

د. عبد الستار الصكر

FINISH LINE



## The Effect of Various Finish Line Configurations on the Marginal Seal and Occlusal Discrepancy of Cast Full Crowns After Cementation - An In-vitro Study

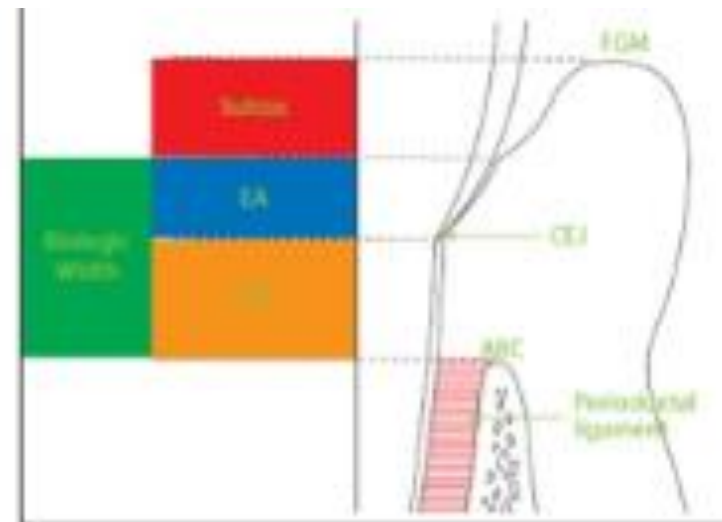
- Shoulder margins provide good seat but a comparatively wider marginal seal
- Chamfer, long chamfer and feather edge margin provide superior sealing of the margins despite poor seat.

## Preservation of the periodontium

- Margins as smooth as possible
- Kept clean by the patient
- Supragingival placement of finish lines whenever possible!
- Subgingival finish lines 2.0 mm from alveolar crest



# Biologic width



- The biologic width is defined as the dimension of the soft tissue, which is attached to the portion of the tooth coronal to the crest of the alveolar bone
- Biologic width (EA + CTA) dimensions -
  - Anterior teeth 1.75mm
  - Premolars 1.97mm
  - Molars 2.08mm



# Margin placement



## Supragingival margin

Placed in non-esthetic area

Least impact on periodontium

## Equigingival margins

At the crest of the marginal gingiva

More impact on the periodontium

More plaque retentive

## Subgingival margin

Below the gingiva

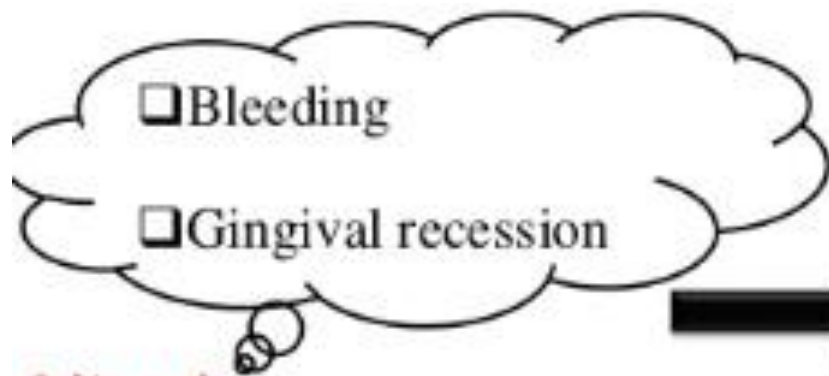
Greatest biologic risk

May violate gingival attachment apparatus

# Margin placement guidelines

- If the sulcus probes 1.5mm or less, place the margin 0.5mm below the gingival crest
- If probing depth more than 1.5mm – place the margin half the depth of the sulcus below the crest
- If probing depth more than 2.0 mm – Gingivectomy is advocated





*Orkin et al*

Subgingival restorations



Supragingival position of the crown margin



*Silness*

Margins below the gingival margin



# Finish line exposure



- Mechanical
  - Copper tube/band
  - Rubber dam
- Chemomechanical (retraction cord)
  - Caustic chemicals – sulfuric acid, trichloroacetic acid, negatol, zinc chloride
  - Racemic epinephrine
  - Aluminium chloride, alum, aluminium sulfate, ferric sulfate
- Rotary curettage/ gingettage
- Electrosurgery



# Extracoronary restoration - Full veneer crowns



Full metal crown



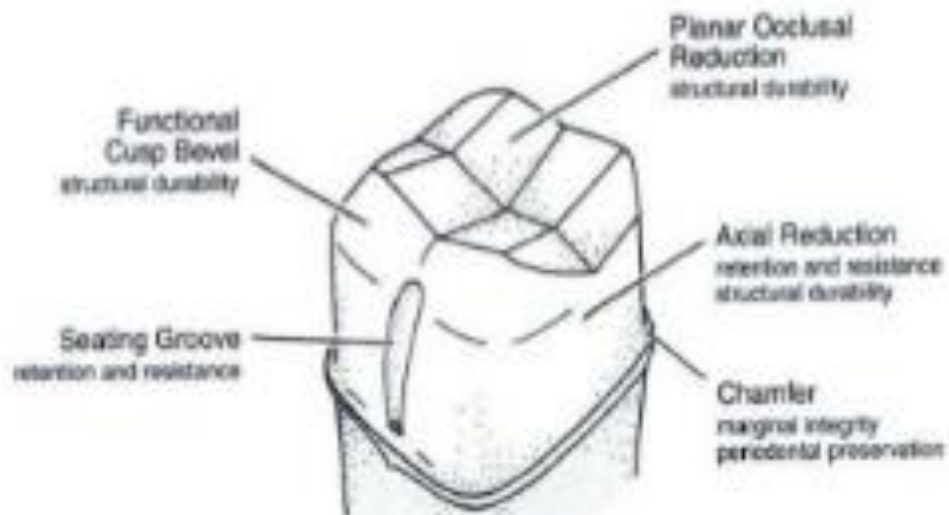
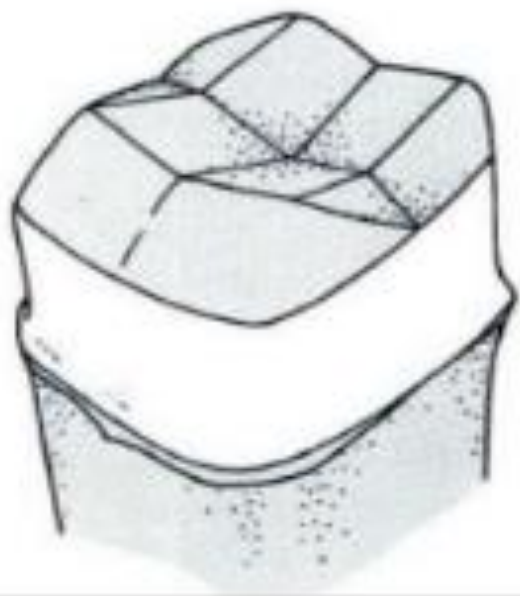
All ceramic crown



Metal ceramic crown

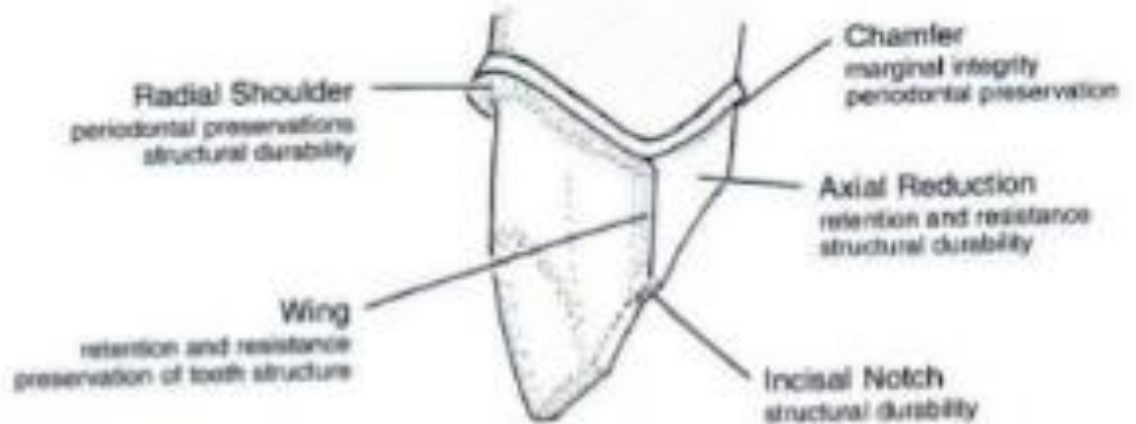
# Full veneer crowns

## Full metal



# Full veneer crown

## Metal ceramic crown



# Cervical finish line

❑ Long chamfer with about a 0.4 mm maximum depth.

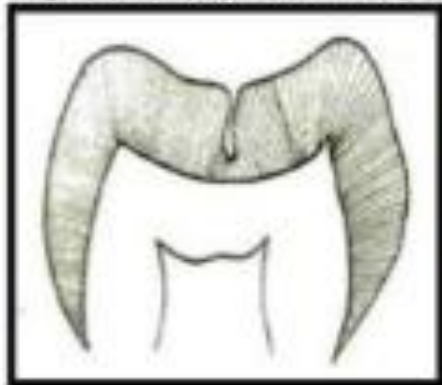
- Proximal finish line

- Incisal third of the tooth - not to extend beyond the contact point



# Enamel pattern

**Occlusal surface**



**Axial surface**



Clinical significance

## Cavity wall angulation

Convergent

Divergent

Parallel

Depending upon the buccolingual width

## Cavity prepared

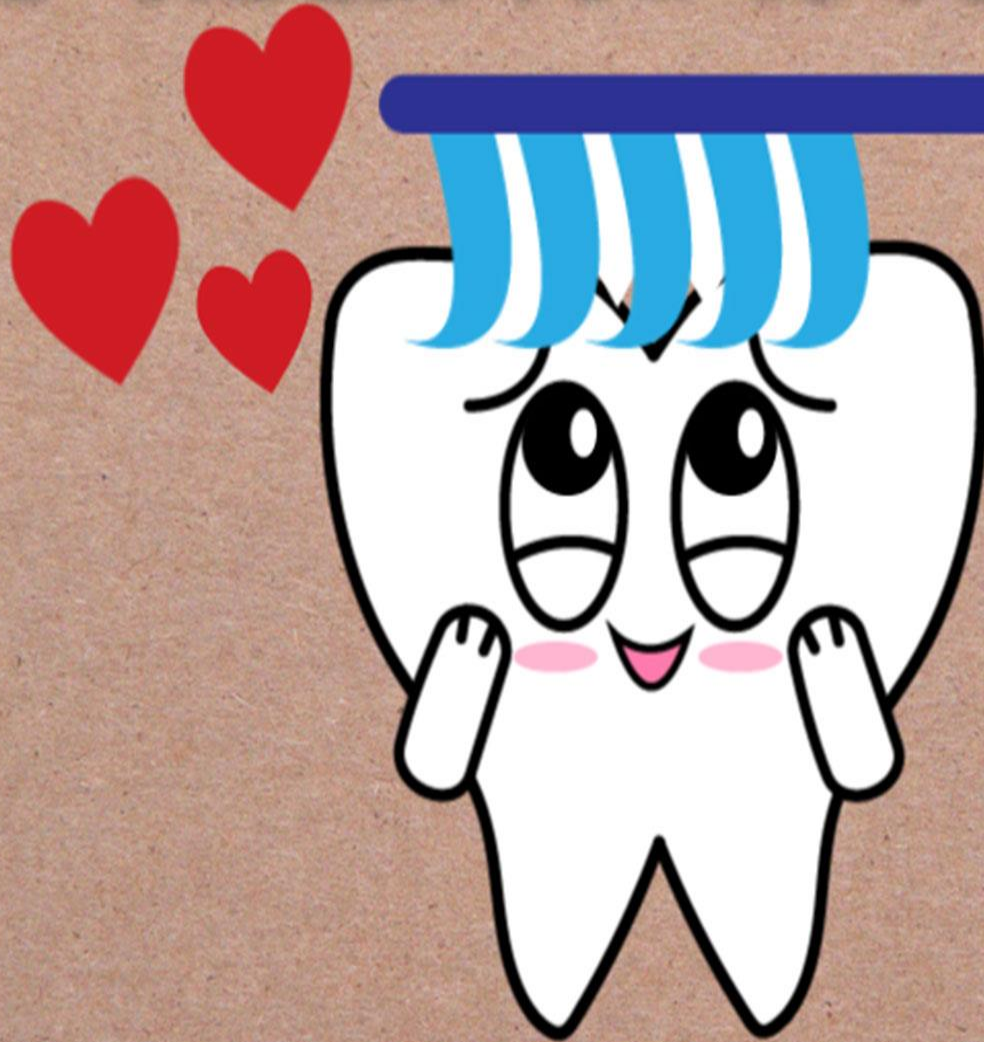
Amalgam

Cast gold

Bevels



# SAY THANK YOU TO YOUR TEETH.



DENTAL  
INNOVATIONS