

## Antibiotic Resistance Pattern of Gram-Negative Bacteria in Gorgan

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**Abstract**

**Background and Objective:** The excessive use of broad-spectrum antibiotics will lead to drug resistance of microorganism and specially nosocomial organisms. Because of high incidence of antibiotic resistance in hospitals, we aimed to study antibiotic resistance to gram negative bacteria.

**Material and Methods:** This cross-sectional study was conducted on the data of biological samples (2006-2008), with positive culture result. Using antibiogram, microbial resistance to isolated microorganism was determined, and after culturing the samples, bacteria were identified by using differential media and antiserum. Then, antibiotic resistance was performed by disk diffusion.

**Results:** The most common gram-negative microorganism obtained from all cultures was Ecoli with the lowest drug resistance to Nitrofurantoin.

**Conclusion:** Based on the results, antimicrobial resistance pattern is not the same in different places and furthermore it is ever changing. Therefore, further research is needed to be done to have an accurate pattern of antibiotic resistance to provide effective treatment regimens.

**Key words:** Antibiotic Resistance; Disk Diffusion; Gram Negative Bacteria; Gorgan