Name:

Ryan Swenson

Group:

4B-1

Basic Science Question:

What is Ferrule?

Report:

Broadly speaking, a ferrule is a ring or cap, typically a metal one, that strengthens something and prevents it from splitting or wearing. In dentistry, ferrule is defined as an encircling band of cast metal around the coronal surface of the tooth. This may be the crown encircling the supragingival tooth structure. Ferrule provides better resistance to lateral and lever forces, protecting remaining tooth structure against fracture (Ausiello et al., 2017). At Marquette, the accepted ferrule height is 2 mm to provide adequate strength. If 2 mm is not available, there are a few options such as subgingival margins, crown lengthening, or orthodontic extrusion (Ausiello et al., 2017).

If the prep has subgingival margins, the biological width must not be violated. Biological width is the attachment of periodontium to the bone above the periodontium, consisting of the junctional epithelium and connective tissue attachment. Impeding biologic width results in inflammation, pocket formation, gingival recession, and bone loss as the body tries to recreate the 2.0 mm biologic width (Oh, 2010).

References:

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