

The Prevalence and Antibiotic Susceptibility of Shigella in Patients Referred to Health Center Laboratory of Isfahan Medical University, 2006

Nosoohian,R. (BSc)

Laboratory Sciences, Isfahan university
of medical sciences

Yavari,M. (MD)

Isfahan university of medical sciences

Ajami,A. (MD)

Laboratory Science, Isfahan university of
medical sciences

Sadeghi,M. (BSc)

Laboratory Sciences, Isfahan university
of medical sciences

Corresponding Author: Nosoohian,R

E.mail: n_rezvaan@yahoo.com

Abstract

Background and objectives : Epidemic dysentery, which can be caused by different organisms, is a major problem in developing countries. The cause variability and drug resistance make the treatment difficult. This study was carried out to determine the prevalence and antimicrobial susceptibility patterns of Shigella in Isfahan reference laboratory.

Materials and Methods: In this descriptive study, 200 stool samples referred to Isfahan Reference Laboratory were examined to detect possible microorganisms and their antibiotic sensitivity.

Results: The Shigella and Salmonella infections rates were 17% and 0.5%. Shigella which is the most frequent cultured organism (97% of bacterial samples) includes: 79% Sd1, 15% Shigella Flexneri and 5% Shigella Sunnei. None of the samples was infected by Ecoli O157H7 or Entamoeba histolytica. The most effective antibiotic was Ciprofloxacin (no resistance was seen to this antibiotic).

Conclusion: The most important cause of bacterial dysentery in this study was shigellosis (sd1). Antibiotic resistance to ampicillin, Amoxiclav and Cotrimoxazole was quite high. This necessitates avoiding to empirical treatment of dysentery.

Keywords: Dysentery, Antibiotic resistance, Salmonella, Shigella, Ecoli