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CHANGES IN THE SPINE AND THORACIC BONES AFTER LIGHT THERAPY IN CANCER

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Abstract: In the early stages, an oncological patient never complains of pain, does not consider himself sick, continues to work, and leads a normal life. In the future, general weakness, fatigue, drowsiness, and decreased performance appear. There is no satisfaction from the food taken, appetite is perverted or absent, there is a feeling of heaviness in the abdomen. These symptoms are combined into a syndrome of small signs, a syndrome of discomfort. A large number of diseases with different etiology and pathogenesis, at different stages of their development, can have a similar clinical manifestation - pain in the lower back and proceed under the mask of various variants of dorsopathies. Not all of them are associated with degenerative dystrophic processes in the spinal motion segment and myofascial disorders.

Keywords: oncological patient, Osteochondrosis, multiple myeloma.

Introduction

A number of oncological diseases can occur with damage to the spine, both primary and secondary. This, in turn, causes a clinical picture similar to the symptoms of dorsopathies, but requiring a completely different treatment tactics. Latent course of oncological diseases, lack of proper medical examination of the population, under-examination, at first glance, "light" patients can lead to serious diagnostic errors, and as a result, to improper treatment, with all the ensuing irreparable consequences for the patient's health. Such patients at any time can be seen by a specialist dealing with the management of vertebral neurological patients (chiropractors, reflexologists, osteopaths, etc.). This should always be remembered by both beginners and experienced doctors. This is what the authors of this article focus on. It presents the features of the clinical picture and pain syndrome of the most common tumors and its distinctive features in dorsopathies. This information, as well as the clinical cases considered in the work, will allow the specialist to suspect a possible oncological background of the patient's pain syndrome and recommend an additional examination to avoid serious medical errors.

Spinal metastases are secondary cancerous foci. The primary tumor is predominantly located in other organs. And only in 10% of cases, the oncological focus is localized in the spinal cord. Spinal metastases are found in the thoracic and upper lumbar vertebrae. Basically, secondary foci belong to sarcomas and lymphomas. From this article, you will learn about the methods of diagnosing secondary cancerous foci, symptoms, methods of diagnosis and treatment, and ways to relieve pain. The information will be useful to everyone who first encountered the diagnosis, wants to understand the nature of metastasis and believes in a positive outcome of therapy.

The circulation determines the spread of cancer cells. They are constantly migrating. From any organ in the body, blood is directed to the liver, then flows to the heart and lungs. The return path is directed to the original organs. During blood circulation, the affected cells enter the numerous vascular branches (collaterals), and from there into the labial structure of the vertebrae. There they settle, starting to form a tumor. Spinal metastases in 87% of cases appear due to primary cancerous foci in the following organs:

- mammary glands and lungs;
- gastrointestinal tract;
- kidneys and prostate gland;

- trachea, tongue, larynx;
- uterus, ovaries, bladder;
- multiple myeloma.

Making an accurate diagnosis depends on a thorough diagnosis. In medical practice, there is a rule based on the need for an MRI or CT scan of the spine when any type of cancer is detected in the body. Metastases can develop slowly or quickly, so a study for the fact of their presence is a mandatory measure. The main diagnostic methods are also contrast myelography and biopsy (cytological and histological analysis of a tumor fragment). As additional methods, ultrasound, radiography, mammography, scintigraphy are used. For angiography, patients are sent to clarify information about the blood supply to the cancer.

Stage 4 cancer and multiple metastases in the spine cannot provide a favorable prognosis for a complete cure for cancer. The average survival rate ranges from 3 to 10 months when it comes to difficult and already inoperable cases. The sooner you contact when suspicious symptoms appear, the more favorable the prognosis.

At the present stage of health care development, when the role of prophylactic medical examination of the population is secondary - in the practice of doctors dealing with the treatment of vertebro-neurologically patients (chiropractors, reflexotherapists, osteopaths), patients with oncological pathology have become more frequent.

More than 90 diseases are accompanied by pain in the lower back (LBP) [2, 8, 11]. Analysis of a number of scientific works on the study of the etiopathogenesis of the LNP syndrome indicates that the place of its formation is muscles and fascia (myofascial pain syndromes), tendons, ligaments, joint capsules, blood vessels (except for intraosseous ones).

The diagnosis of "Osteochondrosis" and underestimation of the pathology of internal organs in medical practice are often the cause of diagnostic errors or deaths due to late diagnosis of oncological diseases [1, 3, 7, 14]. This publication discusses the differential diagnosis of MNPS syndrome caused by

oncological pathology of the musculoskeletal system.

The tumor process can be primary and secondary (metastasis of organ and systemic tumors to the spine or other bones). Among primary tumors of the spine, benign tumors are more common than malignant ones by more than 1.5 times. Malignant neoplasms, both primary and metastases, prevail in adulthood and old age [2, 11, 13].

Back pain can be the first symptom of any swelling; it does not go away at rest and gets worse at night. Often the pain syndrome is characterized by persistence, and if it is radicular, then it is accompanied by irradiation to the leg or shoulder and is persistent until the development of neurological symptoms. Movement disorders and dysfunction of the pelvic organs can occur acutely (this is an unfavorable prognostic sign). Pathological fractures occur in 9% of patients with bone metastases. The syndrome of spinal cord compression during metastasis to the spine is observed on average 4 years after the diagnosis of the primary focus [4, 6, 10, 15].

In vertebro-neurological practice, secondary metastatic lesions of the spine or other bones with a primary focus in the lungs, brain, internal organs are more common, which are often found by chance, on control radiographs of the pelvis, large joints, spine, fluorography of the chest organs, computed tomography of the abdominal organs with contrast. Metastasis is possible from the mammary glands, prostate, lungs, stomach, rectum, uterus and appendages through the arterial system and venous vertebral plexuses. The most common cancer in women is breast cancer (BC). Distinguish between nodular and diffuse forms of breast cancer. With visual diagnostics and palpation, it is already possible to detect specific changes in the mammary glands and refer the patient to a specialist for consultation. Bones are a favorite metastasis site for breast cancer. According to statistics, among cancer patients - women with bone metastases, 50-70% are diagnosed with primary breast cancer. In this case, the spine is more often affected, in the 2nd place are the pelvic

bones, in the 3rd place - the femurs, on the 4th - the bones of the skull and on the 5th - the upper limbs. And in the structure of lesions of the spine with metastases, the thoracic region predominates - up to 70%, the lumbosacral region - up to 20%, and the cervical region - up to 10%. However, most patients have multiple lesions in different bones and organs. At an early stage of metastasis, radiological changes in the spine may be absent, because to visualize metastases on radiographs, it is necessary that the tumor destroys up to 40-50% of the bone tissue. In some patients, metastasis to the spine is asymptomatic, secretive, metastases are detected only with control scanning (X-ray tomography). The most reliable diagnostic marker of bone metastasis is an increase in serum alkaline phosphatase levels. With breast cancer, as a complication, hypercalcemia develops up to a hypercalcemic crisis. More accurate methods for diagnosing metastases are computed and magnetic resonance imaging, radioisotope scanning [4, 10, 15].

For all types of cancer and in the presence of metastases, baths, saunas, massage are prohibited without prior consultation with a specialist. They stimulate physical effects on the body and organs, which accelerates blood circulation. The consequence of the massage is the intensive spread of cancer cells throughout the body. For an already existing tumor, the risk of enlargement increases. As a result, the state of health of a cancer patient worsens and general intoxication may increase. For this reason, for pain in the back and spine, any thermal procedures and massages are prohibited.

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