

## Antibiotic Resistance of Kidney Stones and Urine Isolated Bacteria from the Patients Under Going Nephrolithotomy

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### Abstract

**Background and objectives:** Infection stones are the directly due to persistent or recurrent infection with Urease producing bacteria. they may be exacerbated by urinary obstruction or stasis. Also, some drug components like ciprofloxacin can be the cause of stone formation. We aimed at studing antibiotic resistance of bacteria isolated form kidney stones and Urinary tract infection(UtI).

**Material and Methods:** This descriptive study, during 2008-2010,we obtained kidney stones and urine of 45 patients under gone nephrolithotomy in shahid Beheshti hospital of Babol, Iran. The stones were transferred to microbiology Lab in a strile Condition, after grinding, cultured on Blood Agar and Eosin-Methylene Blue(EMB) media. In Addilion, urin Samples were cultured on the for mentioned media. The Positive cultures were qualitatively evaluated and then, antibiogram was done by using Kirby Bauer method.

**Results:** The resulte show that 10 kidney stone specimens and 8 urine samples were infected by bacteria, mostly by E.coli. In one stone sample and two urine samples, we can isolate more than one bacteria. The bacteria isolated in the stone and urine samples of six patients was the same. We could find two cases of staphylococcus inurine and one in stone culture. The bacteria isolated from stone are resistance to oflaxacin(80%) , which is higher than that to the other antibiotics.

**Conclusion:** Based on the results, there is no relationship between the kind of kidney stone and type of bacteria. Further study needs to be done to prove this relation.

**Key words:** Kidney stone, Antibiogram, E.coli, Infected stone.