ALBENDAZOLE THERAPY IN ORBITAL CYSTICERCOSIS

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Abstract : A patient with orbital cysticercosis is being presented, where albendazole therapy was successfully used. Serial CT scans of the lesion showed definite signs of resolution. The role of albendazole therapy in cysticercosis has been discussed. The relevant literature has been reviewed in brief.

Key words : albendazole

orbital

cysticercosis

INTRODUCTION

The mainstay of treatment in orbital cysticercosis so far, is surgery. Since the cysticerci are generally lodged in the orbital muscles, any dissection in that area is bound to cause muscle weakness resulting in diplopia. It is a classic example where the treatment is worse than the disease. In view of this, the surgeon is caught in a dilemma. Praziquantel (1-3) and albendazole (4, 5) therapy have been tried in cerebral cysticerci since the last decade with varying degree of success. In view of this, albendazole therapy was tried in the present case with orbital cysticercosis. The experience is being reported.

CASE REPORT

A 25 year old lady presented to the neurosurgical outpatient department of J.N. Medical College, A.M.U., Aligarh. She complained of headache and double vision since one week. Objectively, she had a right lateral rectus palsy and a paralytic squint. Headache subsided following symptomatic treatment. CT scan of the brain and orbit showed cystic lesion in the orbit, arising from the right lateral rectus muscle. In view of CT diagnosis of cysticercosis, ELISA test for cysticercosis was asked for. It turned out to be negative. Haemogram was within normal limits. Erythrocytic sedimentation rate was 25 mm/1st hour. X-rays of the limbs did not show any soft tissue calcification.

In view of CT appearance of cysticercosis, patient was put on albendazole 400 mgms twice a day for ten days. Clinically, the patient did not show any improvement at the end of treatment in ten days. Albendazole was continued in the same dose for one month. A repeat CT scan of the lesion at this stage showed very slight reduction in the size of the cyst. The cystic lesion was replaced by a hyperdense disc lesion in the CT scan. Clinically, the patient did not show any improvement. The diplopia persisted.

At this point of time, the patient consulted another centre. She was advised to continue albendazole in the same dose for another month. Steriods were added in the form of tab prednisolone 40 mgms daily in four divided

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dosage. Prednisolone tablets were gradually tapered off in one month's time. The patient started showing clinical improvement in three months' time. The diplopia disappeared and the squint also improved partially. A CT scan was repeated three months after her initial presentation. The scan showed considerable reduction in the size of the hyperdense lesion in the right lateral rectus muscle.

DISCUSSION

The role of albendazole therapy in cysticercosis is being recognised very recently in India. There are several reports on the praziquantel experience (6, 7) but none on albendazole therapy in cysticercosis from India. We have been treating neurocysticercosis with albendazole therapy for the last two years. Our experience in this regard is not yet published.

Complete CT disappearance of giant subarachnoid cysticerci as large as 5 cms, have been reported by Brutto et al (4). What is interesting to note, is that such large cysticerci disappeared with albendazole therapy of eight days only. The disappearance was noticed between 3-6 months. In the present case, repeat

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CT after one month did not show any change in the lesion, obviously because it was done rather too early. Sancheti et al (6), while dealing with the praziquantel experience mention that though clinical recovery occurs in three months time, it takes about 12-24 months for CT lesions to disappear. The optimum time for discernible changes in the CT appears to be much more than one generally tends to believe.

Adding steroids with albendazole potentiates it's action as suggested by Jung et al (8). This is in contrast with praziquantel, where the plasma levels of the drug get reduced with steriods (9).

Albendazole acts by inhibiting the glucose uptake by the parasite membranes, thus virtually starving them to death. Praziquantel causes paralysis of the parasite musculature and thus destroys the scolex. Albendazole, being a cysticidal drug should be preferred over praziquantel (4).

Albendazole, though tried in neurocysticercosis, has not received due attention by the ophthalmologists. It is worth trying in the orbit, where surgery has it's hazards in terms of muscle paralysis.

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