

THE EFFECT OF MIXTURE (SIDR INFUSION WITH HYDROGEN PEROXIDE) ON BACTERIA *PSEUDOMONAS AERUGINOSA*

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ABSTRACT

The remarkable ability of *Pseudomonas aeruginosa* to adapt and thrive in wide variety of environments is due in part to its extensive genetic versatility, which contributes significantly to its potential pathogenicity. Depending on the environmental conditions and the immune status of the host, *P.aeruginosa* can be a quiescent colonizer, a cause of chronic infections, or highly virulent invader during acute infections. The study is to assess the antibacterial effect of a new special solution made by a mixture of sidr infusion (*Ziziphuss spina- Christi* (L) var. *inermis* Boiss) with Hydrogen peroxide. In this study, *P.aeruginosa* isolates exhibited high resistance rate toward Cefataxime (CTX:30mg), Ceftazidme (Ca:30mg), Gentamicin (CN: 10 mg) and Carbenicillin (Py: 100mg). while Norfloxacin (NOR:10mg), Tobramycin (TOB:10mg) and Amikacin (Ami:30 mg) inhibition zone of sensitive isolate in disc diffusion test were determined at (22.16 and 20) mm respectively. We was tested their decontamination using a special antibacterial solution; mixture (sidr leaves aqueous infusion 62.5 g/L with 1.5% Hydrogen peroxide). The mixture inhibition zone of sensitive isolate in well diffusion test was determined at 23mm. we concluded that special (mixture sidr infusion with hydrogen peroxide) antibacterial solution can eradicate *P.aeruginosa*.

KEYWORDS: Sidr Infusion, Hydrogen Peroxide, Special Antibacterial, *P.aeruginosa*