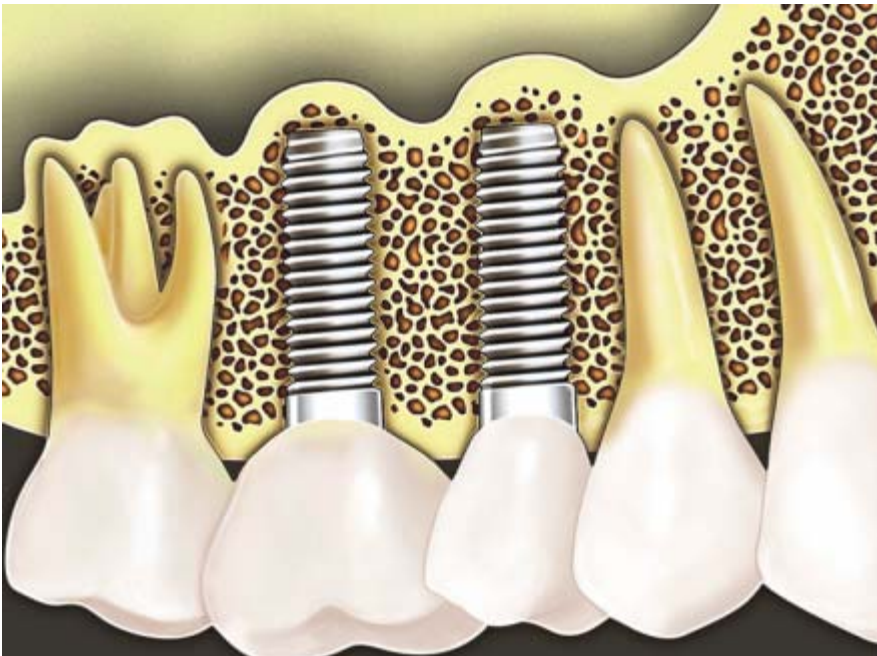


# ***“Recession, Abrasion, Erosion, Abfraction”***

Understanding the inter-dependency  
for ideal

***Function, Longevity and Esthetics***



***Colin Richman DMD***

Periodontics/Dental Implants

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## **Dehiscence:** (J. Pros. Dent – 1965)

To split or peel down along a natural line,  
Example (surgery) splitting apart of wound  
margins. Includes loss of marginal bone.



## **Fenestration:**

**A circumscribed hole in the cortical plate over the root - does not communicate with the crestal margin**



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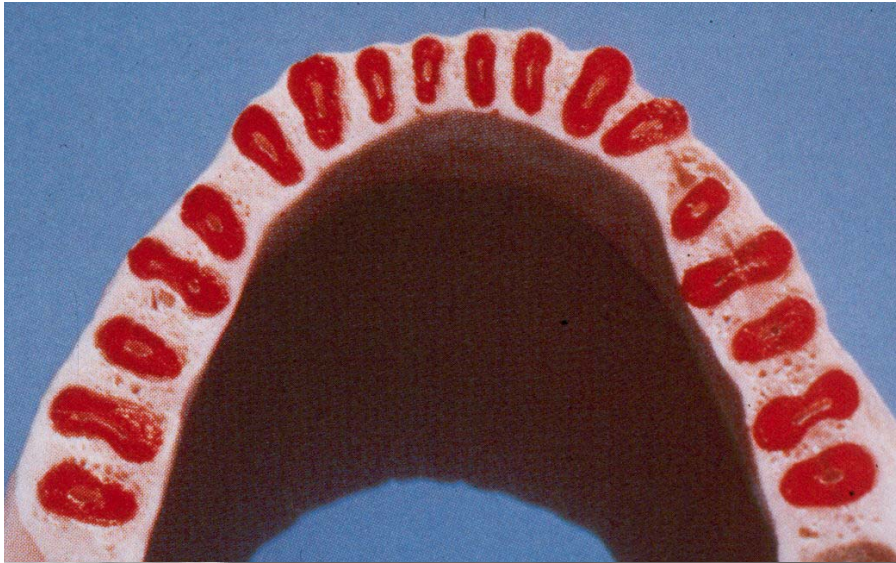
**Abfraction:** (J Pros Dent - 1991),  
**Non Carious Cervical Lesions (NCCL)**

The pathological loss of hard tooth substance caused by biomechanical loading forces.

Such loss is thought to be due to flexure and chemical fatigue, degradation of enamel and/or dentin at some location distant from the actual point of loading.







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# **Etiology**

## **Gingival Recession**

Discrepancy between  
BL width of alveolar bone  
and BL width of associated  
teeth



Probably, the third dimension of an Orthodontic problem, and therefore, Gingival Recession is frequently seen in orthodontic and treated orthodontic patients.

**Preventable**

**Need  $>1.5\text{mm}$  thickness of facial bone to predictably prevent gingival recession**





## **Connective Tissue Grafting**

**To prevent further recession and  
further loss of Attachment,  
As well as possible  
Root surface decay,  
and root surface hypersensitivity.**

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Above, total root coverage  
Middle, removal of an onlay veneer restoration  
Below, Partial root coverage  
Bottom, Minimal root coverage,  
however, excellent new zone of attached tissue





# Biologic Width

Gingival Sulcus – 1mm

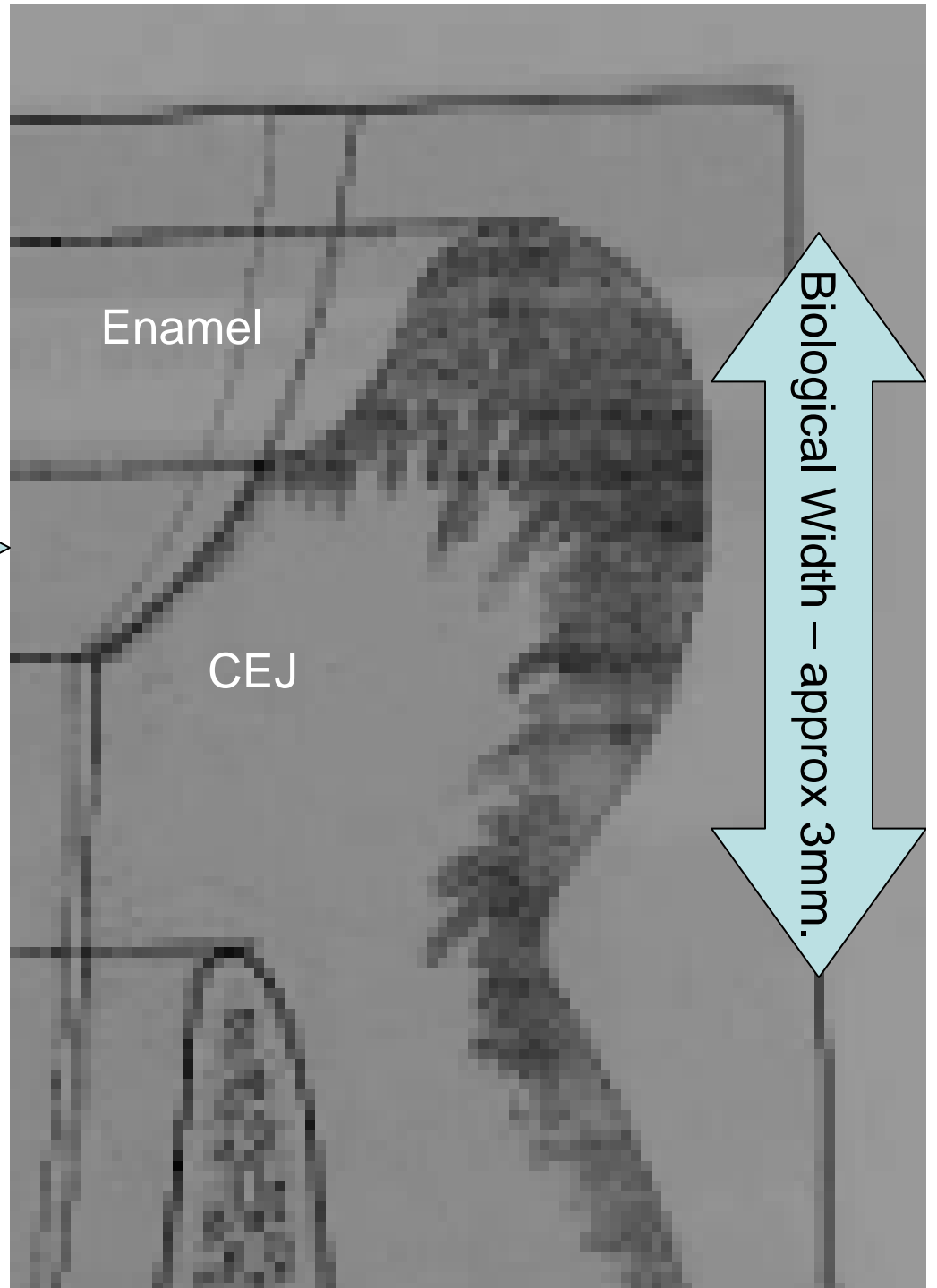
Epithelial Attachment – 1mm

Conn. Tissue Attachment–1 mm

Enamel

CEJ

Biological Width – approx 3mm.



# Recession Etiology



# Recession Etiology

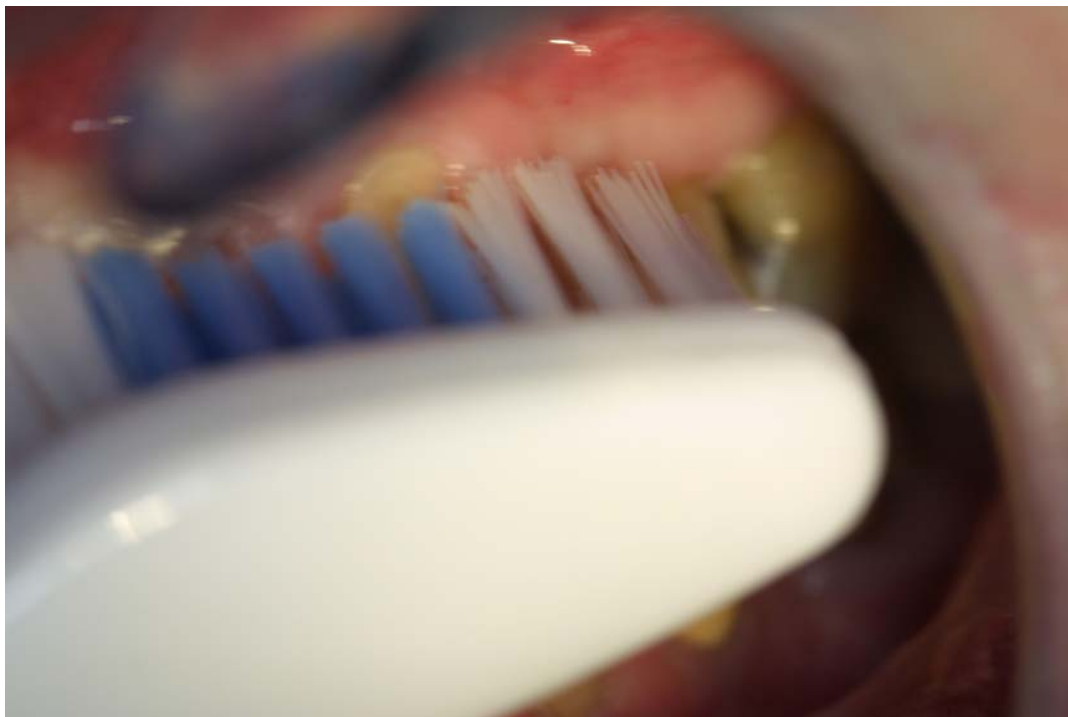




# ***Non-carious Cervical Lesions NCCCL's***

## **Toothpaste Abuse or Abfraction or A Combination of both? (Abrahamson)**





# **Toothbrush Abrasion Toothpaste Abuse**

**Abrahamson**





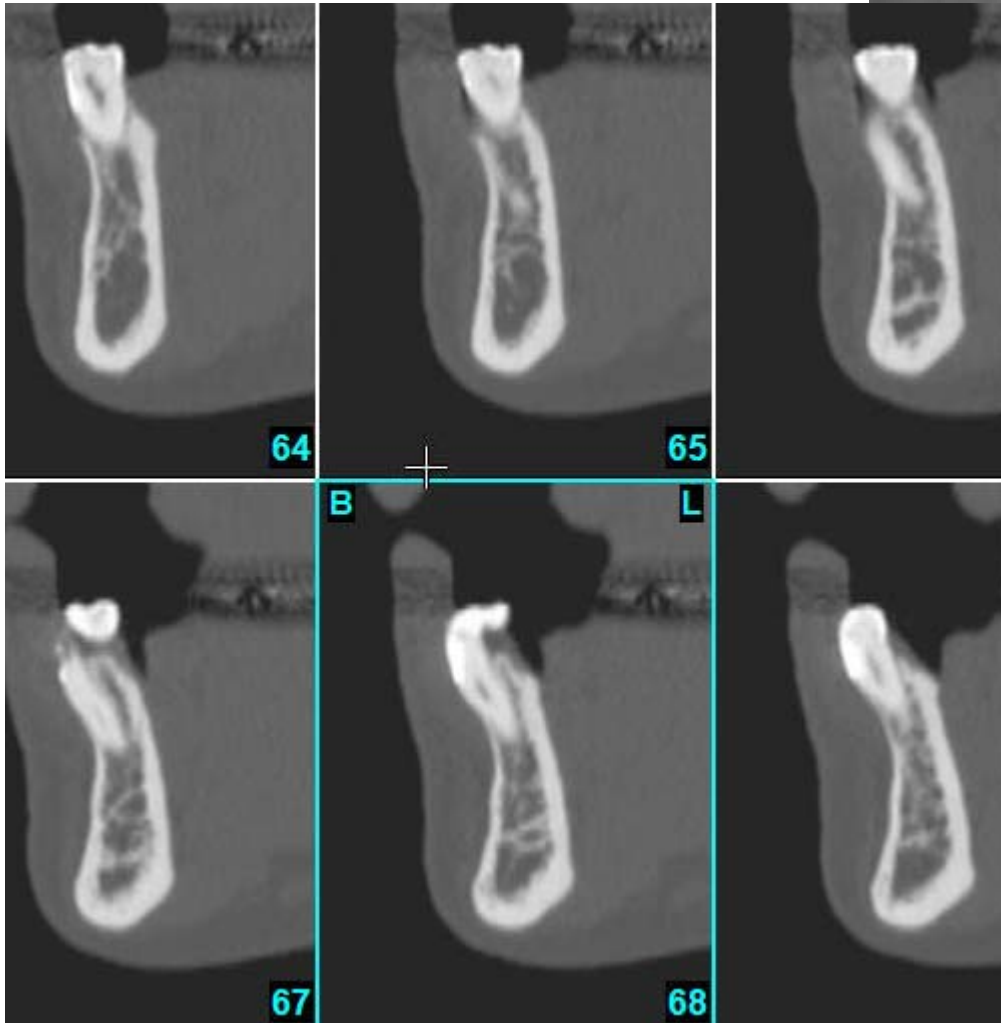
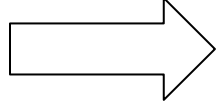
**Note the symmetry of the lesions, and the ability to adapt a probe into each defect**







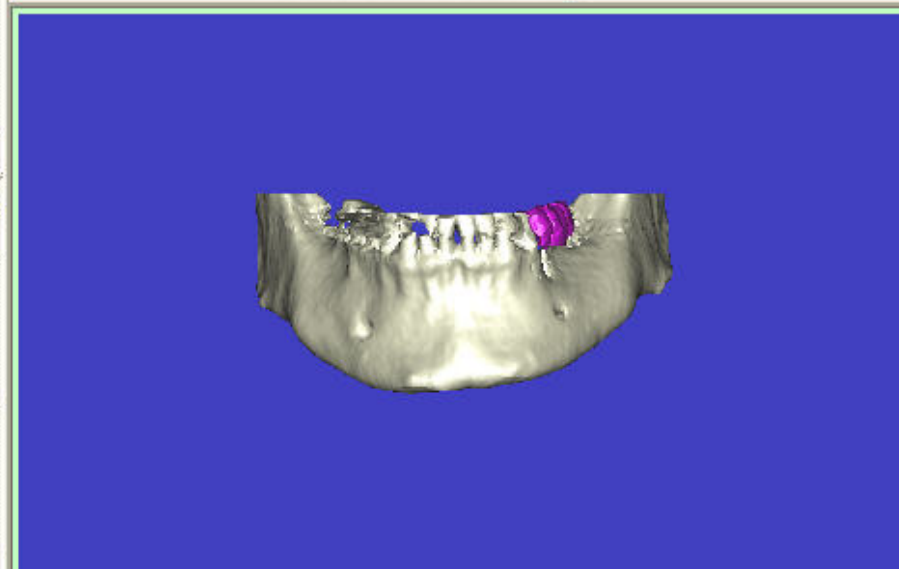
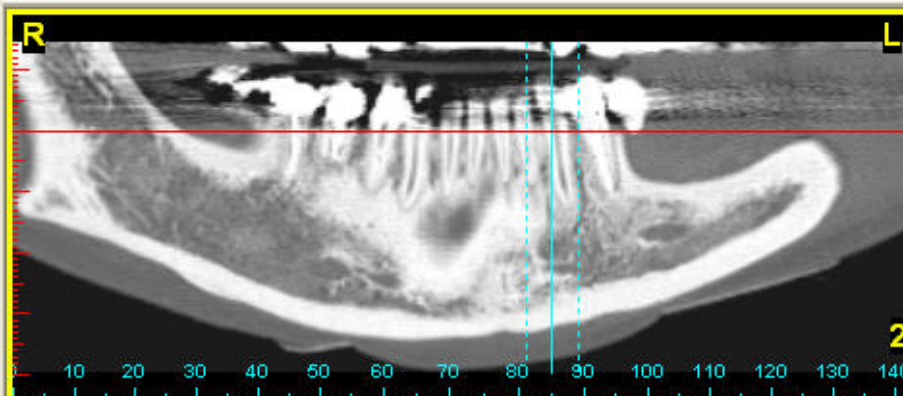
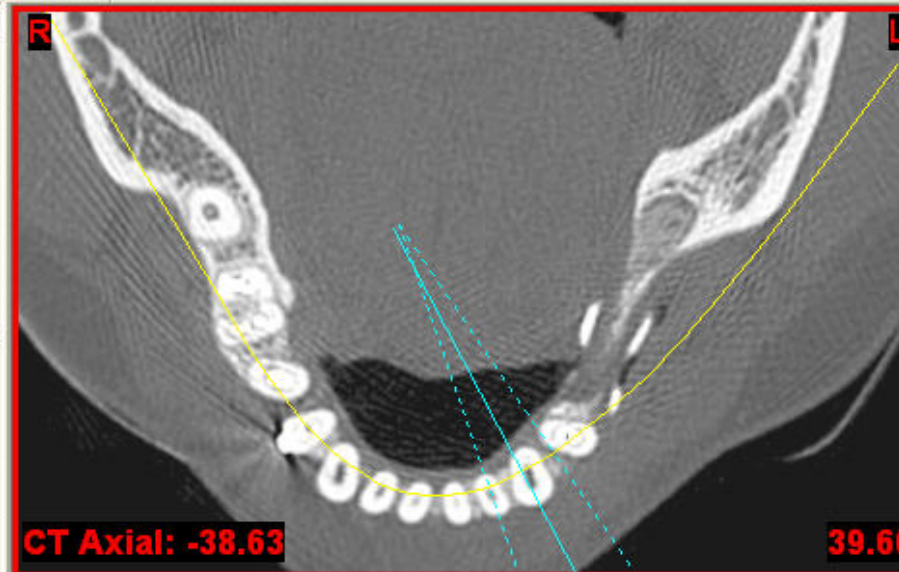
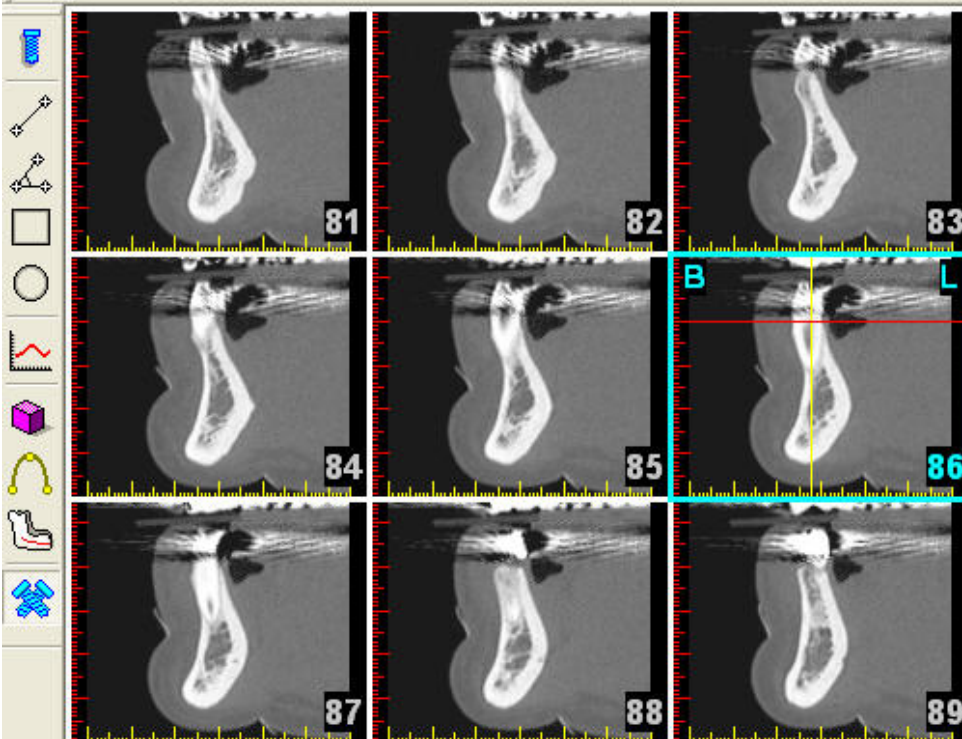
# 3-D Imaging See ahead



# Martine - Mandible (Lossy JPEG & CT Compressed) - SimPlant Planner 9.22

File Edit View Implant Tools Lists Plan Options Help

100% 3.75 3.75 mm Length: 8.50 mm







12/04 – 03/05  
08/05

***Periodontally Accelerated  
Osteogenic Orthodontics***

***“WILCKODONTICS”***

**Enhanced Muco-gingival Status  
Enhanced Stability,  
Decreased Recession,  
60-70% faster treatment time**



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