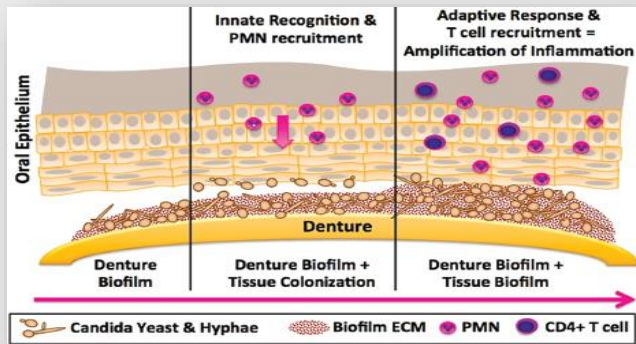


SILVER NANO PARTICLE OR SODIUM HYPOCHLORITE A BETTER DENTURE CLEANSER

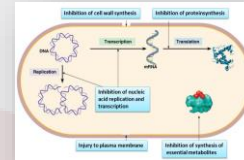
INTRODUCTION: Denture stomatitis is the most common inflammatory condition that affects denture wearers. About 73% of prosthodontic patients are affected by denture stomatitis, of which 70% of the cases are caused by *Candida albicans*



OBJECTIVES: To study the anti-candidal efficacy of various percentages of silver nanoparticles and conventional Sodium hypochlorite as denture cleanser.

RESULTS : The denture cleansing ability of both silver nano particle and sodium hypochlorite are equally effective in reducing the colony forming unit of *Candida albicans*. However, the efficacy of 0.5% silver nano particle is inferior to all other groups. In short, optimum concentration of silver nano particle suspension is a potent anti-candidal agent like sodium hypochlorite.

SILVER NANOPARTICLE: Silver nanoparticles have proven their efficacy against *C. albicans*. Because of their small size, AgNPs possess chemical, physical, and biological properties distinctive from those presented by traditional bulk materials



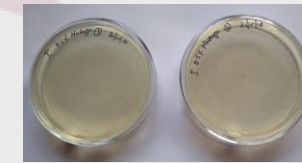
SODIUM HYPO CHLORITE:

The antifungal property of sodium hypochlorite may be explained by the release of hypochlorous acid when it is mixed with water.

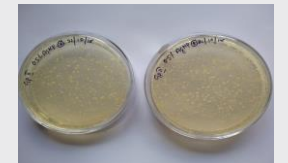
METHODOLOGY: The denture cleansing ability of Silver Nano Particles of various concentration and Sodium Hypochlorite were compared by counting the number of Colony Forming Unit (CFU) left on the acrylic samples inoculated with *Candida albicans* after immersing in the denture cleansing solutions.

DISCUSSION : Silver nanoparticle is a known potent antifungal agent. Reduction in the CFU was observed in silver nanoparticle as the concentration increases till an optimum value. However, comparing the anti-candidal effect of silver nanoparticle and sodium hypochlorite both are equally efficient.

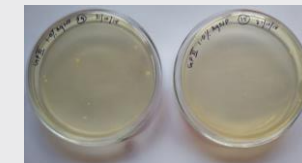
GROUP A
0.5% SODIUM HYPOCHLORITE



GROUP B
0.5% SILVER NANO PARTICLE



GROUP C
1% SILVER NANO PARTICLE



GROUP D
1.5% SILVER NANO PARTICLE

