

Pain syndrome of extra-articular localization (hamstring syndrome, ARS-syndrome)
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In recent years, 12 patients have come to our Center with complaints of severe pain in the lumbar region of the spine, pelvic region, lower abdomen, in the pubic articulation, along the back of the legs. Before contacting our Center, the patients underwent long-term examination by ultrasound and MRI. MRI revealed osteochondrosis changes in the lumbar spine, no pathologies in the joints were noted. Patients were also treated in clinics using massage, manual therapy, physiotherapy, reflexology, they were prescribed non-steroidal anti-inflammatory drugs, steroid injections. As a result of the treatment, the patients experienced short-term relief, the pain subsided, but after 3-5 days, the pain intensified. The patients were diagnosed with trochanteric bursitis.

We began to examine patients with the ART method and found muscle damage in the area of the sciatic tuberosity (posterior thigh muscle group). Patients were referred by us for ultrasound and MRI for a targeted study of the condition of the muscles and tendons of the pelvic ring. As a result of additional studies, changes were identified in the area of the muscles and tendons of the pelvis. In the scientific medical literature, we found a description of "Hamstring - syndrome or ARS - syndrome". ARS syndrome (Adduktor-rectus-symphysis) is a pathological condition of the tendons of the muscle complex of the posterior muscle group of the pelvic ring and the pubic articulation. This symptom complex was first described by the Bulgarian physician M. Bankov in 1958.

Etiology. "Hamstringsyndrome "is a rather" young "disease. This syndrome was first discussed at the end of 1980. The cause of this syndrome is chronic trauma to the posterior thigh muscle group in the area of attachment to the ischial tuberosity. The cause of damage is too strong muscle contraction, which can occur with sharp acceleration, lifting weights, hitting a tense muscle, too long sports training, playing sports without proper warm-up, a sedentary lifestyle, in motorists and in other situations. Most often, hamstring syndrome is observed in athletes involved in track and field athletics and, above all, in sprint and hurdles. However, hamstring syndrome can also occur in non-athletes.

Chronic trauma to the muscles of the posterior thigh group leads to inflammation and compression of the sciatic nerve. The inflamed tendons press on the sciatic nerve, which in turn creates a vicious circle. Pressure on the sciatic nerve causes pain along the back of the thigh. Ultimately, a scar may form in this place.

Clinical picture

In the clinical picture, in the first place is pain in the gluteal region with irradiation along the back of the thigh. The pain increases with muscle tension, with prolonged sitting. In addition, pain occurs when pressing (palpating) the ischial tuberosity, passive flexion of the hip and extension of the lower leg, as well as active flexion of the leg in the knee joint against the doctor's resistance. There is also pain in the lower abdomen and groin areas with irradiation along the muscles. Unbearable pain significantly limits a person's functionality. With a prolonged course of hamstring syndrome, complete separation of muscles from the ischial tubercle is also possible.

Hamstring syndrome needs to be differentiated from a number of other possible causes of gluteal and lower limb pain (eg, sciatica, piriformis syndrome).

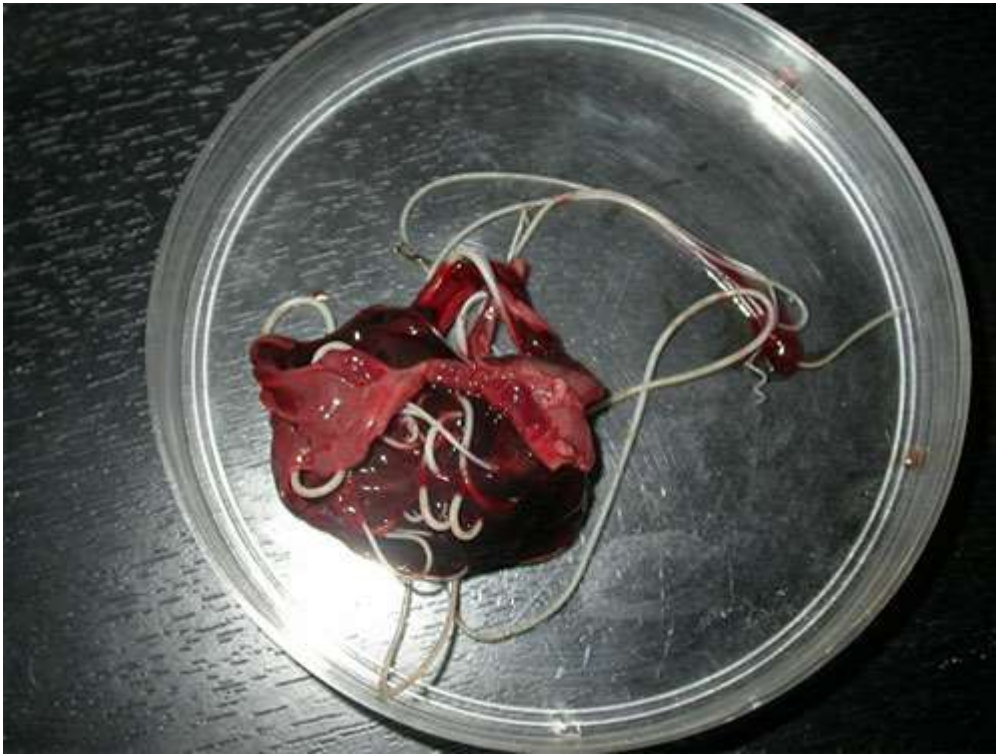
Diagnosics

For the setting of the hamstring syndrome, a thorough medical examination with the additional use of MRI and ultrasound is very important. MRI is decisive in determining the degree of soft tissue damage - complete, partial rupture. The tomograms show the location and extent of the tendon or muscle rupture, as well as the accompanying edema and hemorrhage. Magnetic resonance imaging allows you to see the thickening of the hamstring muscles. X-rays are taken to rule out fractures.

Unfortunately, the hamstring syndrome is practically unknown to domestic doctors, and an erroneous diagnosis of trochanteric bursitis is often made, which is much less common. That is why an integrated approach is needed for a more accurate diagnosis.

When examining 12 patients, we noticed subcutaneous indurations in the soft tissues of the pelvis. Some patients said that these seals move, then appear on the left, then on the right. In the area of these seals, they noted a sharp soreness. The treatment carried out in the clinics did not help them, the pain did not go away, but only increased. And if at first the pains were one-sided, then gradually spread to the other leg. The pain was burning and the patients could not walk. We became interested in these seals and began to investigate them using the ART method.

As a result of research on ART, according to the specified diagnosis, Eliseeva O.I. we found the presence of dirofilariae in the seals.



Rice. 1

Dirofilariasis

The causative agent of dirofilariasis belongs to the class of roundworms Nematoda, order Spirurina, suborder Spiruromorpha, family Filarioidea, genus *Dirofilaria*. In total, several species of worms have been described, of which *D. repens* and *D. immitis* are the most widespread. It is they that cause the vast majority of human cases. The causative agents of the invasion *D. repens* and *D. immitis* are obligate parasites of the canine and feline carnivorous families.

Within 3 months, the larvae develop in the subcutaneous adipose and connective tissue, molt twice and turn into larvae of the fifth stage, which migrate through the circulatory system to the heart and pulmonary artery, where after another 3 months they become sexually mature. The life cycle of dirofilariae lasts 7-8 months. One female dirofilaria hatches up to 30 thousand larvae per day. In the body of animals, parasites live (according to various sources) from 4-5 months to 2 years. Microfilariae circulate in the blood of a definitive host for up to 3 years.

Human dirofilariasis

First of all, it should be noted that this disease is rare in Russia. It is not surprising, therefore, that dirofilariasis in humans is difficult for most doctors to diagnose. What does it consist in? The official name of dirofilariasis is "worm infestation caused by round worms." As the main source of the disease, experts call street dogs and cats, as well as mosquitoes - insects are able to transfer larvae and "implant" them under the skin. Of course, dirofilariasis, like other diseases of this kind, is the most

common in hot countries: Africa, India, Vietnam. Recently, however, more and more cases of infection have been recorded in Russia.

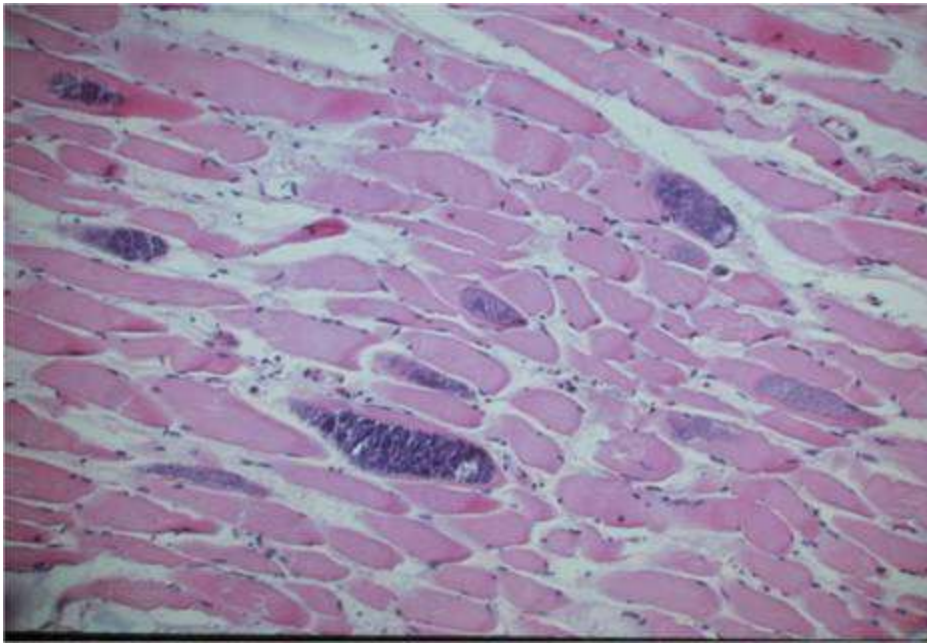
The likelihood of invasion does not depend on the age of the person, but depends mostly on the possibility of contact with infected mosquitoes, at the peak of which the greatest number of infections occurs.

The period of clinical incubation depends on the reactivity of the organism and the growth rate of the parasite and ranges from one month to several years. In the overwhelming majority of cases, a single individual is found - an immature female, therefore microfilariae in humans have not been described, but not completely excluded.

Approximately 6 months after infection, the parasite reaches its maximum size and is located inside the inflamed node. As a rule, the helminth is located in a connective tissue capsule containing serous-purulent exudate, protein and eosinophilic and neutrophilic leukocytes, which infiltrate adipose tissue with the addition of macrophages and fibroblasts.



Rice. 2



Rice. 3

A characteristic symptom of dirofilariasis is the migration of the pathogen - the movement of the seal or the helminth itself under the skin, which is noted in 10–40% of those infected. The distance the dirofilaria moves is several tens of centimeters, the speed of movement is up to 30 cm in 1-2 days. The movement of the parasite from the skin of the right hypochondrium through the left supraclavicular region and the left part of the lower jaw to the conjunctiva of the left eyeball is described. When the parasite migrates in the subcutaneous tissue, after each movement, a new seal appears in a new place, and no traces remain at the old place of its stay. An increase in migration occurs when the skin is exposed to UHF currents during physiotherapy, as well as after warming up with compresses or warming ointments.

A specific sign of dirofilariasis is the sensation of movement and crawling of a living "worm" inside a seal, tumor or subcutaneous node. In many patients, the invasion has a recurrent course with phases of remission and exacerbation of the process.

Treatment

Having established that in patients, muscle tissue damage and the formation of subcutaneous indurations in the pelvic tissue region were caused by dirofilariae, we performed exogenous BRT for 20–25 sessions directly on the affected area and the entire body. The treatment was carried out in stationary conditions in combination with endogenous BRT, body cleansing, massages, antiparasitic drugs. The condition of the patients improved significantly, the seals disappeared, the pain practically did not bother. The course of treatment was repeated 3 months later. Patients do not complain of pain in the lumbar region, pelvis, legs, they move freely.

conclusions

Thanks to ART, parasites were identified - dirofilariae in pain syndrome of extra-articular localization (hamstring syndrome, ARS syndrome). 12 cases cannot only testify to this cause of the ARS syndrome. But the identification of this infection will facilitate the correct treatment and recovery of patients with this syndrome.

Literature

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