



## A RARE CASE OF ORBITAL CYSTICERCOSIS IN JINGZHOU – A CASE STUDY

Dr. Wang Lei

*Ophthalmology Department, Jingzhou number 1 hospital of Shashi, Jingzhou, Hubei, P.R. China*

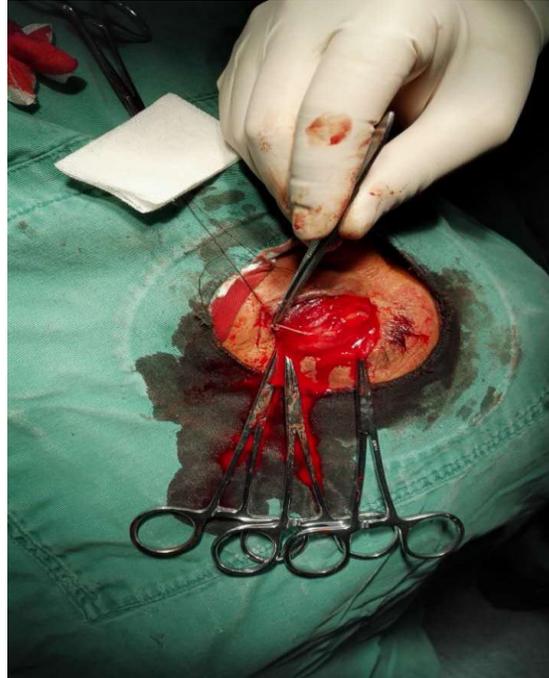
### ABSTRACT

Ocular cysticercosis results from development of *Taenia solium* larvae, *Cysticercosis cellulosae*, in the eye. This condition is observed all over the world but is particularly common in developing countries. In China, it is mostly found in northern China, northeast and central China. The eye, like nervous system and muscle tissue, vitreous body and retina, is a prime location for parasitic development because of its rich vascularization, whereas, the minority is located in the anterior chamber and orbital area. Intraorbital cysticercosis may leads to blindness if untreated. The diagnosis solely depends on biopsy being surgical treatment as the mainstay of treatment.

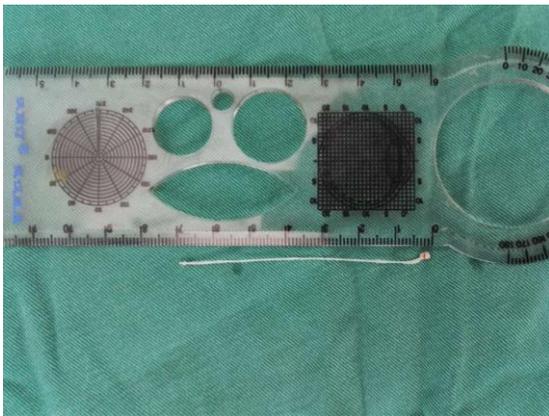
**Keywords:** Cysticercosis, antihelmenthic

## CASE PRESENTATION

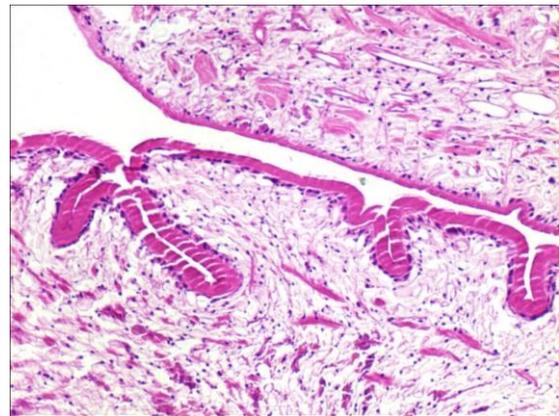
A 56 years old gentleman presented in the hospital with history of left eyelid swollen for nearly 3 months, on and off in nature, for which he was admitted in March but he gives history of recurrent eyelid swelling despite of treatment. There is neither history of trauma , dizziness, headache, limb weakness nor repeated episode of hypothermia. In the another hospital it was diagnosed as a case of inflammatory pseudotumor and was treated with anti-inflammatory and hormonal therapy. For a short instance, it has worked but after the stoppage of medication, there was a recurrent attacks of sign and symptoms were observed. It was repeated altogether of 3 times after treatment. The head and orbital CT examination was performed where no obvious abnormalities were detected. Specialized examination of eye revealed: right eye vision 0.6 and left eye vision 0.8. His right eye has 12 MMHG of intraocular pressure, whereas, intraocular pressure of left eye was 13 MMHG. Left upper eyelid below the central superciliary arches are 1 \* 3 cm hard mass, border clear, tender during compression but no evidence of rebound tenderness was detected. Normal conjunctival congestion, transparent cornea, anterior chamber depth, transparent crystal, fundus did not showed any abnormalities. Then he was diagnosed as a case of left orbital neoplasm. Routine blood examination was done but no obvious abnormality was seen. On September 17, 2016, left eyelid neoplasm resection was planned and performed following standard guidelines, where intraoperative subcutaneous skin incision was done under local anesthesia, blunt separation of muscular layer was done , After the muscular layer was resected ,a long white thread like organism was seen and extracted out with caution which is shown in(picture 1) from head to tail, movable, about 7 cm long and clip out of the insect body, (picture 2) shows the surrounding obvious muscle adhesion, and cleaned up the surrounding tissue and after removal of all the residues. Interrupted suture was given in muscle and skin. Pathological examination revealed orbital cysticercosis with surrounding inflammatory granuloma.(picture 3) . Anti-inflammatory hormone was initiated for symptomatic treatment and postoperative ketoneses arsenic (praziquante1) orally, antihelminthic medicine was started and well tolerated. Having adult dose of 15 ~ 20 mg/kg. After the extraction and use of antihelmenthic , he responded well to the treatment and improved gradually during hospital stay. After the healing of wound , the suture was removed and observed. There was no complications and he was clinically stable, hence, he was discharged from hospital .



**Figure 1:** Removal of the parasites from the cyst



**Figure 2:** Removed parasites total length of 7 cm



**Figure 3:** Parasites pathological section

## DISCUSSION

Cysticercosis are the larva of *Taenia solium*. They can parasitize in the whole body, various organs and tissues such as skin, muscle, brain and eyes. Infection way has its infection and foreign infection being two kinds, eye swine cysticercosis clinically, it is not uncommon. The second parasitic in the retina, a small number of parasitic in the anterior chamber and under the conjunctiva, separate peri-orbital parasitic in the rare. Ocular cysticercosis infection have two main ways: (1) : endogenous infection, swine cysticercosis patients in the gut by digestive tract antiperistalsis to the stomach, the stomach through the people of the various parts of the body as it enters the blood become cysticercosis;(2) the exogenous infection: eating food

contaminated with eggs. Acquired eggs pollution after contact with the eyes, parasitic worm after conjunctival develop into larva worms through conjunctival orbit or ophthalmic circulation. Clinical manifestations are mainly: exophthalmos, local bag piece, limited movement, diplopia, local conjunctival congestion, edema and merging other parts cysticercosis lesions. Cysticercosis and pouch exudates can produce immune inflammation, granulation tissue hyperplasia, finally fibrous scar being made in the eye QiuBi, orbital and orbital bone tissue adhesion, a corresponding symptoms. Diagnosis should be found in detail with the history of the disease, patients with or without words in swine cysticercosis of infections, and presence of raw pork rice and ingestion of uncooked flesh, mydriatic after careful fundus examination, laboratory examination, imaging studies. Once orbital cysticercosis is diagnosed, there should be early surgical treatment, otherwise cysticercosis will persist in intraocular and recurrent inflammation. This can cause vision loss, vitreous opacity(hemorrhage), meningitis, depending on the retinal pigment from, concurrency, green light with cataracts, eventually leading to eyeball atrophy. QingZhuang years, cysticercosis farming people takes the first place, and clinical manifestations of multiple focal symptoms, many changes, atypical symptoms or signs are often difficult to diagnosis. Therefore, detailed history and physical examination, is the main stay of diagnosis, comprehensive analysis of clinical data, and will to auxiliary examination, is the key to reduce cysticercosis misdiagnosis and missed diagnosis. General patients by enzyme-linked immunosorbent positive rate is higher, with other parts can help in the diagnosis of cysticercosis. Surgical treatment is the only way to control inflammation preoperatively, with intraoperative complete removal of cysticercosis and thecal sac. This example of cysticercosis reveals the inflammation around the orbital area with granulomatous reaction, therefore, early treatment can relieve eye lesions and postoperative complications. The disease in rural, should strengthen the health epidemic prevention knowledge education and meat, people's diet as much as possible to reduce the occurrence of swine cysticercosis.

## REFERENCES

1. jia-qi liu editor. Practical ophthalmology[ M] Beijing: people's medical publishing house,1984,4,19.
2. Song Zhenying editor. Eye diagnostics [M] Beijing: people's medical publishing house,1985,743.
3. zhao wei xian human parasitic worm first learn [M] version 2. Beijing: people are the people who born press, 1994,581-592