

# A successful, temporary, pragmatic, emergency management of dislodged crowns

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## Abstract

Full crowns are often used as treatment in dentistry. Dislodgement of a crown may occur at any time if a negative tensile force on the crown allows displacement. Keeping the displaced crown in situ is problematic, as the crown tends to come off the stump, may be lost and or swallowed. Emergency refixing is often not feasible or available. This note suggests an easy, successful, emergency management of temporarily refixing the crown with sugarless chewing gum until the crown can be recemented by a dentist.

**Keywords:** Crowns, open dental clinic, displaced crowns, chewing gum.

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## 1. Introduction

Conservative dentistry may be conformative or restorative. Among the many forms of replacing tooth material is the full coverage crown. Crowns are placed in the hope they will function, durable and last for many years. Temporary crowns are usually placed on the root of a coronal crown-prepped tooth until the permanent crown can be placed. Crowns may be made of metal, metal fused to porcelain, porcelain, or dense resin. When crowns are placed, they are cemented permanently into position. The prevalence of dislodgement of crowns is unknown, but dislodgement does occur frequently. Consequently, the patient is often stressed, may have dental pain from exposed dentine in a vital stump, usually has no immediate solutions on hand, and is unsure about what to do. Immediate presentation at an open dental clinic with a fully functional operator will generally afford immediate treatment. But .... all too often patients will call with desperate appeals for help, after hours on weekends or during holidays.

## 2. Aim

This directive suggests a temporary but successful, pragmatic, emergency management of displaced crowns, using sugarless chewing gum.

## 3. Materials and Methods

Hopefully the dislodged crown has been retrieved and in the possession of the patient. If possible, the cement lining should be scraped out using a sharp instrument like a nailfile or a small sharp knife. The patient should then insert the crown back onto the stump to know the mesio-distal orientation for its' fit. The loose crown is then easily removed. The patient is instructed to procure a piece of sugarless chewing gum, and to chew the gum for at least ten minutes, until the patient

subjectively feels the initial intense flavor is diminished. When the bolus of gum is soft and lost its flavor, the patient can then make a small ball of the gum, just big enough to fit into the crown, and then insert it into the crown and place the crown over the exposed recipient tooth. The patient must then bite slowly, determinedly and carefully until the crown is seated back onto the crown-prepped tooth. With a few firm clenches the crown should settle back into perfect occlusion and remain stable for a few days. The excess gum should be removed and discarded, and the crown will stay in place until definitive treatment is done. This should not be longer than two days after which professional dental help should be found.

## 4. Discussion

Most sugarless chewing gums are flavored with synthetic sweeteners like cyclamates, stevia or xylitol, none of which are acidogenic or cariogenic.

With loss of a crown in a dental arch, continuity of contact of the occlusal table is lost, and the adjacent teeth may drift and reduce the space available for the crown. Accordingly temporary replacement of the crown would be preferable to leaving the stump and occlusal space uncovered for a few days.

This advice is simple to follow and may be given verbally per telephone.

This method described allows the crown to remain in situ for a few days or longer, and will allow usual mastication, and diminishing of pain if present. On presentation to a dentist they will easily be able to remove the crown, inspect the tooth core and check the marginal seal. Sticky foods, like caramel toffees, or other adherent tacky food should be eschewed until the crown is properly cemented. Should the crown be defective, construction and fitting of a new

crown with adequate marginal seal may be indicated. The old crown may be used as a temporary fix. The chewing-gum should be chewed until flavorless to ensure no molecules will induce osmotic pain on a vital dentine core. 'Home-spun cementation with a glue' may be disastrous as the remaining dental core stump may be decayed; the ad-hoc glue may induce pain, and often a solid glue may not allow perfect occlusal settling resulting in a high crown with consequent traumatic periodontal injury.

### **5. Conclusion**

This pragmatic advice of using soft sugarless chewing gum is a temporary, effective re-cementation of dislodged crowns, and when dental operatory clinics are closed, or not easily accessible, is a boon for all dentists and health-care workers in emergency situations,

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