

Preparation of an anterior porcelain fused to metal crown



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Matrix



An accurate, well trimmed silicone matrix is essential for creating a predictable interim restoration or reduction guide

Incisal reduction



Incisal reduction should be with a parallel diamond bur of 1 ½ to 2mm thickness depending on the thickness of the tooth and the amount of incisal translucency required

Incisal reduction



The bur may be used to create depth grooves of 1 ½ to 2mm

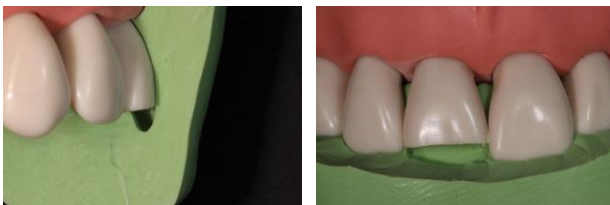
Incisal reduction



The same bur may be used to level off the incisal reduction

This usually brings the prepared incisal edge to (or past) the incisal edge of the adjacent lateral incisor tooth

Incisal reduction



Labial Reduction



The same bur may be used to prepare the cervico-labial shoulder margin

Note that the inciso-labial part remains untouched

Labial Reduction



Labial Reduction



Palatal Reduction



The cervico-palatal reduction is made near-parallel to the cervico-labial reduction using a chamfer burs

Palatal Reduction



Palatal Reduction

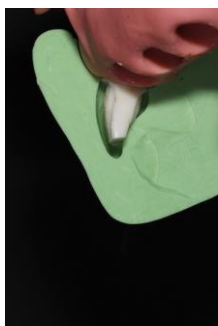


You should be able to see both margins simultaneously (with one eye closed) to confirm that there is no undercut

Palatal Reduction



Labial Reduction



The Inciso-labial reduction is made to create a 2 plane reduction labially

This can be prepared with either the barrel or chamfer diamond bur

Palatal Reduction



I prepare the Inciso-palatal part last but in some incisal relationships this is not required

Proximal reduction

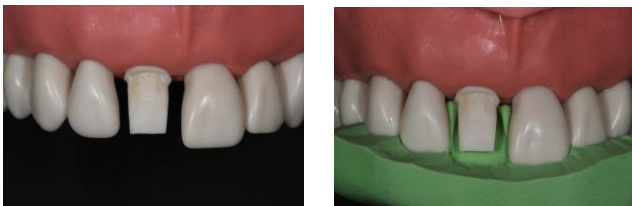


The proximal reduction is initiated with a needle bur maintaining a sliver of hard tissue between the prepared and adjacent teeth

Proximal reduction



Proximal reduction



The sliver of hard tissue is then removed using the needle bur

Proximal reduction



Advanced
Restorative
Care

Proximal reduction is completed by extending the shoulder preparation to the contact point with the adjacent teeth

Note that this often means that the reduction is more palatal one side of the preparation in comparison to the other

Proximal reduction



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Care

Incisal notches



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Care

The corners can become very thin and need reduction to add structural durability

Polishing



A variety of burs can be used to polish the preparation

The End



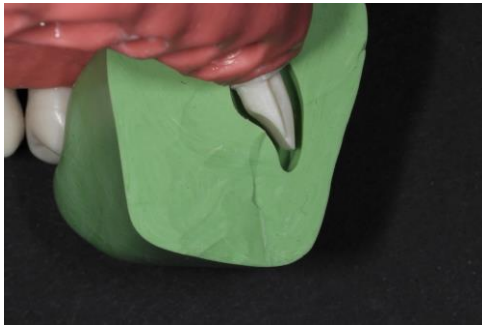
The End



The End



The End



The End



The End



There is little difference in hard tissue removal in comparison to a dentine-bonded crown

The End



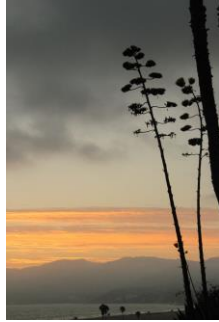
The porcelain fused to metal preparation is slightly more destructive

The End



The porcelain fused to metal preparation is less tapered

Any questions?



Email me if you have any questions

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Good luck!