An investigation into the contamination potentiality of diluted and non-diluted Propofol

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It is believed that propofol may support microbial growth because of its nourishing lipid emulsion structure. There are many reports on isolation of various fungi and bacteria from propofol. Post anesthesia morbidity or mortality after administration of contaminated propofol are also reported. This study was designed to evaluate contamination potentiality of pure and diluted propofol in multiple sampling of the drug during 72 hours after opening of the vials. Three vials of propofol 1% without antimicrobial preservative (Fresenius Kabi, Austria GmbH) were randomly selected and an angio cath. were inserted aseptically into each vials. One vial was kept as pure solution and the others diluted to 1/2 and 1/5 of initial concentrations by using sterile dextrose 5% solution. All the vials kept in laboratory room temperature for 72 hours. Multiple 0.5 ml drug aspiration every single hour for 8 hours and then every 24 hours for 72 hours were done and samples were evaluated for bacterial and fungi growth. Surprisingly, no growth of aerobic and non-aerobic bacteria or Fungi was seen after standard incubation period during 72 hours of drug usage. According to our findings, it seems using vials instead of ampulas; using fixed angio caths instead of frequent needle insertions and following the exact aseptic process for drug preparation and administration will decrease contamination potentiality of propofol, so that, there will be minimal or no need to add preservative substances because of their described health hazards.

Keywords: Propofol, Fungi and Bacteria, Contamination, Vial

Antibiotical effects of homoeopathic drugs on prevention of post surgical secondary infection in dogs

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One of the reasons of select this title is to make know of homoeopathy science and experience effect of homoeopathic drugs on prevention of secondary infection in surgical wound. In this study Hepar sulphuris; the drug is selected for eight dogs (4 male, 4 male) and drug with 30c potency administered in the way of Intranasal and ophthalmic drop to 4 animals for 4 days in 6.i.d interval. The other group for prevention of post surgical infection used the compound of penicillin and streptomycin intra muscular. Result showed that the hepar sulphuris rapidly and completely prevented of infection and in comparison with penicillin and streptomycin had desired results. Also in assessment of microscopic sections healing was faster in animal that treated with homoeopathic drug than those treated with penicillin and streptomycin.

Keywords: Homoeopathic drugs, post surgical infection, penicillin, streptomycin