

without damage to the unit. Handpieces and air-water syringes should be autoclavable or disposable.²¹

The 'Ideal' Surgery

Ideally, surgery equipment, design and logistics should promote good infection control by dental healthcare workers. A surgery has therefore been designed to change behaviour by reducing the number of items that may be touched to a minimum.²²

This surgery is designed without drawers, worktops, telephones and other items that may be touched or contaminated. All instruments are obtained before commencement of a patient's treatment from an adjacent dispensary. Given that there are no worktops and drawers to become contaminated, surgery cleaning between patients becomes more straightforward.²² A saving in equipment and surgery cabinetry may also result. For a more complete exposition of dental surgery design in respect to infection control, the reader is referred to the work of Chant *et al.*¹⁷

ADDITIONAL COMMENTS

The practice of dentistry involves the chance of cross-infection. The clinic must accept responsibility to eliminate or greatly reduce disease transmission.

Infection control includes a wide variety of standardized procedures and specific pieces of equipment. Each pathway of microbial spread requires a set of specific preventive processes to ensure effective infection control.

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ABSTRACT

REDUCING THE RISK OF POST CROWN FAILURE

The Influence of Post Length and Crown Ferrule Length on the Resistance to Cyclic Loading of Bovine Teeth with Prefabricated Titanium Posts. F. Isidor, K. Brondum, G. Ravnholt. *International Journal of Prosthodontics* 1999; **12**: 78-82.

Root-treated teeth frequently require posts to support the coronal tissue for restoration. Loss of retention of these posts, or root fracture, can pose a serious complication to treatment. It has been known for some time

that increasing the length of the post results in more favourable stress distribution and increases retention. More recently it has been shown that if the coronal tooth structure is encircled within the crown, creating a ferrule effect, the incidence of root fracture is decreased.

The authors prepared 90 teeth for post crowns, using a variety of lengths of both post and ferrule. The teeth were then subjected to cyclic loading of 400 N at an angulation of 45° to the long axis of the tooth, simulating the clinical situation. The results show that ferrule length is more important than post length in increasing fracture resistance.

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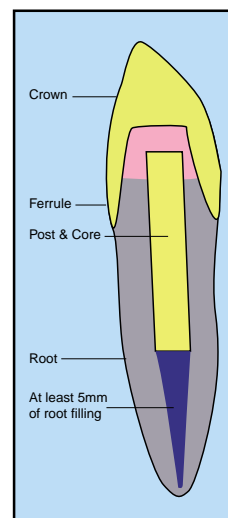


Figure 1. Illustration of the Ferrule effect in crown design.