Identification of Intestinal Microsporidia by Trichrome Staining and Calcofluor White Methods among Kidney-Transplanted Patients in Hamadan

Abstract

Background and Objective: Microsporidia is an obligatory intracellular parasite known as an opportunistic infection in immunocompromised patients. Its laboratory diagnosis is relatively difficult and modified trichrome staining is a standard diagnostic method for detection of Microsporidia. The aim of present study was to identify intestinal Microsporidia in kidney-transplanted patients, using modified Trichrome Staining and Calcofluor White Methods.

Material and Methods: In 2012, 180 stool specimens were taken from kidney-transplanted patients given immunosuppressive drugs in Hamadan, Iran. To identify Microsporidia we use modified Trichrome Staining and Calcofluor White Methods.

Results: The mean duration of kidney transplant and immunosuppressive drug using was 5.5 Years. Only one female patient was positive for Microsporidia.

Conclusions: Owing to low frequency of this opportunistic infection among kidney transplanted patients, we can conclude that their hygienic conditions are good enough and they are not exposed with the parasites.

Key words: Microsporidia, Modified Trichrome Staining, Kidney Transplant, Calcofluor White, Hamadan