

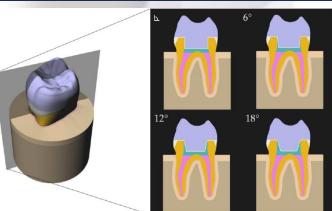




An Endocrown is described as a full coverage restoration with a circumferential butt-joint margin and a central retentive feature that extends into the pulp chamber space.

# **ENDOCROWN - A POST ENDODONTIC RESTORATION OF CHOICE WHEREIN THERE ARE** CONSTRAINTS OF DECREASED CROWN LENGTH AND INTEROCCLUSAL SPACE

A crown that extends into the pulp chamber of a pulpless tooth and restores the anatomic form of the crown of the tooth; retention is obtained through adhesive luting and traditional preparation techniques; a post is involved. (GPT 10)



**Enamel** Dentin Filling material Gutta percha Cortical bone Cancellous bone Periodontal ligament

Lithium disilicate

Resin cement

#### **ADVANTAGES**

- Procedure is easy
- No post requirement
- Conservative preparation
- Facilitates the impression taking and protects the periodontium

#### **DISADVANTAGES**

- Wedging forces that may cause tooth fracture
- · Loosening of endocrown

# **MACROMECHANICAL**

Internal portion of Pulp chamber / RETENTION and cavity margin

Adhesive Cementation technique

**MICRORETENTION** 

Milled using aided techniques











# **INDICATIONS**

- Significant loss of tooth structure
- Short crowns
- Calcified root canals
- Narrow canals
- Root perforation
- Fractured instrument in the canal

### **CONTRAINDICATIONS**

- When pulpal chamber is less than 3 mm deep
- Cervical margin is less than 2 mm wide for most of its circumference

# PREPARATION

#### REFERENCES

- Fages, Michel, and Bertrand Bennasar. "The endocrown: a different type of all-ceramic reconstruction for molars." Journal (Canadian Dental Association) vol. 79 (2013)
- Dogui, Houda et al. "Endocrown: An Alternative Approach for Restoring Endodontically Treated Molars with Large Coronal Destruction." Case reports in dentistry vol. 2018 1581952. 30 Aug. 2018



Reduction of 2 mm on occlusal surface



Axial preparation to eliminate undercuts in the access cavity



Supra-cervical butt joint with peripheral band of enamel

Polishing the cervical band

Bonding with the self adhesive or composite

Final restoration

