

Picture Stories

Unusual presentation of cysticercosis in a child

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Introduction

Cysticercosis results from the ingestion of eggs of the pork tapeworm, *taenia solium*. The human is the final definitive host in which the tapeworm develops to maturity producing eggs which are passed out in the faeces^{1,2}. We report a case of a 4 year old boy who presented with a swelling in midline of neck. This child was operated upon with a clinical diagnosis of thyroglossal cyst, but the histopathological report was cysticercosis.

Case report

A 4 year old boy presented with a midline swelling of neck since 8 months, gradually increasing in size. On examination, there was a cystic lesion 2cm x 1cm, lateral to midline on the left side of neck. The swelling moved with deglutition & protrusion of tongue and was not mobile in the cranio-caudal direction (Figure 1).



Figure 1. Midline cystic swelling

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Ultrasonography showed a probable thyroglossal cyst. After routine work up, patient was taken up for surgery. Cyst, along with tract and central part of hyoid bone was excised completely (Sistrunk operation). The cyst was slightly adherent to surrounding muscles. Postoperative recovery was uneventful. Histopathology report showed a cyst with central laminated cyst wall of cysticercoids surrounded by granulomatous inflammation with surrounding muscle tissue suggestive of cysticercosis (Figures 2 & 3). A 4 week course of anti-helminthic was given. Patient was asymptomatic at 1 year postoperative assessment.

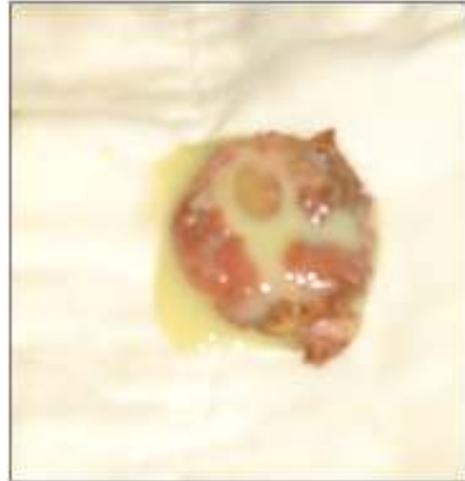


Figure 2: Cyst with larvae

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Figure 3: Microscopic examination showing cysticercosis

Discussion

Cysticercosis in children is rarer than in adults^{1,2}. The commonest site involved is the central nervous system and the second most common site is skeletal muscle^{1,2}. Symptoms are secondary to mass effects or allergic response^{1,2}. Very few cases of isolated cysticercosis in thyroglossal cyst have been reported but all were in adults and were travel related^{3,4}. It is commonly seen in immunocompromised patients. Disseminated cysticercosis with secondary involvement of thyroglossal cyst is more common^{5,6,7}. A survey of the literature has not revealed even a single case report of cysticercosis in neck or in thyroglossal cyst in a child.

Serology can be done to detect the cysticercal antibodies in the serum or cerebrospinal fluid^{8,9}. Biopsy from the lesion remains the gold-standard in providing a definitive diagnosis. Available treatment options for cysticercosis include anti-parasitic therapy, anti-seizure therapy, and surgery. Generally, treatment depends upon a number of factors such as location, size and number of cysts. Treatment with anthelmintics has a questionable value but when given, 4 weeks of praziquantel is said to be the drug of choice. Albendazole is another option.

References

1. Allan JC, Garcia-Dominguez, Craig PS, Rogan MT, Lowe BS, Flisser A. Sexual development of *Taenia solium* in hamsters. *Annals of Tropical Medicine and Parasitology* 1991; **85**: 473–7.
2. Chawla S, Husain N, Kumar S, Pal L, Tripathi M Gupta R K. Correlative MRI imaging and histopathology in porcine neurocysticercosis. *Journal of Magnetic Resonance. Imaging* 2004; **20** 208–15.
<http://dx.doi.org/10.1002/jmri.20105>

PMid:15269945

3. Uledi SJ. A rare gigantic solitary cysticercosis pseudotumour of the neck. *Journal of Surgical Case Reports* 2010; **9**:5
4. Gupta S, Sodhani P. Clinically unsuspected thyroid involvement in cysticercosis: a case report. *Acta Cytologica* 2010; **54** (5 supplement): 853-6.
PMid:21053555
5. Cruz ME, Schantz PM, Cruz I. Epilepsy and neurocysticercosis in an Andean community. *International Journal of Epidemiology* 1999; **28** 799–803.
<http://dx.doi.org/10.1093/ije/28.4.799>
PMid:10480714
6. Cruz-Revilla C, Rosas G, Fragoso G. *Taenia Crassiceps* cysticercosis: Protective effect and immune response elicited by DNA immunization; *Journal of Parasitology* 2000; **86**: 67–74.
<http://dx.doi.org/10.2307/3284911>
PMid:10701566
7. David S, Mathai E. Ocular cysticercosis- a review of 25 cases; *J. Assoc. Physicians India* 2000; **48**: 704–7.
PMid:11273505
8. Del Brutto OH, Sotelo J. Neurocysticercosis: an update; *Reviews of Infectious Diseases* 1988; **10**: 1075–87.
<http://dx.doi.org/10.1093/clinids/10.6.1075>
PMid:3060939
9. Del Brutto OH, Grandos G, Talamas O, Sotelo J, Gorodezky C Genetic pattern of the HLA system HLA A, B, C, DR,DQ antigens in Mexican Patients with parenchymal brain cysticercosis. *Hum. Biol.* 1991; **63**: 85–93
PMid:2004746