Efficacy of secnidazole in the Treatment of Intestinal Amoebiasis

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Introduction

Acute intestinal amoebiasis is common in Pakistan[1]. Though 5- nitroimidazoles are generally used as the drugs of first choice, but compliance is poor due to its longer treatment course. WHO[2] has recommended that the treatment of amoebiasis should be based on a suitable, effective and single dose therapy to avoid the risk of non-compliance. Secnidazole, a long acting nitroimidazole which has a half life of 19 hours[3] was therefore, tried as a single dose therapy for non-complicated intestinal amoebiasis, to see its efficacy and tolerance.

Patients, Methods and Results

Adult patients whose fresh stool examination at our department showed trophozoites of entamoeba histolytica were included in the study. Patients suffering from extra intestinal amoebiasis, toxic cases and children under the age of 15 years were excluded from the study and so were the cases who had taken antiamoebic treatment for the present episode. Single oral dose (2 Gm) of secnida2ole was given as 4x500 mgtablets andpatients were made to sit for2 hours to report any untoward side effects. Patients were asked to refrain from all antibiotics and antiamoebics till the completion of the trial (21 days). Tolerance and clinical efficacy of the drug was checked via clinical examination performed at 2 hours and day 5 and 21 following secnidazole intake. Parasitological efficacy was checked by a repeat stool examination on day 5 and 21. Clinical, parasitological and global outcome were assessed according to the table. A total of 25 patients (20 males and 5 females) entered the study, of these 2 were lost to follow up and were therefore excluded from the study. The ages of 23 patients ranged from 16-65 years (mean 30 years). At inclusion the presenting features were abdominal colic (18), tenesmus (9), diarrhoea (6) and fever (3). Trophozoites of E.H. were present in 7 and both cysts and trophozoites in 16 stools. Majority (18) of the patients had excellent tolerance to the drug, 3 had nausea and 1 each had bitter taste in the mouth, vertigo and cramps in the legs. Of 23 patients assessed for the efficacy according to the criteria mentioned, 20 (87%) showed complete clinical recovery, 2 relapsed and symptoms persisted in 1. Trophozoites of E.H. were eradicated in 19 (82.6%) cases, while one showed E.F1. at day 5 (treatment failure) and 3 showed trophozoites in stools at day 21 (clinical relapse). According to WHO criteria complete response was achieved in majority (19) of the cases with only 4 showing treatment failure. The drugwas well tolerated by most of the cases. Minor/transient side effects not requiring therapeutic intervention were seen in few cases.

Table. Clinical, parasitological and global outcome.

Clinical outcome:	
Recovery	No symptoms at day 5 and 21.
Persistance	Symptoms +ve at day 5 and 21.
Relapse	Symptoms absent at day 5, present at day 21.
Parasitological outcome:	
Failure	E.H. +ve on day 5.
Relapse	E.H. -ve. on day 5, +ve on day 21.
Cure	No E.H. on day 5 and 21.
Global outcome:	
Complete	No E.H., no symptoms.
Probable	No E.H., symptoms present.
Treatment Failure	E.H. +ve in one of the 2 follow ups.

Comments

Oral administration of a single dose of 2G seenidazole in adults was highly efficacious in the treatment of uncomplicated intestinal amoebiasis. According to WHO criteria, complete response was achieved in 19 cases (83%), with treatment failure in 4 cases only. The drug was well tolerated by most of the cases. Similar results were reported by others4. Amoebiasis being common in Pakistan and patient compliance being a problem, a single oral dose appears to be the treatment of choice for non-complicated intestinal amoebiasis.

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