

Antibiotic Sensitivity of the *Vibrio cholera* isolated from rectal swab

Niknezhad . F (MSc)

Instructor of Mycology, Paramedical
Faculty, Golestan University of Medical
Sciences

Kabir. MJ (MSc)

Instructor of Health Management,
Golestan University of Medical
Sciences

Keshtkar.AA (Ph.D)

Associate professor of Epidemiology,
Golestan University of Medical
Sciences

Hazrati.B (MSc)

Pathologist, Health deputy of Golestan
University of Medical Sciences

Kurdjazi.N (BSc)

Laboratory Sciences, Golestan
University of Medical Sciences

Rezayyan. I (BSc)

Laboratory Sciences, Golestan
University of Medical Sciences

Ankizeh,A.H(BSc)

Public health Golestan University of
Medical Sciences

Corresponding Author: Niknezhad. F

E.mail:Fniknezhad@yahoo.com

Abstract

Background and objectives: *Vibrio Cholera* is one of the causative agents that can easily lead to death if the appropriate therapeutic measures are not taken in time. The purpose of this study is to identify the antibiotic sensitivity of the isolated *V. cholera*s from the patients during the outbreak of Cholera in Golestan province, 2005.

Materials and Methods:The Subjects were 95 positive cultured samples (Inaba Strain) sent by different laboratories of Golestan province health centers .First, these samples were confirmed with microbiological and biochemical tests. Then, their antibiotic sensitivity was examined by Kirby –Bauer method (12 routine drugs were used).To obtain better results, the tests carried out in parallel by two expert technologists.

Results: The participants, aged 29.8 ± 16 years, are male (52.6%) and female (47.1%). The highest antibiotic susceptibility pattern is related to Cephalexin (91.6%), Ceftriaxone (87.8%), Oxycloxacillin (76.1%) while the most antibiotic resistance is referred to Nalidixic Acid (84.5%), Fourazolidin (50.7%) and Erythromycin (50.7%). During outbreak, Antibiotic resistance was not increased. Both technologists reports regarding Ampicillin, Tetracycline, Nalidixic Acid (kappa of 94%, 89%, 82%, p value<0.05) have the most agreement while it is not true about Erythromycin and Fourazolidin disks. (Kappa 67% and 62%, p value<0.05)

Conclusion:Because of the resistance of *Vibrio cholera* to different antibiotic agent, it is important to determine their pattern to control and prevent the spread of drug resistance species.

Key words: *Vibrio cholera*, Inaba, antibiotic resistance, Golestan