

Isolated Myocysticercosis of Leg Masquerading as Deep Vein Thrombosis

Dear Editor,

The occlusion of the lower limb deep veins, referred to as deep vein thrombosis, is an uncommon entity with an incidence of 88–100 per 100,000 person-years.^[1] *Taenia solium*, the pork tapeworm, is a segmented worm belonging to the cestode class of intestinal helminths. Humans are the only definitive host; however, the intermediate host is usually pig, but humans can also be an intermediate host. The ribbon-like adult worm typically resides in the jejunum for few years before it produces eggs. The eggs are released in human feces, and after the ingestion of eggs by the pig, the larval oncospheres are activated. These larvae escape the egg, and penetrate the intestinal wall, and are carried to different tissues of the body. Within 2–3 months, the encysted larval stage called cysticerci develops. In humans, cysticerci could be found in the brain, cerebrospinal fluid, skeletal muscle, subcutaneous tissue, or eye.^[2] Isolated myocysticercosis without any neurological involvement is rare, with only a few cases reported in the literature.^[3]

A 31-year-old male presented to a primary care center with complaints of sudden onset pain in the right calf along with swelling in the right foot. On local examination of the right leg, he had pitting edema of the right foot up to the ankle joint. There was tenderness present on calf compression. The provisional diagnosis of deep vein thrombosis was considered, and he was empirically started on low-molecular weight heparin 60 mg subcutaneous twice a day and was referred to our center. On examination of the right leg at our center, he was found to have 2 × 3 cm swelling with indistinct margins in the medial compartment of the upper one-third of the right leg 5 cm below the popliteal fossa. He underwent ultrasonography of the right leg, which revealed 2 × 2 cm cystic swelling with scolex in the center, suggestive of myocysticercosis [Figure 1]. The patient was subjected to magnetic resonance imaging (MRI) of the lower limbs, brain, and eyes with orbits. However, there was no evidence of cysticercosis elsewhere in the body except the right flexor digitorum longus muscle with perilesional edema. The final diagnosis of isolated myocysticercosis was established, and the patient was managed with tablet albendazole (15 mg/kg orally daily for 4 weeks).

T. solium causes two types of infections in humans: adult tapeworm in the intestine and the larval form in the tissues, called cysticercosis. Cysticercosis in humans is like a zoonotic infection. Muscular cysticercosis generally remains asymptomatic. However, it can present clinically in three different ways: myalgic type, nodular type, and pseudohypertrophy type. Our patient presented with a combination of myalgic and nodular types.

Ultrasonography of the muscle is one of the easiest and cost-effective modalities for diagnosing muscular cysticercosis. On ultrasonography, the following patterns can be identified: cyst with scolex and surrounding edema; cyst with scolex without surrounding edema; or irregular cyst with no or minimal fluid and absence of scolex (ruptured cyst).^[4] Similarly, MRI is very useful in diagnosing the infection, delineating the stage of cysticercus and the plane within the muscle where the cyst is located. Our patient's USG revealed a hypoechoic cyst with hyperechoic scolex in the center with surrounding edema, and MRI confirmed the USG findings.

The treatment of cysticercosis depends upon the cyst burden, location, and symptoms of the patient. In cases

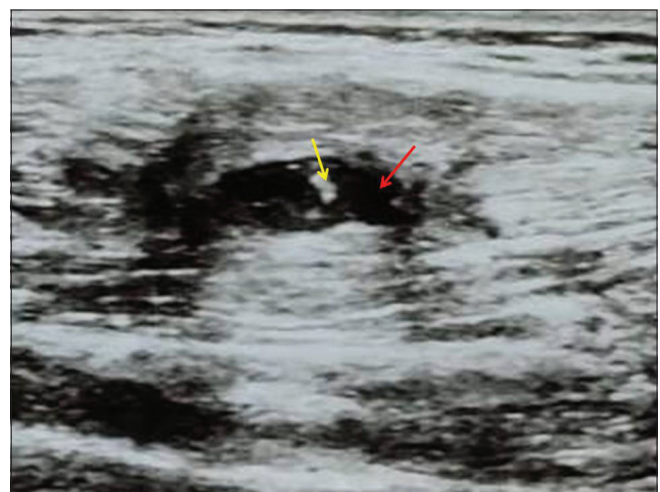


Figure 1: The ultrasonography of the right leg. The red arrow shows the hypoechoic cyst and the yellow arrow shows the hyperechoic scolex in the center

of a solitary cyst, both medical management and surgical excision can be done depending on the patient's and the treating doctor's preference.^[5] We successfully managed our patient conservatively with oral albendazole and without glucocorticoids.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given his consent for his images and other clinical information to be reported in the Journal. The patient understands that his name and initials will not be published, and due efforts will be made to conceal identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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