

Conclusion: It is suggested that the noticeable percentage of the inflammatory changes on cervical smear cytology of Iranian women is often associated with these above neglected infectious organisms. Also, the diagnostic accuracy of the detection of the cervicitis is enhanced by using a combination of Gram-stained smear and PCR. Therefore, the eradication of these infections is possible with accurate diagnosis, suitable health education and the administration of specific therapeutic agents.

Antibacterial effects of nanosilver colloidal particles with dental disinfectant solution against two strains of bacteria: a comparative study

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Introduction and Objectives: The risk of infection by microorganisms in blood, saliva and exudates from infected patients in dental and medical centers has always been a threat to the patients and the medical staff alike. We don't always have the luxury of time to autoclave the instruments so this has brought about the need to develop different ways to disinfect the instruments at the medical offices further more deconex (Trade Mark) that in disinfectant solution in a famous detergent for disinfecting of surface and equipments. Nanosilver, due to its smaller particle size, has greater contact surface and has many uses as new antibacterial agent. The purpose of this study is to determine the effects of particles of nanosilver colloid and deconex P53 plus solution on *Pseudomonas aeruginosa* (ATCC 27853) and *Staphylococcus aureus* (ATCC 29213).
Materials and Methods: To measure the effective concentration of antibacterial of Nanosilver and deconex 53 plus, the MIC and MBC measurement methods were used.
Results and Conclusion: The MIC and MIB concentration of *Pseudomonas aeruginosa* is 100 and 500 ppm, respectively. The Nano particles and deconex 53 plus has tidal effect on *Staphylococcus aureus* so the MIC is equal to the MBC, but in the case of *Pseudomonas aeruginosa* the amount of MBC of nanosilver and deconex are 5, 20 times more respectively of its MIC and also the antibacterial effect against *Pseudomonas aeruginosa* is more than *Staphylococcus aureus*.

Survey of antibiotic sensitivity of Escherichia coli isolated from urinary tract infection

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Blood Agar medium. Bacteria and fungi were identified by clinic of microbiology of Imam Reza hospital of Mashhad.
Results: In autumn, the most prevalent bacteria in hospital were *Enterococcus* spp. (78%). The fauna of bacteria in hospital in this season consisted of *Enterococcus* spp., Coagulase Negative Staphylococci, *Staphylococcus aureus*, *Streptococcus* spp., *Escherichia coli*, *Klebsiella* spp., *Pseudomonas aeruginosa* and Gram positive bacilli. Eight cockroaches contaminated with fungi *Aspergillus* spp. (12.5%), In spring, the most prevalent bacteria in hospital were *Enterococcus* spp. (48%). The fauna of bacteria in hospital in this season consisted of *Enterococcus* spp., Coagulase Negative Staphylococci, *Staphylococcus aureus* and *Escherichia coli*, *Klebsiella* spp., *Enterococcus* spp., *Citrobacter freundii*, *Serratia marcescens* and Gram positive bacilli. Six cockroaches contaminated with fungi (14%), namely *Penicillium* spp. (14%), *Mucor* spp. (57%), *Aspergillus* spp. (14%) and *Candida albicans* (14%).
Conclusions: The results suggested that for reducing the risk of transmission of various disease agents, suitable control measures should be applied to manage the population of cockroaches in various locations.

Bacterial cervicitis among married women with inflammation on Gram-stained cervical smears in Shiraz

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Introduction and Objectives: Mucopurulent cervicitis is the most common inflammatory disease of the female genital system. The aim of this study was to determine the prevalence of bacterial agents causing mucopurulent cervicitis in women attending several family planning clinics in Shiraz.
Materials and Methods: 615 women aged between 17 and 56 years of age presenting for medical examination were enrolled. Out of 615 women, cervical smears were prepared from 273 (44.39%) who had evidence of purulent or mucopurulent cervicitis on medical examination. Gram-staining was performed on endocervical smears to detect inflammation and gram-negative intracellular diplococci (*N. gonorrhoeae*).
 Inflammation was defined as ≥ 10 PMNs/soil immersion field on endocervical smears.
 PCRs were done to establish the prevalence of *Chlamydia trachomatis*, *N. gonorrhoeae*, *Mycoplasma genitalium*, and *Ureaplasma urealyticum* using known specific-primers for each pathogen.
Results: Overall, of these 273 women with inflammatory changes on cervical smears, 125 (45.78%) cases had at least one sexually transmitted infection and the most common etiological agent of infectious cervicitis was *M. genitalium*. The prevalence rates of *M. genitalium*, *C. trachomatis*, and *U. urealyticum* were 23.07%, 4.02%, and 0.73%, respectively. No microscopic detection or PCR amplification obtained for *gonorrhoea*. The commonest clinical manifestations were genital discharge, redness of cervix and irritation. Most infected patients were managed and monitored.