



Minimum Inhibitory Concentration Check

Materials Used

Nutrient Agar

Nutrient Broth

3 mouth wash Sample

3 oral samples

Sample Preparation

Saliva, Periodontitis and Leukoplakia samples were collected in the transport media from the patients and stored at 4 °c. Samples were inoculated in Nutrient broth for overnight aseptically. The overnight cultures were reinoculated for 4h for the MIC check.

MIC Check

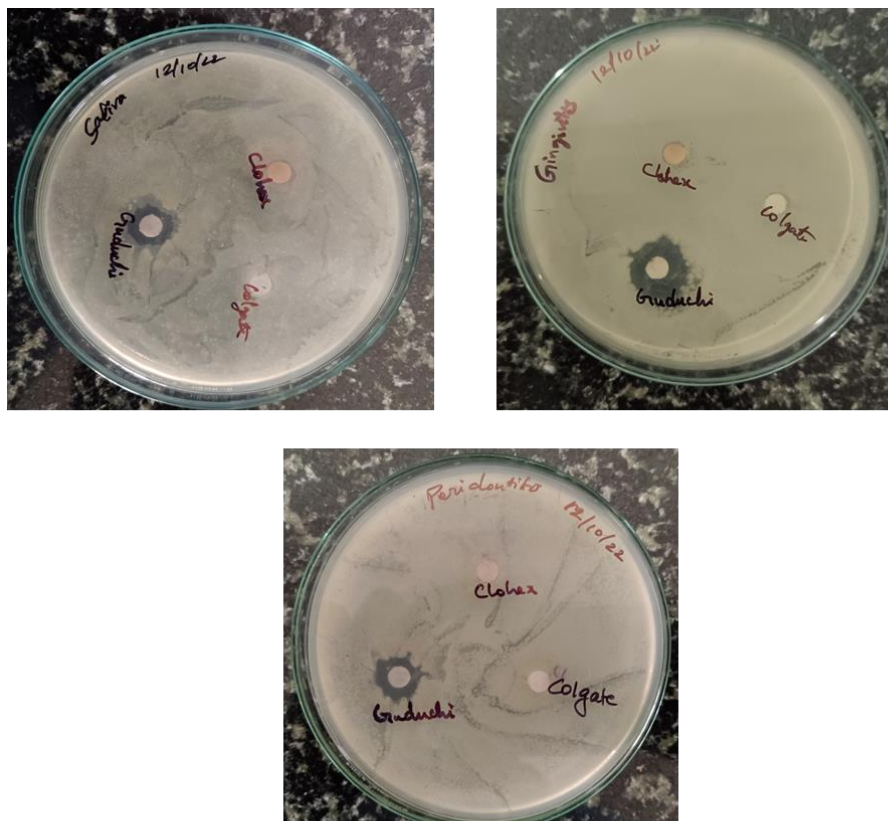
For the comparative analysis, we have taken 2 samples (Clohex and Colgate vedshakti Oil Pulling) along with Guduchi Irimedadi oil pulling sample. Disc diffusion method was used to check the MIC.

Sterilized discs were soaked with 50µl of mouth wash samples and kept for the experiment. 100µl of the fresh culture were spreaded on Nutrient Agar plate and treated discs were placed on the plate. Plates were kept at 4°c for 20mins then incubated at 37 °c for overnight.

Result

To check the antimicrobial activity of mouth wash samples, Disc diffusion method has been done to test MIC. After the overnight incubation, we got a good zone of inhibition in Guduchi Irimedadi product rather than other.

Based on the result, we can observe that the zone of inhibition is more in Gingivitis sample followed by Peridontitis and Saliva.



A good zone of Inhibition is observed in Guduchi's sample



Conclusion

Regular brushing is not the only proper way to maintain the oral hygiene. The most common types of dental disease are tooth decay (cavities, dental caries) and gum diseases, including gingivitis, and periodontitis. For the proper care of oral cavity, mouthwashes are recommended by the doctors after brushing. Commercially available mouth washes contain alcohol as their main ingredient which may lead to dry mouth in many people. To avoid these, oil pulling is an effective method as it contains natural extracts from plants.

To confirm this hypothesis, we have checked **Guduchi Irimedadi Natural oil pulling** sample against two commercially available products in the market, one of which are claiming that the sample contains ayurvedic oil and other one is an alcohol based mouthwash. Based on the above result we found that **Guduchi Irimedadi Natural oil pulling** product is the better one against common and harmful microbes.