## ALGORITHMS FOR DIAGNOSING AND TREATING BACK PAIN

Khalimova Dilrabo Jalilovna Assistant of the Department of Internal Medicine of Bukhara State Medical Institute named after Abu Ali Ibn Sina dilrabo.halimova@mail.ru

**Annotation:** Analysis of the frequency of referrals to the outpatient network in our country has shown that from 40 to 70% of patients in polyclinics come to the doctor complaining of pain, with the most common being back pain. Depending on the causes of back pain is divided into specific and nonspecific. Non-specific character of back pain is observed in 90% of cases. The frequency of specific back pain does not exceed 8-10%, compression radiculopathy of the lumbosacral roots is observed in no more than 3-5% of patients with back pain.

Keywords: disease, pain, back pain, rheumatic disease

## Introduction

For back pain, a properly conducted clinical examination allows in most cases to clearly separate patients with specific and non-specific pain. First of all, when interviewing and examining a patient with back pain, the doctor should remember about "threat symptoms", the presence of which can indicate a serious, sometimes life-threatening disease.

"Threat symptoms" that indicate the possibility of specific back pain include:

Onset of persistent back pain before age 15 and after age 50;

Non-mechanical nature of pain (pain does not decrease at rest, in a lying position, in certain poses);

Relationship of pain to trauma;

Gradual increase in pain;

History of cancer;

Occurrence of pain on the background of fever, weight loss;

Complaints of prolonged stiffness in the morning;

Symptoms of spinal cord injury (paralysis, pelvic disorders, sensitivity disorders);

If there are no "threat symptoms" during the initial examination, the patient is classified as having non-specific back pain, and analgesic therapy is prescribed without additional diagnostic procedures. According to international standards, if a patient with back pain does not have "threat symptoms" or root pain, there is no need to conduct laboratory and instrumental examinations, including radiography of the spine or computer and magnetic resonance imaging (MRI) [1].

It is important to remember that imaging methods with high frequency reveal degenerative-dystrophic changes in the spine, even in patients without back pain. Thus, according to MRI of the lumbar spine, asymptomatic herniated discs are detected in persons less than 40 years of age in 30-40% of cases, and in persons over 60 years of age-in 100% [8, 22]. Degenerative-dystrophic changes in the spine, which doctors often diagnose as osteochondrosis, can only be considered a prerequisite for the occurrence of back pain, but not its direct cause. The presence of signs of degenerative-dystrophic lesions of the spine tissues in patients with non-specific back pain does not correlate with the nature of pain or its intensity, so, despite the temptation to attribute radio logically detected signs of spinal osteochondrosis to the cause of pain, no convincing evidence of such a relationship have yet been obtained. In modern domestic and foreign guidelines for the diagnosis of back pain, x-ray examination is not a component of the primary examination [1].

Pain at rest and at night, unexplained weight loss, a history of cancer, as well as the age of the patient over 50 years may indicate the presence of a primary or metastatic tumor of the spine. Metastatic lesions of the spine structures are more common than primary tumors. Spinal metastases are found in 70% of patients with primary tumors. Among the tumors that most often metastasize to the structures of the spine are breast, lung, prostate, kidney, lymphoma, melanoma, and gastrointestinal tumors. Back pain that wakes the patient up at night may also indicate a tumor.

In half of all cases in patients with abdominal aortic aneurysm, the first symptom is back pain. Therefore, the presence of a pulsating volume formation in the abdomen during palpation is a serious reason for additional diagnostic procedures.

Compression fracture of the spine can be suspected in the presence of a spinal injury, as well as in persons with osteoporosis due to age-related disorders of calcium metabolism. Osteoporosis is most often detected in women in the post-menopausal period, in people taking glucocorticoids. Smoking, alcohol consumption, and a sedentary lifestyle are also risk factors.

The presence of pronounced stiffness in the back, especially in the morning, the gradual appearance of pain, increased pain at night may indicate rheumatic disease.

If the patient complains of weakness in the legs, violation of urination, he has a decrease in sensitivity in the anogenital area and pelvic disorders; you should suspect compression of the horse's tail.

When examining the patient, it is important to pay attention to possible rashes on the skin, changes in posture, posture, gait, volume of movements in the spine, hip joints, and the degree of tension and soreness of the muscles, the localization of myofascial trigger points. At the same time, weakly expressed orthopedic symptoms in severe pain can be a sign of serious co morbidities. Neurological examination can detect damage to the roots and structures of the spinal cord.

If "symptoms of threat" are detected during the initial examination, a clinical and instrumental examination and consultations with appropriate specialists are required to confirm or refute the presumed diagnosis. Upon confirmation of the diagnosis carried out the treatment of the underlying disease. In the absence of data on the presence of any specific pathology, the patient's back pain is classified as non-specific and effective analgesic therapy is performed. As a rule, non-specific back pain is of a benign nature and is associated with a" mechanical» cause due to overload effects on the ligaments, muscles, intervertebral discs and joints of the spine.

After careful collection of anamnesis in patients with lower back pain, neurological and orthopedic examinations should be performed. Neurological examination reveals signs of sensitivity disorders, trophic disorders, movement, and changes in tendon reflexes. During orthopedic examination, pay attention to the posture, posture, the presence and degree of scoliosis, asymmetry of the limbs. It is important to determine whether or not the severity of orthopedic symptoms and pain is appropriate. As a rule, weakly expressed orthopedic symptoms in severe pain are a sign of serious comorbidities.

Muscle-tonic pain syndrome occurs due to nociceptive impulses coming from the affected discs, ligaments and joints of the spine during static or dynamic overload. In more than half of cases, the source of nociceptive impulses is the arch-process (facet) joints, which is confirmed by the positive effect of blocks of the projection of these joints by local anesthetics. Nociceptors contained in cases of spinal roots, in the Dura mater, posterior and anterior longitudinal ligaments can also participate in the formation of pain. As a result of nociceptive impulses, reflex muscle tension occurs, which initially has a protective character and immobilizes the affected segment. However, in the future, the tonic tense muscle itself becomes a source of pain. In this case, areas of skin and muscle hyperalgesia, muscle tension, and restricted movement in the corresponding segment of the spine are detected. If you tilt in the anterior-posterior or lateral directions, the pain may increase. Pain relief is noted in the position of lying on your side with your legs bent at the knee and hip joints.

MFBS occurs under the influence of excessive load on the muscles, with the syndrome palpable muscle feels spasmodic in the form of a tight string. Painful compressions (trigger zones) are found in the muscle, the pressure on which causes local and reflected pain.

The development of MFBS is largely due to the sensitization (increased excitability) of nociceptors localized in the muscles [2]. When nociceptors are sensitized, the nerve fiber becomes more sensitive to damaging stimuli, which is clinically manifested by the development of muscle tension and hyperalgesia. Neurological disorders are not typical for this pathology.

Treatment of patients with non-specific back pain should be aimed primarily at the regression of pain symptoms, which helps to restore the patient's activity and reduce the risk of chronic pain [1]. It is important to actively involve the patient in the treatment process, convince him of the benign course of his disease, and explain to him the causes of the disease and treatment tactics.

An important advantage of meloxicam is the low risk of hepatotoxic and skin reactions, as well as the development and exacerbation of bronchospastic conditions, which makes it possible to prescribe it to patients who have similar reactions observed against the background of taking acetylsalicylic acid and other n-NSAIDs. Recently, a randomized study was conducted in Uzbekistan, in which patients with lower lumbar pain syndrome were compared with the effectiveness of the original drug meloxicam and generic [3]. Patients were assigned to groups using a random number generator, and there were no significant differences in the groups by professional composition, age, or comorbidities – factors that could affect the outcome of treatment. Meloxicam was administered to trigger points at 15 mg/1.5 ml daily for 3 days, followed by the administration of a tablet form of 15 mg daily for 20 days. The authors noted the same effectiveness in the compared groups. However, after the introduction of the original meloxicam and Amelotex ®, no local side effects were observed.

## Literatures:

1.Alekseyev A.V., arinina E. E., Arseniev A. O., Barinov A. N., brand P. Ya., Vlasov V. V., Dubinina T. V., Karpakov A. B., Klimenko A. A., Kukushkin M. L., Lesnyak O. M., Maximov D. M., Pravdyuk N. G., Podchufarova E. V., Smirnov A.V., Solodovnikov A. G., Takhtay V. V., Shostak N. A., Erdes sh.f. Non-Specific pain in the lower back: Clinical recommendations for therapists and General practitioners. Moscow: OOO "Komplekssservice, 2008. 70 p.

2. Pain. Practical guide for doctors / edited By N. N. Yakhno, M. L. Kukushkin. Moscow: publishing house of the Russian Academy of medical Sciences, 2011, 565 p.

3. Gutyansky O. G. Application of amelotex and compligam in polyclinic practice in patients with back pain // Russian medical journal. 2010. Vol. 18, No. 6. Pp. 1-5.

4. Danilov A. B. Application of b vitamins for back pain: new analgesics? // Russian medical journal. 2008. Vol. 16 (special issue). Pp. 35-39.

5.Karateev A. E., Yakhno N. N., Lazebnik L. B., Kukushkin M. L., Drozdov V. N., Isakov V. A., Nasonov E. L. Application of non-steroidal anti-inflammatory drugs. Clinical recommendations, Moscow: IMA-Press, 2009, 168 p.