation also affect the proliferative stage. A factor that enhances the proliferation of fibroblasts is released from the aggregated blood plasma platelets. The second phase of wound healing - the development of connective tissue - usually begins from the 4th to 6th day, when fibroblasts become the predominant cellular elements. The neoplasm and maturation of connective tissue ends with biosynthesis and

fibrillogenesis of collagen, the formation of fibrous tissue [1].

One of the methods for diagnosing RSE, according to O.M. Tarasenko [3], is a contrast-enhanced MRI, which allows to reliably distinguish postoperative ESR from recurrent disc herniation according to the following criteria: scar tissue is contrasted after 6-10 minutes, and disc herniation - after 30-45 minutes, besides, the contrast intensity is much less compared to scar tissue.

When performing CT or MRI studies in standard modes in patients with RSE, relapses of disc herniation have been described. However, during the second operation, herniated discs were not found in some patients. On the contrary, the RSE attracted the attention [3]. The wrong choice by the surgeon of the surgical access, the method and volume of the surgical intervention, and the methods of preventing ESR is the main reason for the unsatisfactory results of the operation. A condition for a successful rehabilitation process is the differential diagnosis between RSE and recurrent disc herniation.

For this purpose, MRI studies were carried out on a GyroscanIntera 1.0 T apparatus from Philips. Scanning was performed in sagittal and axial projections in T1 and T2-B / I sequences. A fat suppression sequence, STIR, was also used. On MRI scans in the spinal canal epidurally visualized many small structures of linear and irregular shape with an MR signal of medium intensity in T1 and T2-I / I. With suppression of the signal from fat on the side of the operation, the deformation of the dural sac was determined and an increase in the intensity of the MR signal was noted due to the inflammatory component.

FINDINGS:

The use of the STIR sequence allows for the differential diagnosis of RSE and recurrent disc herniation, which ultimately allows a more selective approach to the indications for surgery and the search for a method to prevent compression cicatricial adhesive epiduritis

REFERENCES:

1) Drivotinov B.V. On the diagnosis of cicatricial adhesion process in lumbar osteochondrosis / B.V. Drivotinov, F.V. Oleshkevich, E.A. Karpenko // Actual problems of neurology and neurosurgery: Sat. scientific. tr. / [Ed. A.F. Smeyanovich,

I.P. Antonov]. - Minsk: Belarusian Science, 2000. - Issue. 2. - S. 64-72.

2) Nekrasov A.K. Analysis of the causes of unsatisfactory clinical outcomes of surgical treatment of hernias of intervertebral discs of the lumbar spine. Nekrasov, M.A. Nekrasov // Topical issues of damage and diseases of the nervous system. - Ivanovo, 2001.-- S. 124.

3) Radchenko V.A. Complications of microdiscectomy in lumbar osteochondrosis / V.A. Radchenko, A.I. Sold, O.V. Ryabov // Orthopedics, traumatology and prosthetics. - 2003. - No. 2. - P. 12-15.