

Construction of Metal Occlusal Surfaces



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Indications for Metal Occlusal Surfaces:



Porcelain Denture Teeth
Create excessive wear to the occlusal surfaces of natural teeth and ceramic restorations.

Acrylic or IPN Denture Teeth
Easily abraded by natural teeth and ceramic restorations.



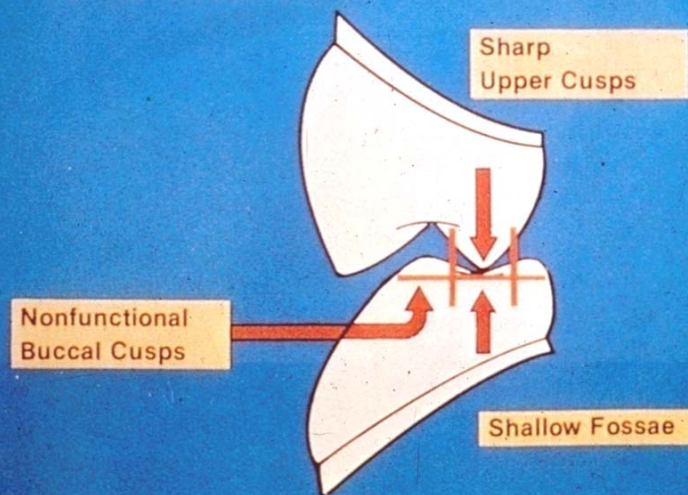
PARTIAL DENTURE DESIGN:

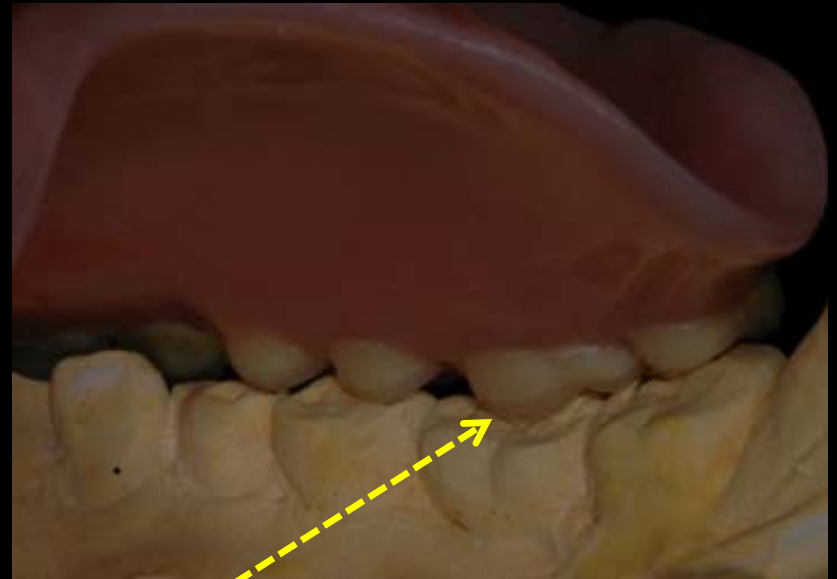
LIGUALIZED OCCLUSION

- *Porcelain Teeth to Porcelain Teeth*
- *Natural Teeth and Ceramics -----*

Use Gold Occlusals

LINGUALIZED OCCLUSION



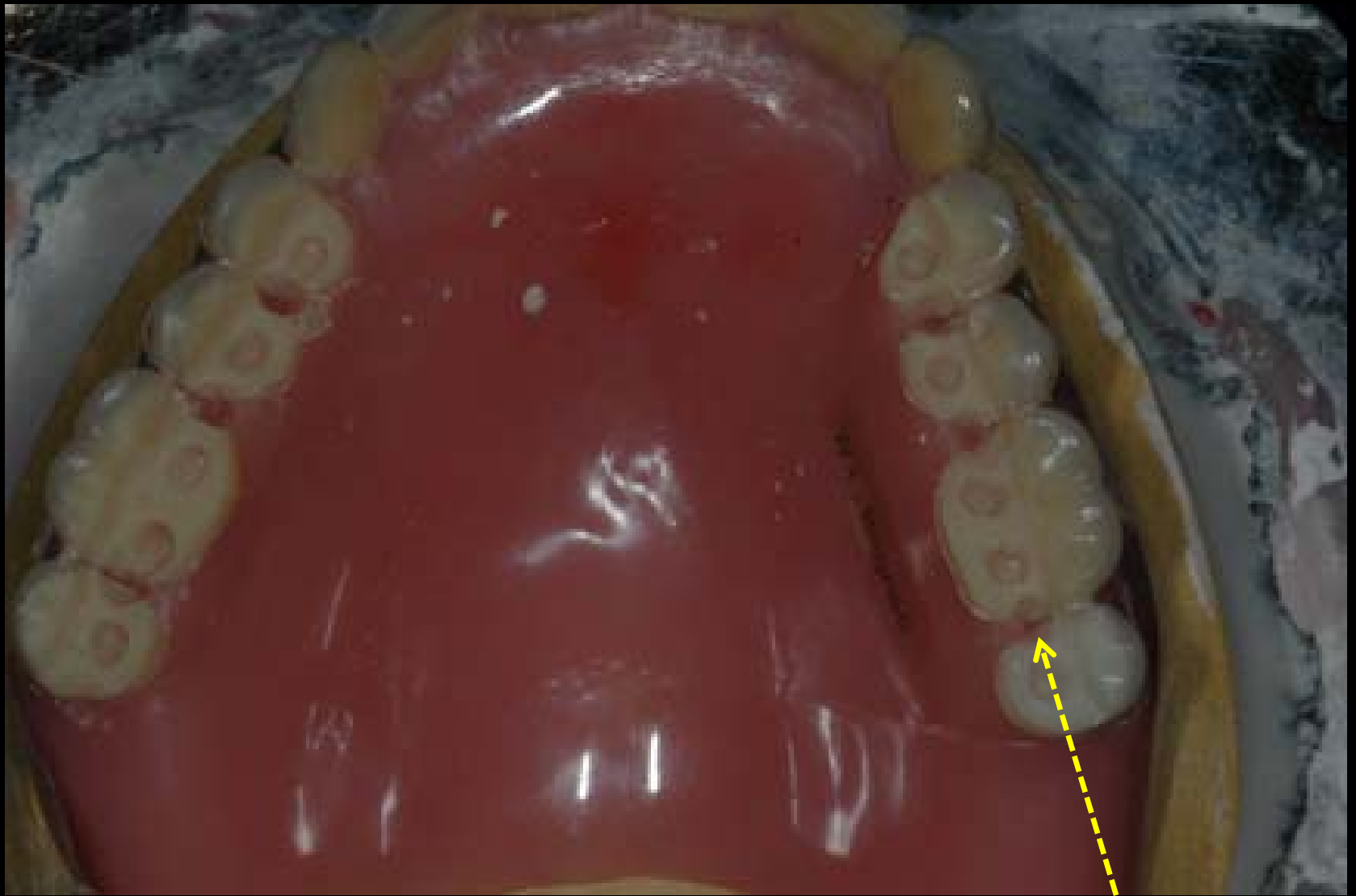


IPN Posteriors custom contoured into lingualized occlusion with cold-cure repair resin or temporary bridge resin.



Mount on reline jig
with occlusal core of
die stone.

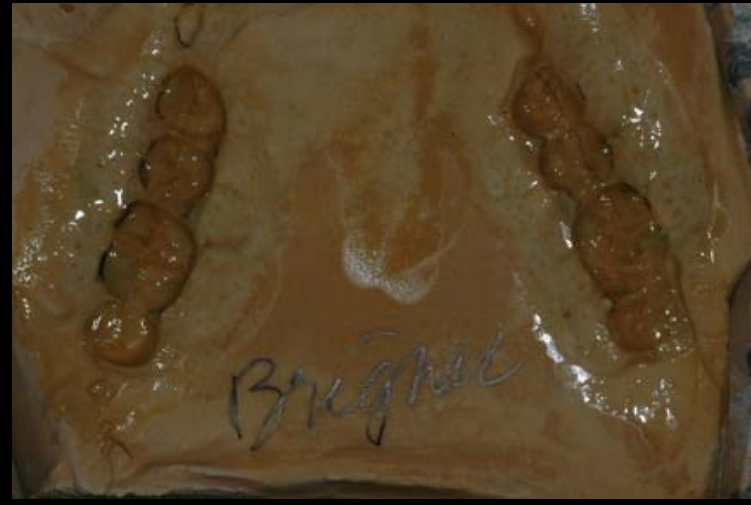
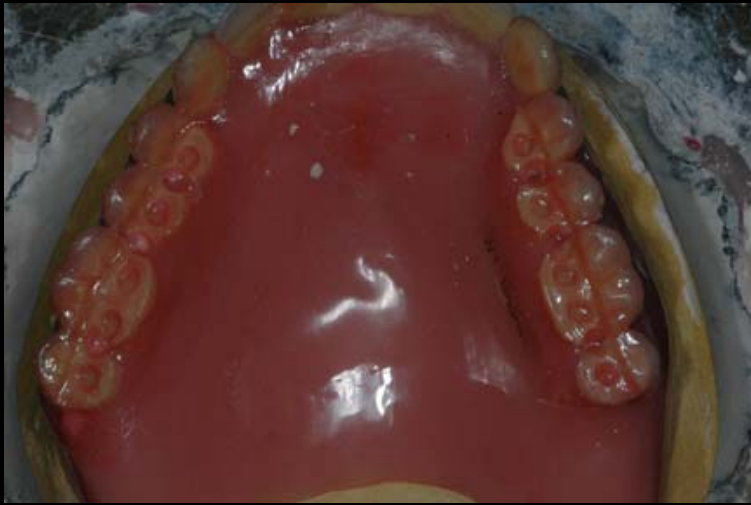




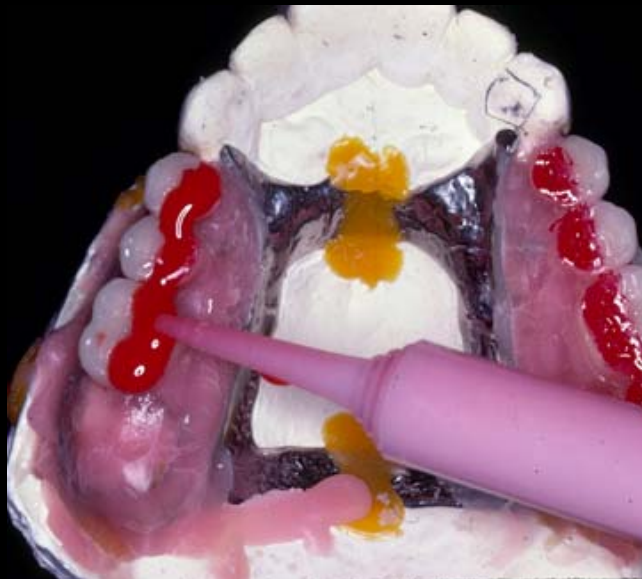
$\frac{3}{4}$ crown prep with no undercuts and deep “potholes” in interproximals to strengthen acrylic pattern



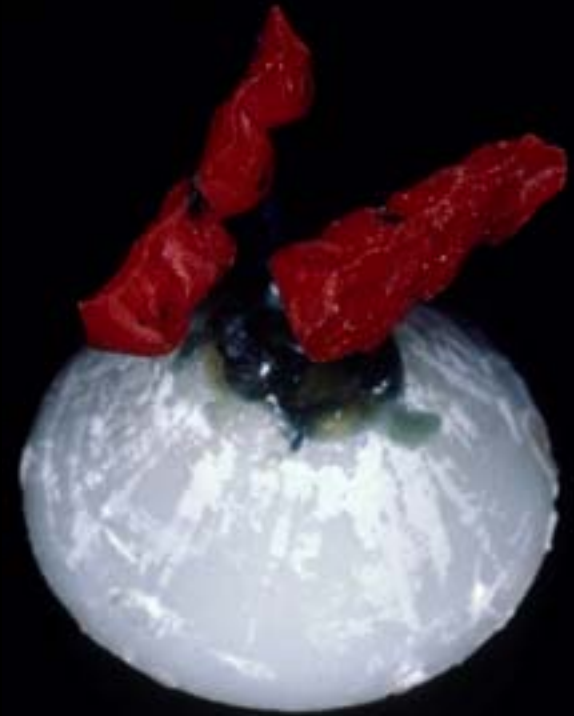
Reduce height of occlusal imprints to prevent pattern from being locked into stone and add relief channels to facial and lingual of each tooth with 701 bur.



Paint double coat of Rubber-Sep over teeth and lubricate die stone with Die-Lube.



Inject creamy mix of GC Pattern Resin and tighten reline jig to place. Allow to set at least 10 minutes.



Sprue and cast
resulting patterns into
Type IV hard gold or
non-precious metal.



Presently, the material of choice is Auriloy, a non-precious nickel/chromium alloy with a hardness number of 240. (Aurium Research, (800) 645-6110).

The metal can be cast in low or high heat investment and compares favorably to Magenta (Ivoclar/Vivadent) Type IV hard, yellow gold that has a hardness number of 285.





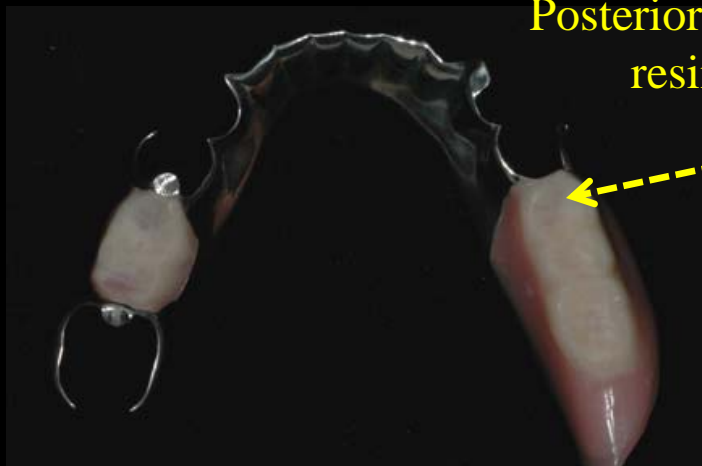
Finish and polish metal while still on sprue.

Use GC Fitcher to determine that metal casting completely seats in prepared teeth of denture.

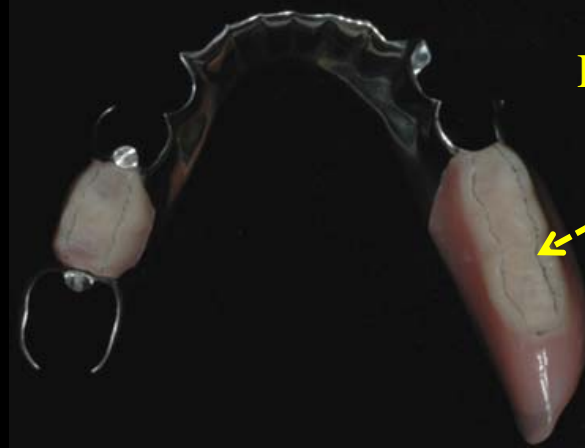
Bond metal occlusals to denture teeth with cold-cure pink repair resin.
(Temporary bridge resin will discolor over time.)



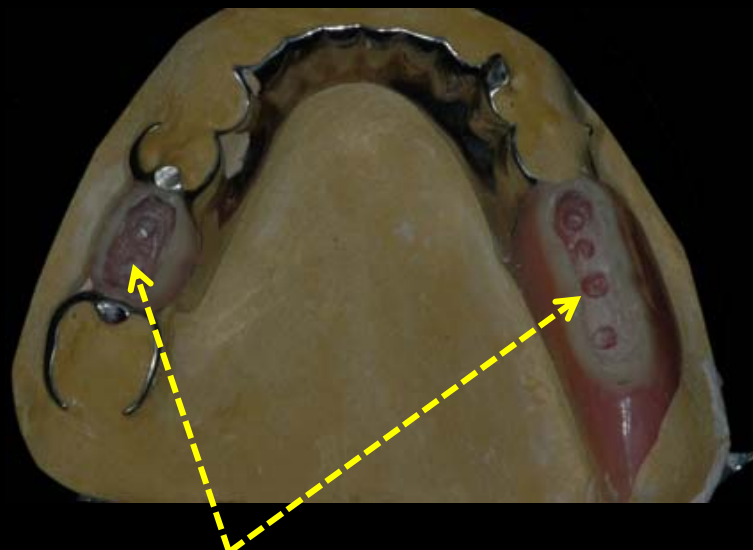
Posterior teeth modified with temporary bridge resin to create lingualized occlusion.



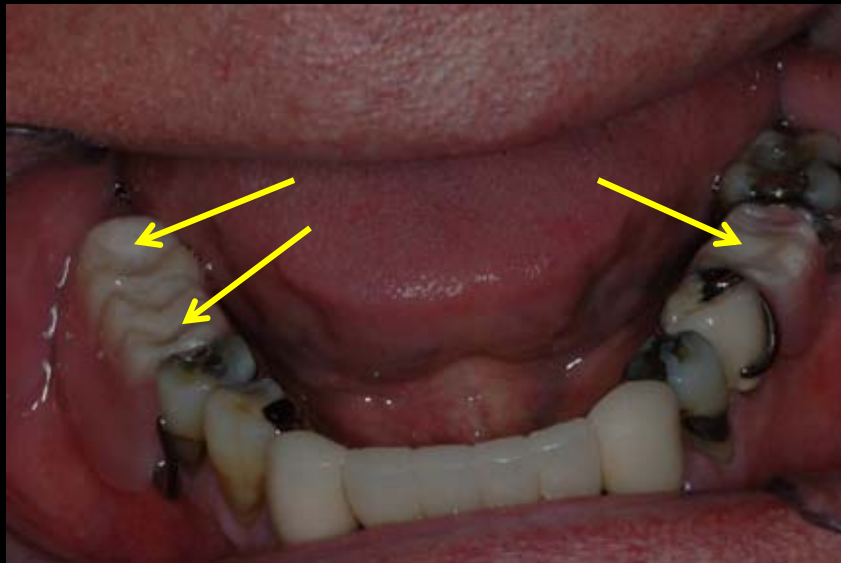
Preparations outlined.



Prepare occlusal inlay preparation without undercuts or bevel.



Place "potholes" in interproximal areas to strengthen pattern and provide anchorage for resin.



Posterior teeth modified with temporary bridge resin to create lingualized occlusion and patterns for metal occlusals.







