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Detection of low-intensity *Schistosoma mansoni* infection by Percoll sedimentation and real-time PCR techniques in a low-endemicity Egyptian settingAmal F Allam¹, Hoda F Farag¹, Adel Zaki¹, Ola A Kader¹, Rashad Abdul-Ghani² and Amel Y Shehab¹¹Alexandria University, Egypt²Sana'a University, Yemen

Objective: To evaluate the performance of Percoll sedimentation and real-time polymerase chain reaction (PCR) for the detection of *Schistosoma mansoni* cases previously tested as negative by Kato-Katz technique in two low-endemic areas in Alexandria, Egypt, Abis- 4 and 8 villages.

Method: Stool samples of 824 primary school children were examined by Kato-Katz technique (three slides of 41.7 mg each). After obtaining the results of this survey, stool samples were recollected from a subset of 150 students, who gave negative results after Kato-Katz. These samples were microscopically examined after the concentration with Percoll technique. Part of the 150 negative stool samples and five positive samples (used as controls) were kept at -20 °C and further processed by SYBR Green PCR.

Result: Prevalence of *Schistosoma mansoni* infection as determined by three Kato-Katz thick smears was 1.82% (15 cases). Three more cases tested positive by Percoll sedimentation among the 150 samples that were negative by Kato-Katz. Specific amplification by SYBR Green PCR was noted in all positive controls and in three cases of Kato-Katz-negative samples, two of which were also positive by Percoll.

Conclusion: Percoll sedimentation and SYBR Green PCR proved useful in detecting low-intensity *Schistosoma mansoni* infections in low-endemicity areas in Egypt.

Biography

Amal Farahat Mohamed Allam is an acting Dean of medical Research Institute, Alexandria University he is also the Vice Dean of community service and environmental affairs & Professor of Parasitology in Parasitology Department. She published her papers in many international Journals. She participates in many national health education campaigns and help in the treatment of poor population.

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