# Sheet 13 fourth year dr rabab3a

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# Repair :if the failure is single piece pf restoration

#  redo : if the restoration has multiple defect

#  sometimes the restoration won’t be repairable then you have to extract the tooth.

* Signs of restoration failures :
overhangs
2ry caries
open contact
gingivitis
* symptoms:
pain like pain upon chewing
food impaction
discoloration
sharp edges
sensitivity
broken tooth or filling
loose tooth or filling
falling filling or tooth
muscle spasm
tmds
* treatment pathway :
we start with CC and symptoms , **make sure to recapitulate these symptoms into clinical signs** , so the idea is to reproduce the symptoms that the ptn has into a clinical signs that we can confirm from our own perspective as a dentists.

history > clinical examination > special investigation >sound clinical judgment >correct dx
if there is an odontogenic emergency it is always related to one tooth in particular

*Remember that clenching and bruxism and other ptn habits may be the cause of restoration failure.*

*Note :
bruxism ptn with conventional crown >crown fracture
bruxism ptn with post retained crown > root fracture*

* Defenitions :
success : 99 % correct
survival : below average
failure : needs redo
* failures related to tooth structure :

 most commonly **2ry caries** esp with amalgam more than composite, **fracture** could happen in amalgam or composite with high loading on restoration esp with undermined enamel,**dentine margins failure** ,**loss of pulp vitality, split root** .

*note : post is the last chance to save the tooth as any failure to the post indicates extraction ; if we can do a foundation restoration without a post a longer restorative cycle will be achieved*



**Ditching**: Deficiency of amalgam along the margin, preventing the margin of the cavity preparation from being flush. It’s a gradual deterioration of amalgam at tooth-restoration interference.



Tooth Fracture mostly occurs in case of undermined tooth structure under occlusal load .
it’s a failure with possible debonding of the restoration

The tooth needs a crown and as you can see the restoration extends to the pulp chamber so if there is a previous RCT we might need to redo it .

* when to repair & when to replace ?

this is determined under certain criteria :

1. **Ryge criteria 1973**

Alpha:

Ex: sharp restoration that needs polishing , darkened composite

• Excellent, fulfilling all quality criteria; tooth

and/or surrounding tssues are adequately

protected

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Bravo:

Ex: when we use burs to remove part of the cavity; caries in cervical margin of a composite restoration >remove caries and part of the composite > add composite and finish (repair)

• Sufficiently acceptable but with minor

shortcomings in areas where any

instrumentation may result in damage to the

tooth; no adverse effects are anticipated

Charlie:

Ex: fractured amalgam

Unacceptable but repairable

Delta:
Ex: root fracture

Unacceptable and must be replaced

*fissure staining in low caries risk ptn> review every 6 months or one year*

*fissure staining in high risk ptn> fissure sealant and review every 3 months*