Comparative study of antimicrobial and wound healing effects of mouthwashes with or without Ag nanoparticles on the oral surgery of rabbit

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Introduction:

The oral cavity is a complex ecosystem that is home to a diverse population of microorganisms. The presence of these microorganisms can contribute to various oral diseases, including infections and periodontal diseases. The use of mouthwashes has become a popular method for maintaining oral hygiene. However, the effectiveness of mouthwashes in preventing infection and promoting wound healing is still under investigation.

Methods:

A randomized, double-blind, placebo-controlled trial was conducted on 50 rabbits. The rabbits were divided into two groups: the experimental group received mouthwash containing silver nanoparticles, while the control group received a placebo mouthwash. The rabbits were subject to oral surgery and the wound healing and antimicrobial effects of the mouthwashes were assessed.

Results:

The results showed that the mouthwash containing silver nanoparticles had a greater antimicrobial effect and promoted faster wound healing compared to the placebo mouthwash. The silver nanoparticles were found to be effective in inhibiting the growth of bacteria and promoting tissue repair.

Conclusion:

The findings of this study suggest that the use of mouthwashes containing silver nanoparticles may be a promising method for preventing oral infections and promoting wound healing after oral surgery.

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References:


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