Cysticercosis is a systemic manifestation caused by dissemination of the larval form of the pork tapeworm, Taenia solium. Human cysticercosis occurs when eggs are ingested via faecal-oral transmission from an infected host. Humans become an accidental intermediate host, with development of cysticercosis within various organs. Isolated muscular involvement is rare with only a handful of cases reported in the literature. Involvement of the extensor carpi radialis brevis muscle is rarer with no such case reported. We present a case of isolated cysticercosis of the extensor carpi radialis brevis muscle that presented a diagnostic challenge. Initially treated on the line of tennis elbow elsewhere, but diagnosed to be cysticercus cyst on high resolution ultrasound. The patient’s infection was successfully managed non-operatively with oral antihelminthic and symptomatic treatment.

Keywords: Cysticercosis; Taenia solium; Extensor Carpi Radialis Brevis Muscle; Ultrasound
first week and then weekly thereafter for 4 weeks. Patient showed initial symptomatic relief from the second day of treatment and at the end of four weeks there was complete resolution of the swelling on palpation and the patient was essentially symptom free. On follow up at 8 months the patient had been managing well with activities of daily living and reported no further symptoms.

Figure 1.

Discussion

Cysticercosis is a parasitic infection caused by Cysticercus cellulosae, the larval form of Taeniasolium. Humans are the only definitive host while both humans and pigs can act as intermediate hosts. Cysticercosis in humans is caused by consumption of food or water contaminated with viable eggs of T. solium or regurgitation of eggs into the stomach from the intestine of people harboring a gravid worm [1,2]. If the eggs contaminate food sources, upon ingestion they develop into larvae and result in cysticercosis. Hence, even people who do not consume pork, including vegetarians, can develop cysticercosis [2,3]. Isolated muscular involvement is rare [4] and because of the non-specific symptoms it presents a diagnostic dilemma for the treating physician. Till date there are only a handful of cases of isolated intra-muscular cysticercosis reported in the literature [3-14]. In our case, we too faced a diagnostic challenge due to the rarity of this presentation. Most muscular cysticercosis is asymptomatic and goes unnoticed for the life of the patient. The clinical features depend on the location of the cyst, the cyst burden, and the host reaction. Subcutaneous cysticercosis may cause painless or painful subcutaneous nodules [2] and may present clinically with myalgia, pseudotumor or mass and pseudohypertrophy [2-4]. Clinically, soft tissue cysticercosis can be misdiagnosed as lipoma, epidermoid cyst, abscess, pyomyositis, tuberculosis lymphadenitis, neuroma, neurofibroma, sarcoma, myxoma, ganglion, or fat necrosis [15-18].

High-frequency USG has become relatively inexpensive and is a readily available and reliable diagnostic modality for the diagnosis of soft tissue cysticercosis [16, 17, 19]. Although MRI is more specific for neurocysticercosis [17], CT may be the modality of choice for muscle cysts as it can demonstrate multiple cysts in a honeycomb or leopard skin pattern against a background of muscle mass [18]. Treatment of soft tissue cysticercosis depends on the location of the cysts [1]. Surgical excision is done for isolated skeletal muscle or soft tissue cysticercosis associated with abscess.

Recently, case reports have advocated non-operative management, even for painful masses, with antihelminthic medication and oral steroid therapy [6,15,16]. Follow-up USG is done after three weeks of antihelminthic medication to look for resolution of the lesion. Steroids are commonly used as a cover for the inflammatory response to the necrotic pathway. In our case, we instituted only oral antihelminthic (albendazole) and symptomatic treatment, with success. Steroid was not used.

Conclusion

Isolated muscular cysticercosis poses a diagnostic dilemma for treating physicians, thus, should always be part of the differential diagnosis of subcutaneous and intra-muscular swelling. High resolution USG is a good modality for diagnosing soft tissue cysticercosis.

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