

# DISINFECTION OF PUMICE

Mala Dixit

Before any dental restoration or appliance is placed permanently in the mouth it should be highly polished. Not only is a rough surface on a restoration, denture, orthodontic appliance, and so forth uncomfortable, but also food and other debris cling to it. Such a restoration or appliance become dirty, and in some cases tarnish or corrosion may occur.

Rough surfaces are likely to occur unavoidably during the construction of an appliance, for example inspite of all the care possible, an acrylic denture base may have minor surface roughness that need to be removed before the denture is polished.

There are many abrading and polishing agents available, but the most commonly used in dentistry is pumice.

Pumice is a highly siliceous material of volcanic origin, and it is suitable for use either as an abrasive or as a polishing agent, according to its particle size. It is used in dentistry for many operations, from the smoothing of denture bases to the polishing of teeth in the mouth.

Particles of pumice contaminated by micro-organisms from the patient's dentures showed positive oral organisms growth in a random sample tested.

Small surface scratches and pits in the den-

ture base harbor micro-organisms in mucinous films which are not easily removed by brushing. Subsequently the abrading action of the pumice dislodges the organisms from the denture base, causing them to adhere to the particles of pumice

Infections organisms may be transmitted from patient to patient if pumice is re-used to polish dentures. Contaminated particles may also create a hazard to the dentist's eyes.

Some disinfection of pumice can be achieved by mixing the pumice used for polishing dentures with a chemical disinfectant. However absolute disinfection is not assured by this method.

We can follow some precautionary methods viz.

1. Always wear safety glasses.
2. Discard the pumice after polishing the adjusted denture to prevent the transmission of organisms from patient to patient. Hence use smaller quantities of the mix.
3. Mix the pumice with non-irritating disinfectant such as zephiran chloride.

## REFERENCES

1. Dominick L Larato - JPD - Vol 18, July 1987
2. Ralph W Phillips - Skinner's Science of Dental Materials - Ed. 9th, 1992.

Lecturer, Dept of Periodontology, Govt Dental College's Hospital, Mumbai 400 001.

### PRIZE FOR BEST ARTICLE IN DDJ

It gives me a pleasure to announce that there will be a Cash Prize of Rs. 500/- for best article published in the Entire issues of Dental Dialogue Journal.

— Editor