

SUMMARY

The present study was performed to evaluate enzyme-linked immunosorbent assay (ELISA) for diagnosis of giardiasis in children.

The study was performed on 200 child attending the outpatient clinics and inpatients sections of Benha University Hospital, full sheet were prepared to obtain data incldyding age, sex, clinical manifestation, dietetic history and past history. The age of the examined cases ranged from 1 year upto 13 years.

From each case a stool sample was examined for giardiasis cyst or trophozoites by direct smear method and zinc sulphate centrifuged floatation method.

Sonicated cysts were used as antigen for ELISA. The sensitivity of ELSIA was 100% while the specificity was 93.8%.

in the present study, there was no significant differences in results in relation to age and sex but we found that diarrhoea, abdominal camps, anorexia and loss of weight are the most prevalent clinical presentation of giardia in the detected cases

with the test. Also we noticed that giardiasis is more frequent in children exposed to previous attacks of diarrhea and contact with animals. So, we may considered it as a risk factor for giardiasis.

As regarding the dietetic history, we found that giardiasis is more frequent in artificially fed children more than breast fed children, this is because breast milk protects children from symptomatic giardiasis as it contains immunoglobulins against giardiasis.

CONCLUSION

From the present study, it could be concluded that *Giardia lamblia* infection is rather prevalent among infants and children. It was found that intensity of infection with *G.lamblia* could not be correlated with either age or sex.

Diarrhoea, abdominal cramps, anorexia and loss of weight is the most frequent manifestation of giardiasis, also we found that diarrhoea and contact with animals are risk factors for giardiasis and breast feeding is important in protection of infants and childrens against symptomatic giardiasis.

Diagnosis of *G.lamblia* by direct method is difficult on the other hand, ELISA preferably used as indirect method of diagnosis as its sensitivity is very high.

RECOMMENDATION

- ◆ We recommend detection of antibodies of giardiasis in serum by ELISA. Correlation between it and our study.
- ◆ As regarding: preservation of stool samples, we recommend: the time of preservation not exceed three months to preserve the antigenicity of the parasite.
- ◆ In field study we must do stool examination for the detection of the parasite and confirm the diagnosis by one of the immunological tests.
- ◆ In immunocompromised children manifesting with diarrhoea we recommend to do ELISA for early diagnosis of giardiasis for fear of its hazards.
- ◆ Routine examination of house- animals in highly manifested area with giardiasis to overcome their trouble in transmission of the disease.