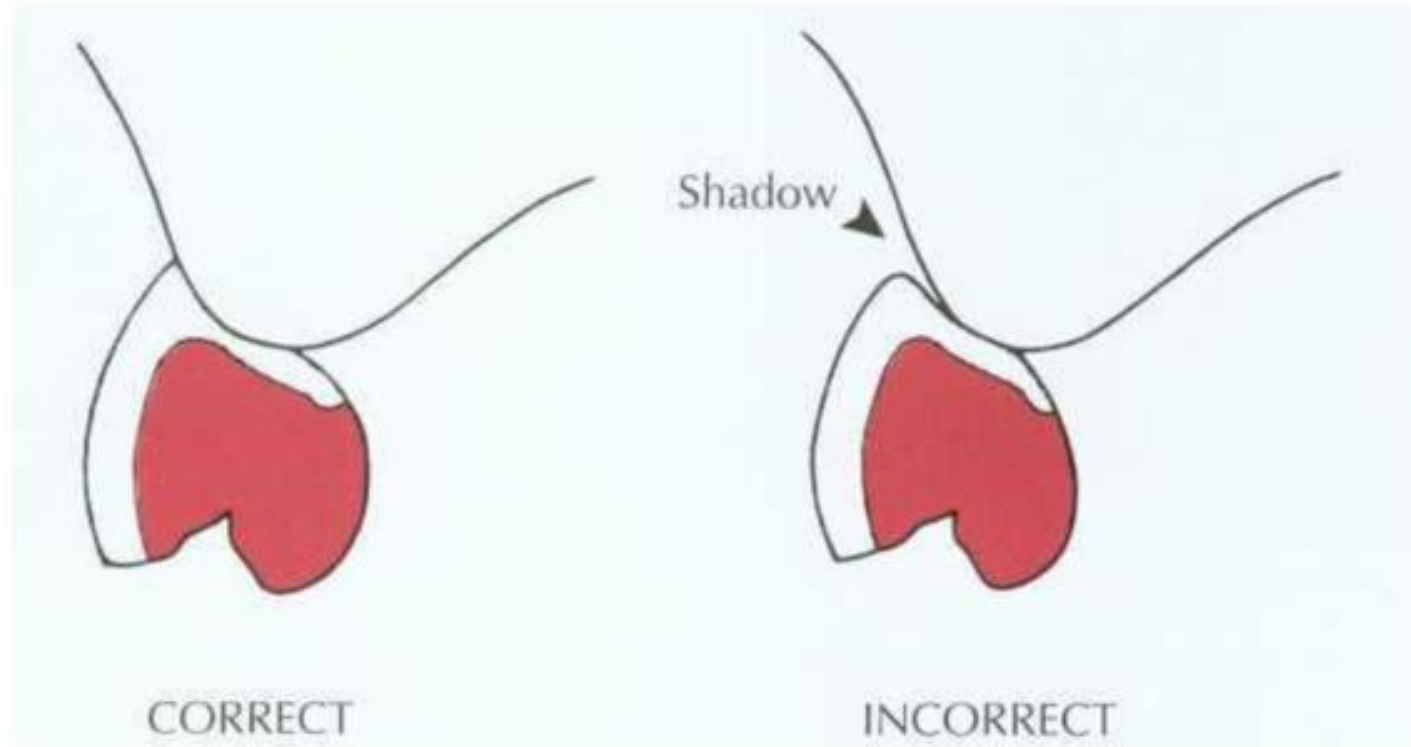


▶ ***PONTIC & pontic design***

▶ **2**

د. عبد الستار الصكر

Esthetic considerations



Ideal Requirements of a Pontic

- It should restore the function of the tooth it replaces.
- It should provide good aesthetics.
- It should be comfortable to the patient
- It should be biocompatible.
- It should not impinge on the tissues or produce any kind of tissue reaction.

- It should permit effective oral hygiene. It should be easy to clean and easy to maintain.
- It should preserve underlying mucosa and bone.
- It should not produce any ulceration in the mucosa.
- It should not produce resorption of the residual alveolar ridge.

Factors Affecting the Design of a pontic

- Space available for the placement of the pontic.
- The contour of the residual alveolar ridge.
- Amount of occlusal load that is anticipated for that patient.

General Design Considerations for a Pontic

Gingival surface:

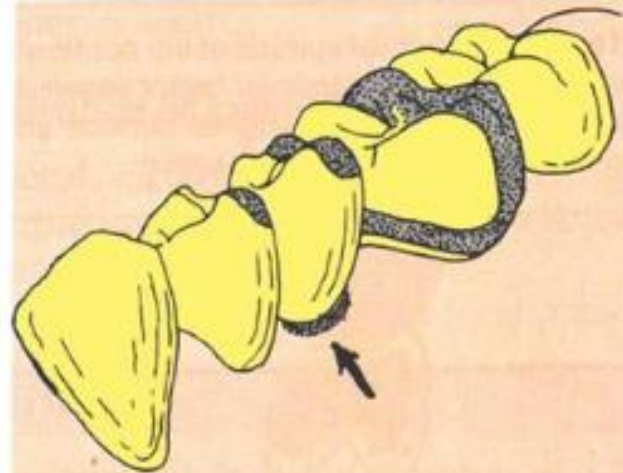
(1) the gingival surface of the pontic should be preferably finished using ceramic for better tissue response.

(2) the tissue contact of the gingival surface should be minimal to prevent adverse tissue reaction.

A



B

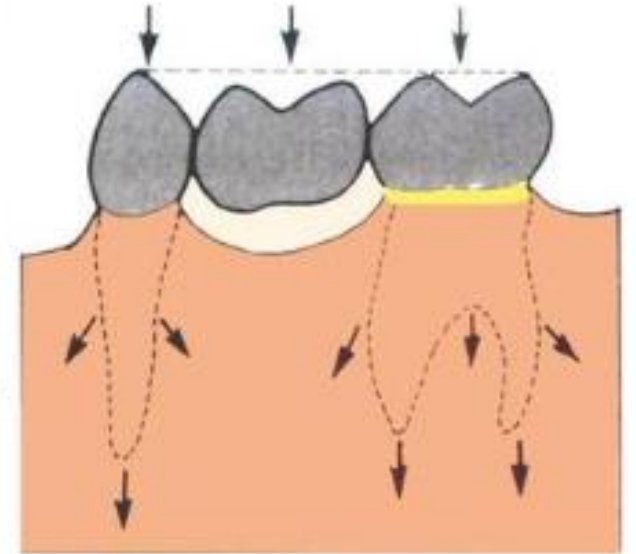


- Occlusal surface

- The size of the occlusal table can be reduced to decrease the amount of force centred on the abutment.

- The functional cusps of the occlusal surface of the pontic should not be reduced, to preserve a stable vertical dimension. **The functional cusp is the load-bearing cusp of the tooth.**

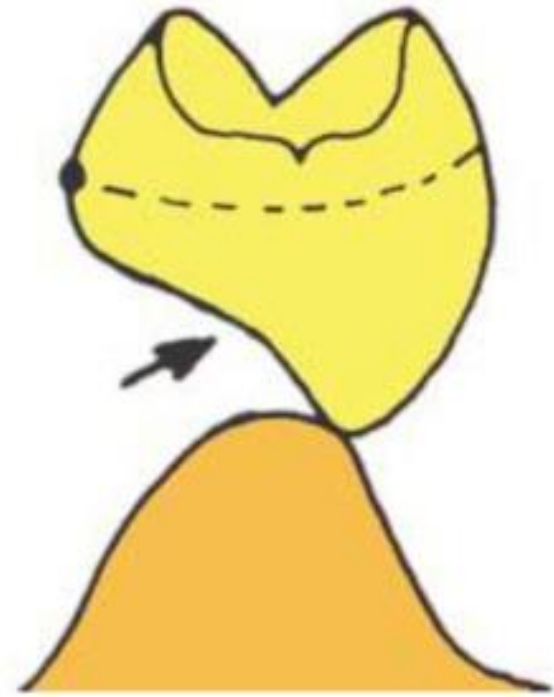
- In the maxillary teeth the buccal cusps provide Aesthetics. In the lower teeth the lingual cusps Aid to protect the tongue.



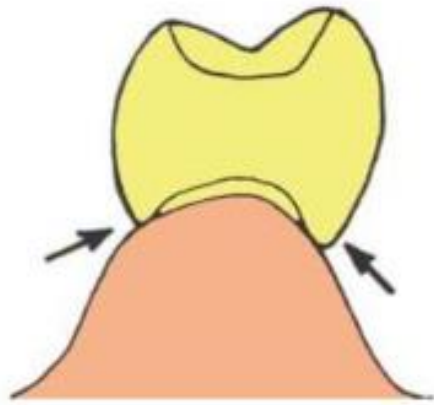
- Proximal surface
 - Vertical clearance should be sufficient to permit physiologic contour of the pontic and allow space for the interproximal tissues.
 - Interproximal embrasures should be left open to permit easy cleaning.

- Buccal and lingual surfaces.

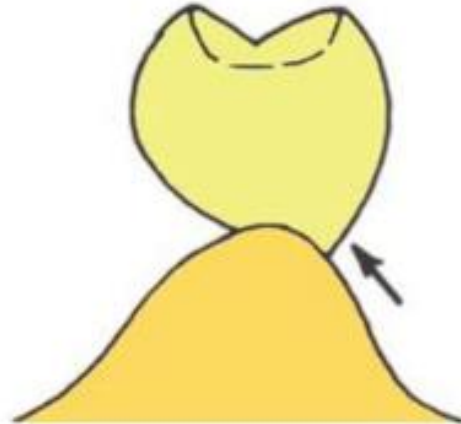
They are designed based on the aesthetic, functional and hygienic requirements, the embrasures are wider lingually than facially.



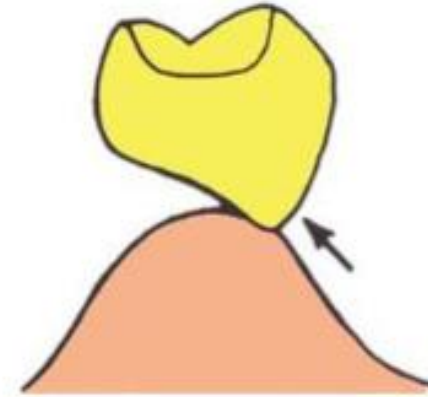
Classification of pontic based on Mucosal Contact



Saddle pontic



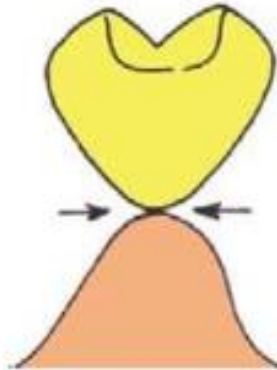
Ridge lap pontics



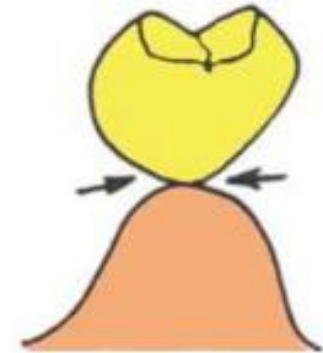
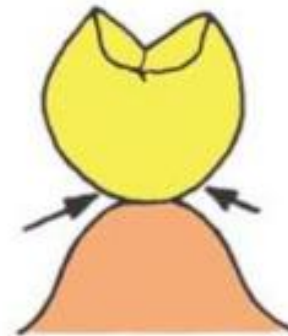
Modified ridge lap pontic



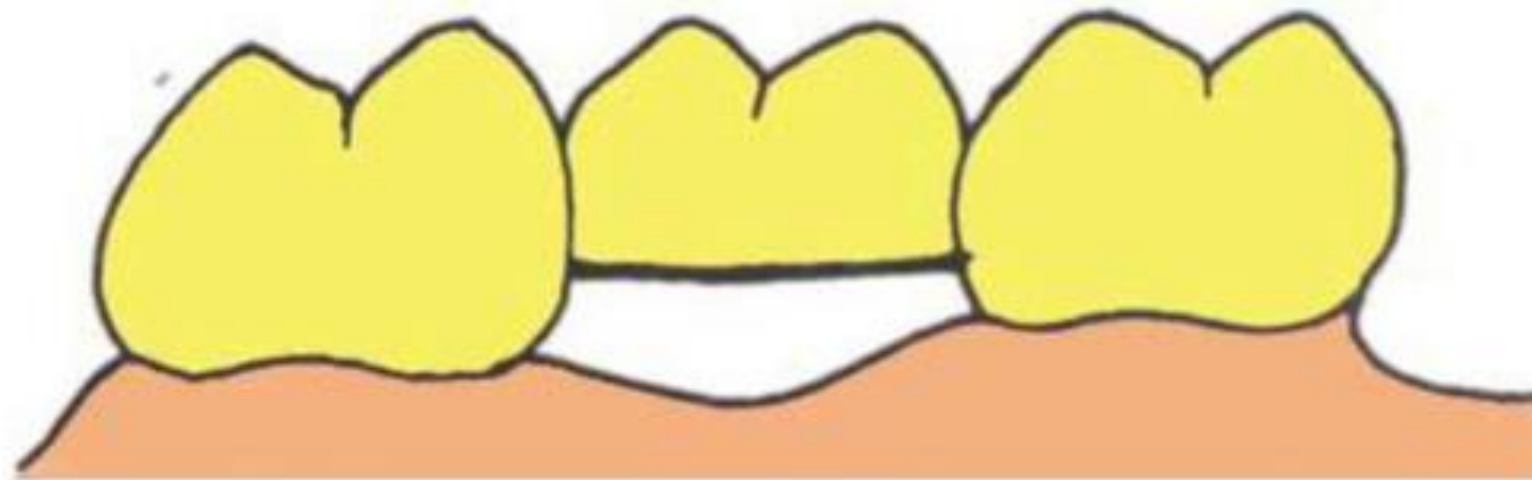
Ovate pontics



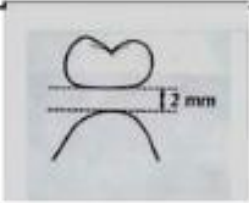




Conical pontic, or heart shape



Spheroidal and modified spheroidal pontics



Sanitary or hygienic pontics

Pontic designs	Recommended Location	advantages	disadvantages	form
Sanitary (hygienic)	Posterior mandible	Good access for hygiene	Poor esthetics	
saddle or ridge-lap	Not recommended	Esthetics	Not amenable to oral hygiene	
Modified ridge-lap	Anterior teeth and premolars, some maxillary molars	Good esthetics	Moderately easy to clean	
Conical Egg or heart shaped	Molars without esthetics requirements	Good access for oral hygiene	Poor esthetics	
Ovate	Maxillary incisor and premolars	Superior esthetics negligible food entrapment easy to clean	Requires surgical preparation	

THANK YOU!

