

# A simple method to protect crown margins from moisture during cementation

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Glass ionomer cement is commonly used as a luting cement, owing to its excellent bond to tooth structure and metal, strength, radiopacity and handling properties. However, contamination with water or saliva is considered to be an important clinical problem with glass-ionomer cements, affecting the properties of the material. This article describes a simple method to protect crown margins from moisture, during cementation with petroleum jelly.

**Key words:** Glass ionomer cement, moisture isolation, petroleum jelly

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## INTRODUCTION

Glass ionomer cement is used to lute cast restorations in dentistry, because of its excellent bond to tooth structure and metal, strength, radiopacity and handling properties. When placing the material and during initial setting, there arises a need to control moisture, which is acknowledged as the major problem with glass-ionomer cements. When such control is lacking, it causes faster damage to material, leading to deterioration of physical, chemical and mechanical properties.<sup>[1]</sup>

Contamination with water or saliva is considered to be an important clinical problem.<sup>[2]</sup> To prevent early contamination by moisture while the cement is setting, application of another material with low-water penetration like wax, varnish, resin or petroleum jelly has been recommended.<sup>[3-6]</sup> This article describes a

simple method to protect crown margins from moisture during cementation with petroleum jelly.

## Procedure

- 1) The tip of a disposable syringe (DispoVan, Hindustan Syringes and Medical Devices Ltd, Faridabad, India.) is trimmed and commercially available polyvinyl siloxane light body dispensing tip (Aquasil, Dentsply International, USA.) is attached to that portion. The dispensing tip is modified to allow sufficient bulk of petroleum jelly to be delivered rapidly to the margin. Load Vaseline (white petroleum jelly I.P., Bioline, Biopharm Laboratories Bangalore, India.) in the syringe [Figure 1].
- 2) Cement the crown restoration in the usual manner with any moisture controlling technique. Remove excess cement from the crown margin during the



**Figure 1:** Petroleum jelly loaded in a disposable syringe



**Figure 2:** Petroleum jelly applied to the circumference of the crown margin

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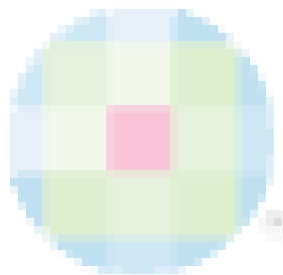
setting stage. Apply petroleum jelly around the entire circumference of the crown margin [Figure 2].

After completion of the setting stage, remove the petroleum jelly with cotton roll.

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