CHAPTER 5

Conclusions

From the experiment result. The following conclusion can be drawn

1. From the difference between the Ra of flat and polished surfaces, ΔRa, prophylaxis pastes consisting of fine to medium diatomite particles are good for polishing dentin surface because after polishing, ΔRa increases, showing the smooth surface. The mixture between perlite and diatomite also exhibits good performance.

2. For enamel, a harder material, silica, is a better polishing agent followed by fine diatomite and fine perlite.

Besides diatomite, fine perlite is also a good polish for both dentin and enamel since its ΔRa value is not so large as that of diatomite which means less abrasion and more cleaning action from its flaky particles. The combination of the effect of particle size and shape of the different materials can modify the Ra value of the paste.

3. The particles of used prophylaxis paste are blunt or rounded and become smaller because surface of particle is abraded with that of dentin or enamel resulting in transfer of particle mass, and also some particles are fragmented during action.

4. The prepared prophylaxis paste containing fine to medium diatomite particles, and fine perlite one highly competitive with the reference prophylaxis paste, Nupro.

5. In the comparison of Ra values, in addition to the nature of the polishing agents, solid content of the paste also play an important role.