Importance of Research

Intestinal coccidian parasites cause disease predominantly in immunodeficient patients, quite a few of them are reported in immunocompetent patients. These can be acquired easily and are difficult to treat. There are battery of tests ranging from microscopy to molecular methods available for detecting these protozoa. But many of these are cumbersome, time consuming thus posing a diagnostic challenge. Therefore, there is need for highly sensitive rapid techniques which aid in early diagnosis and accurate treatment. Though more sensitive methods like antigen detection, nucleic acid amplification assays are available but as they are expensive most of the laboratories still rely on microscopic examination. Kinyoun's acid fast stain is used in detection and differentiation of coccidian parasites based on their size and morphology. Auramine stain is a fluorescent dye used in mycobacteriology in detection of acid-fast microorganisms and has replaced Kinyoun's acid fast stain because of the ease and sensitivity of interpretation. In India every RNTCP lab is provided with a LED microscope which can be utilised for screening of coccidian parasites without allocation of additional budget. By both techniques, Cryptosporidium spp (3%) and Cystoisospora spp (3%) were the coccidian parasites detected. Similar results were obtained by Abou El-Naga and colleagues, 1998, and Hanscheid and colleagues, 2008. This fluorescent stain could easily differentiate the artifacts from the coccidial parasites, thus yielding better results than Kinyoun's acid-fast stain. The advantage of the auramine over Kinyoun's acid-fast stain was reported by Abou El-Naga and colleagues in 1998, and by Hanscheid and colleagues in 2008. The ease of interpretation varied with 2 methods.

About University

Tabriz University of Medical Sciences (TUOMS) is public medical sciences university located in Tabriz, East Azarbaijan Province, Iran. It is ranked as one of Iran's top medical schools, with more than 5000 students.

The University consists of eleven faculties: Medicine, Pharmacy, Dentistry, Paramedical Sciences, Health, Nutrition and Food Sciences, Rehabilitation, Nursing & Midwifery, Health management and medical informatics, Advanced Medical Sciences and Traditional Medicine. The school offers professional degrees in Medicine (M.D.), Dentistry (D.D.S.), Pharmacy (Pharm.D.); Bachelor's, Master's, and Doctor of Philosophy (Ph.D.) in various other medically related subjects. The school also offers technical courses in pursuit of associate degrees and certification in medically related fields. In addition, TUMS operates over 10 teaching hospitals and is a major medical care provider in East Azarbaijan Province and the surrounding provinces.

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