

*D' Alessandro Geminiani*

## Recession Coverage: a Decision-making Process

Corbelli & Pini Prots, 2012

## Definition

Displacement of  
the gingival margin  
apical to the CEJ

*Glossary of Periodontal Terms, 1992*



# Definition

Displacement of the gingival margin apical to the CEJ

*Glossary of Periodontal Terms, 1992*



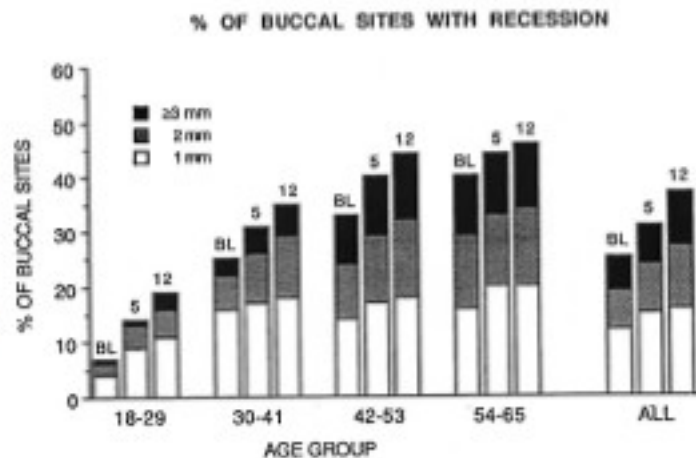
# Epidemiology

REC is a frequent finding

% of patient with REC increase with age

Sites with REC were susceptible to further progression

*Serino et al, 1994*



# Risk Factors

Thin tissues  
Toothbrushing trauma

*Songnes & Gjermo, 1976*  
*Rajapakse et al, 2007*



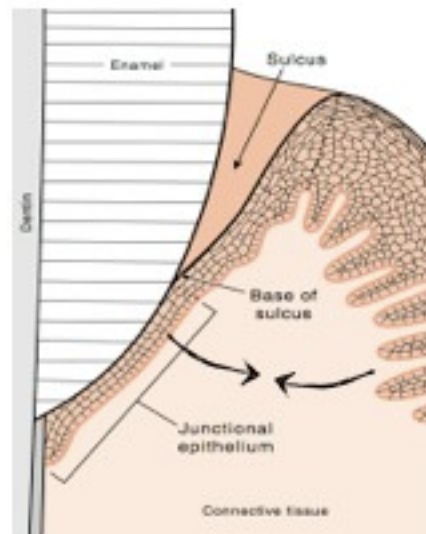
# Pathogenesis

Destruction of connective tissue  
Proliferation of rete pegs  
Thickening of the epithelial layer  
Epithelial thickness is restored  
Loss of tissue by desquamation

*Baker and Seymour, 1976*

Traumatic action of tooth brush

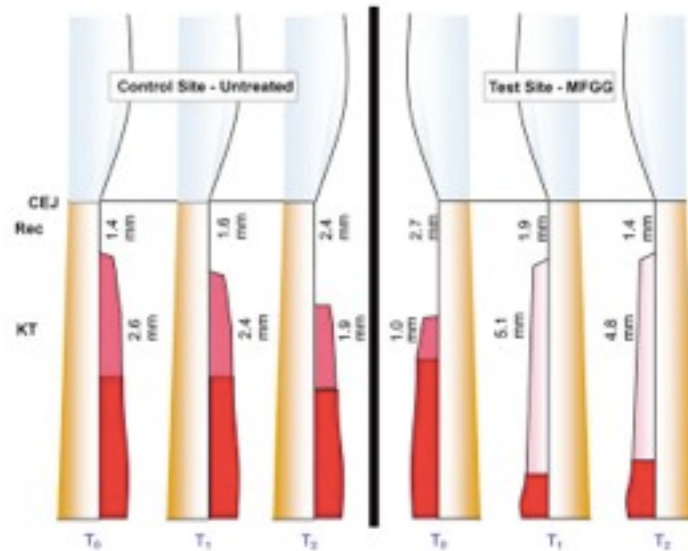
*Goman, 1967*  
*O'Leary 1968*  
*O'Leary 1971*



# Long-term

Untreated control sites had progression of REC

Agudo et al, 2009



## When to Treat?

Before Ortho in presence of bony dehiscence




Recession is progressing despite good OH

Improve plaque control (teeth and implants)

Pre-prosthetic

Annals Perio, 1996

# Treatment Options

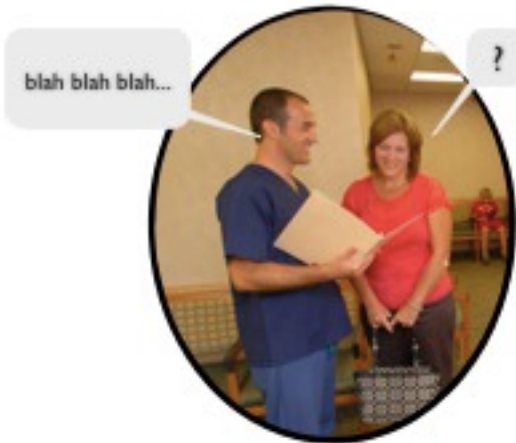
1968	1989	1985 1992 1995 2000
Free Gingival Graft	Coronally Advanced Flap	Combined Procedures (CAF + CT/GTR/Growth Factor)
		
<p>Colo et al, 2008 Chamirone et al, 2010 Cluser et al, 2003 Dedes et al, 2003 Raccuzzo et al, 2002</p>		

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## What do we do?



# What does the patient want?



Discuss patient desires and expected outcome



Select the best treatment option

# What do we want?



Complete Root Coverage

Easy

Time and Money



Too Many Post-op

Poor Esthetic Outcome

Unpredictable Result

# What does the patient want?



Esthetic

Limited or No Discomfort

Time and Money



Dentinal Hypersensitivity

Poor Esthetic Outcome

Complicated OH

# What do we want?



Can we predict the outcome?



Can we predict the outcome?

Oral Hygiene





# Can we predict the outcome?

Oral Hygiene

Smoking

- Miller, 1985
  - Muller et al, 1988
  - Souza et al, 2008
  - Trombelli & Scabbia, 1998
  - Zucchelli et al, 1998
  - Amorante et al, 2000
  - Bouchard et al, 2001
  - Harris, 1994
  - Hirsch et al, 2001
  - Maurer et al, 2000
  - Tolmie et al, 1991
- SR  
Chambrone et al, 2009

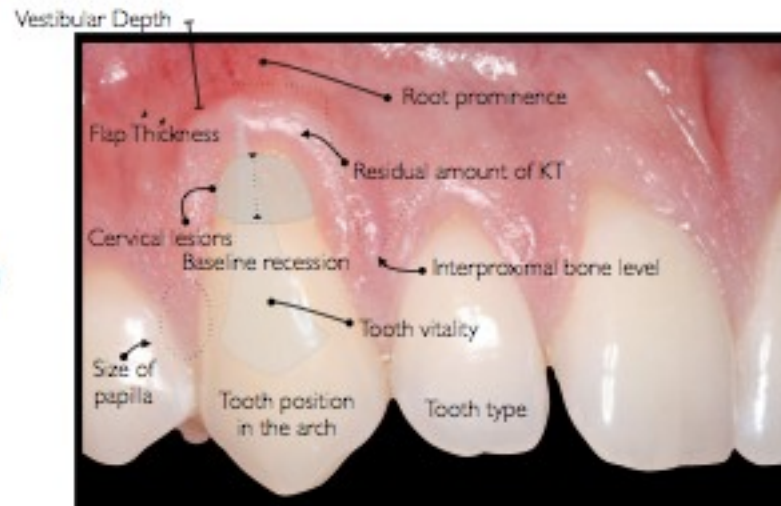


# Can we predict the outcome?

Oral Hygiene

Smoking

Tooth/site-related factors



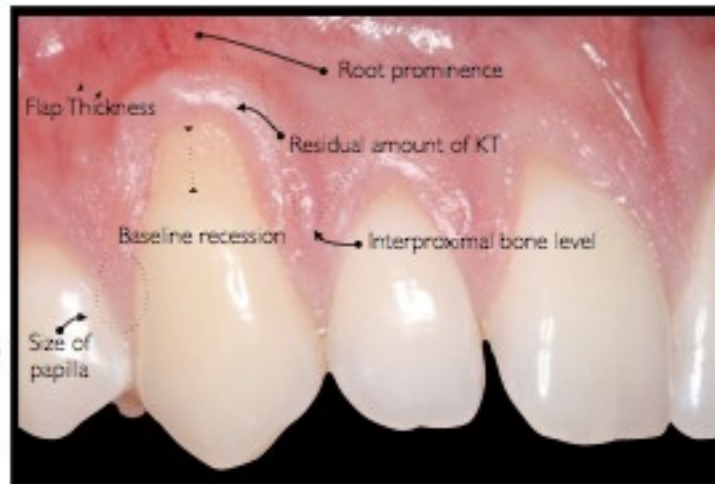
# Can we predict the outcome?

Oral Hygiene

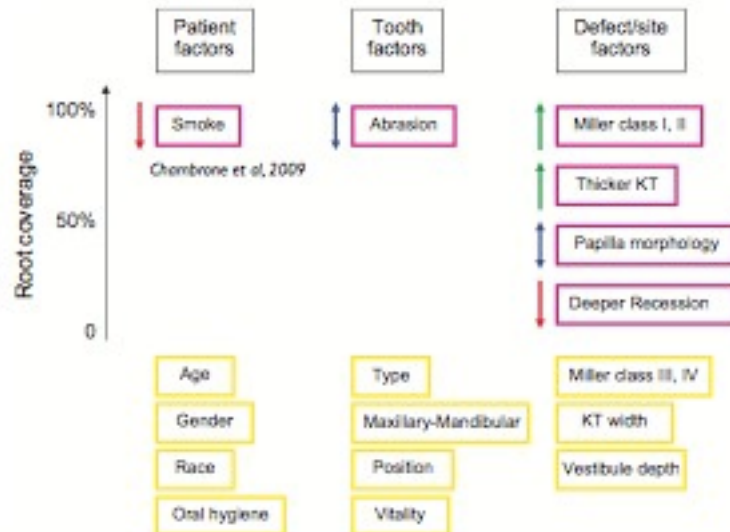
Smoking

## Tooth/site-related factors

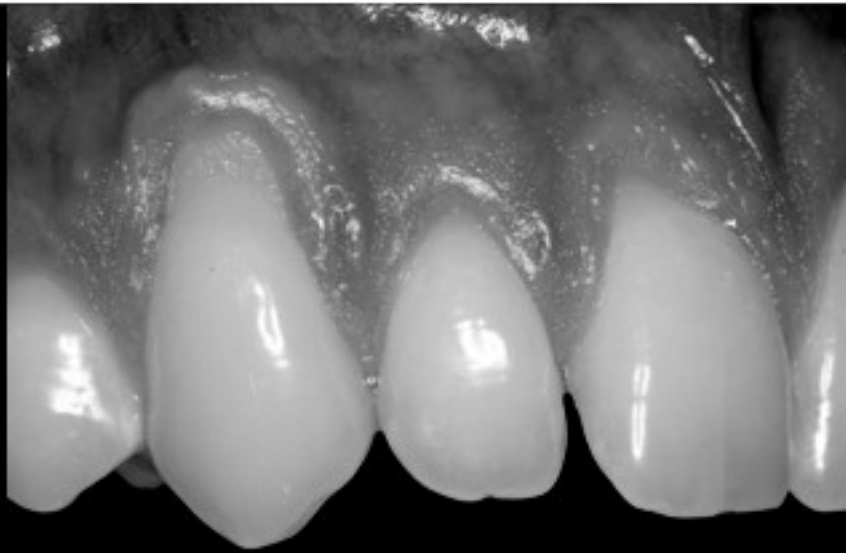
Root curvature	Soletto et al, 2005
Interdental support	Miller, 1985 / Anco et al, 2010
Dimension of papilla	Soletto et al, 2001 / Haghighati et al, 2009
Flap thickness	Baldi et al, 1999
Residual amount of KT	Zucchelli et al, 2004
Baseline recession depth	Raccuzzo et al, 2002 / Closter et al, 2007



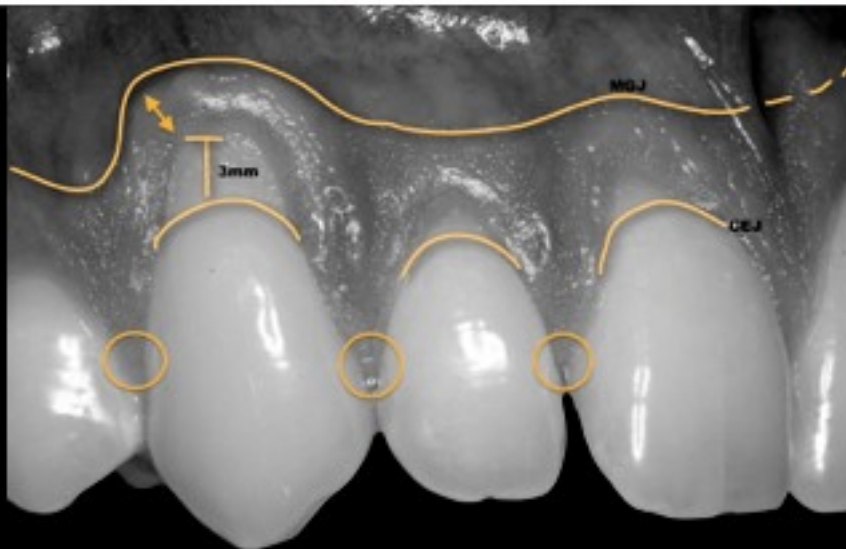
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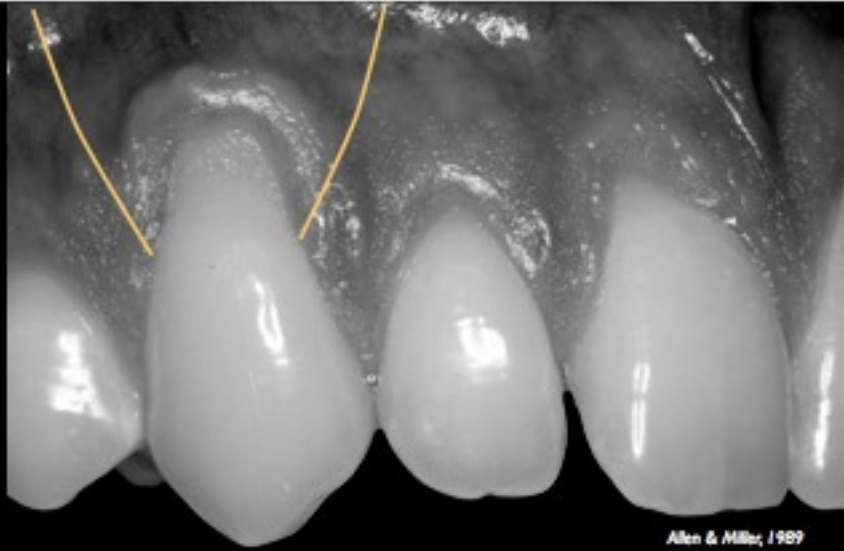
## Coronally Advanced Flap



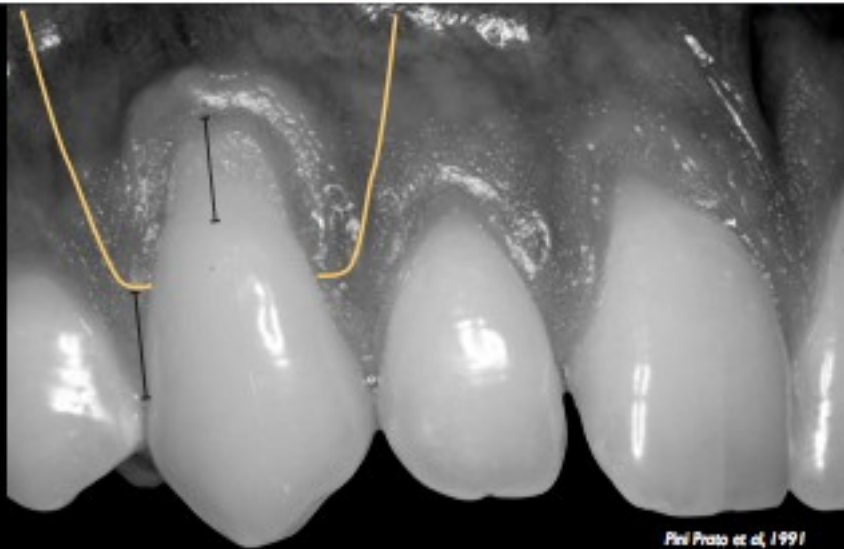
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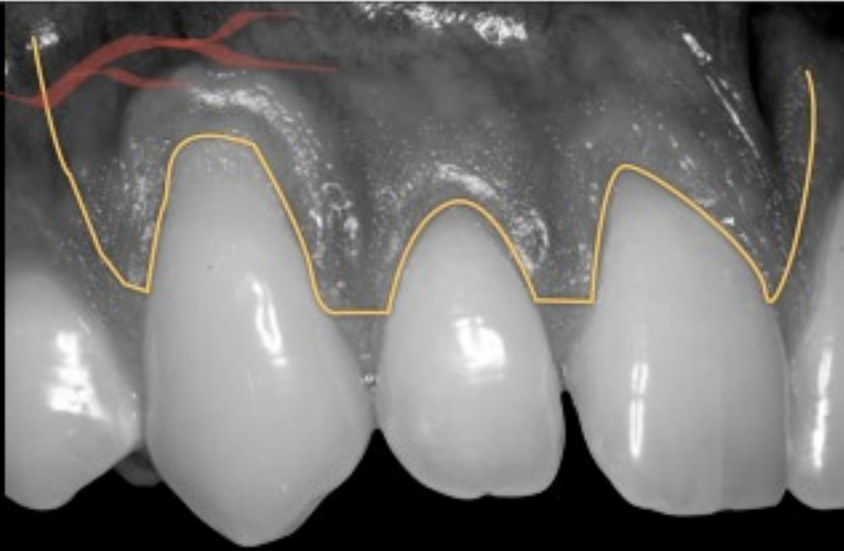
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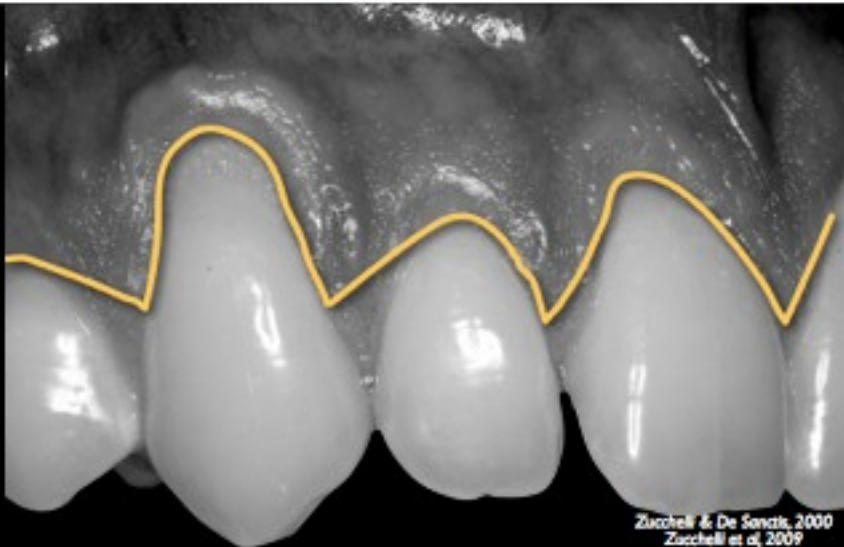
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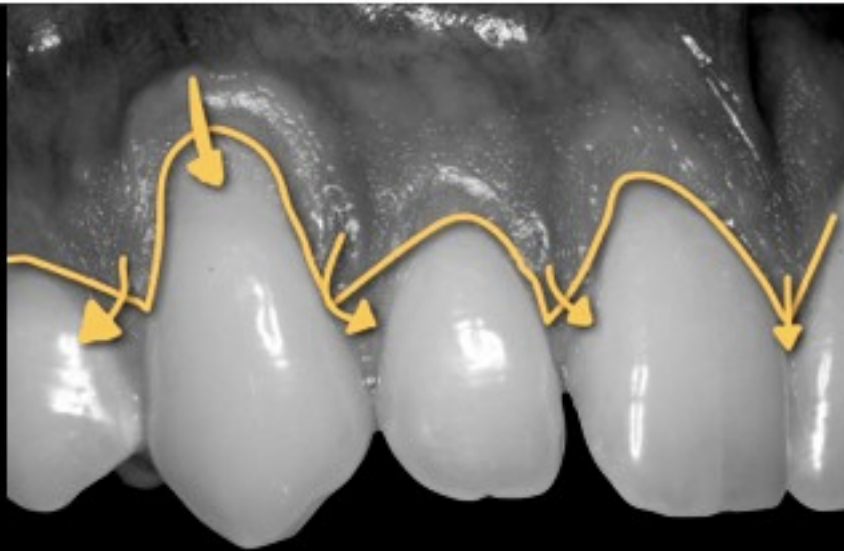
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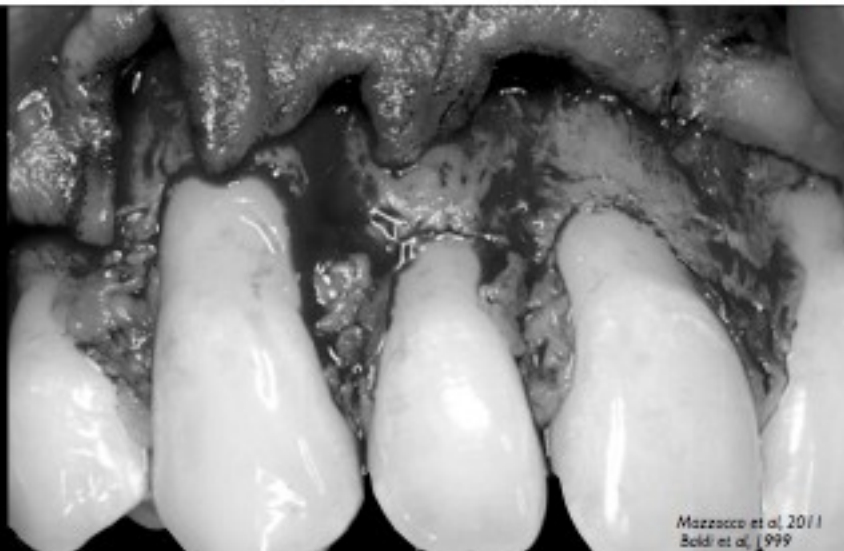
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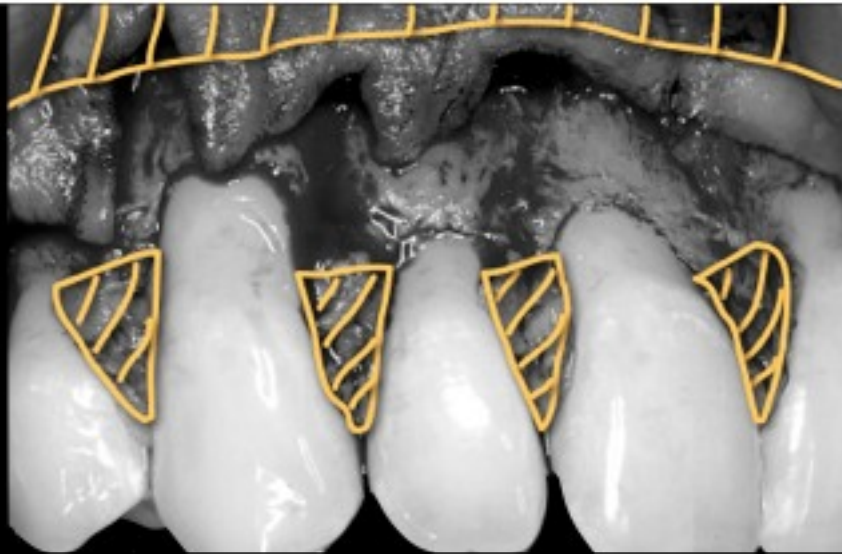
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## Coronally Advanced Flap

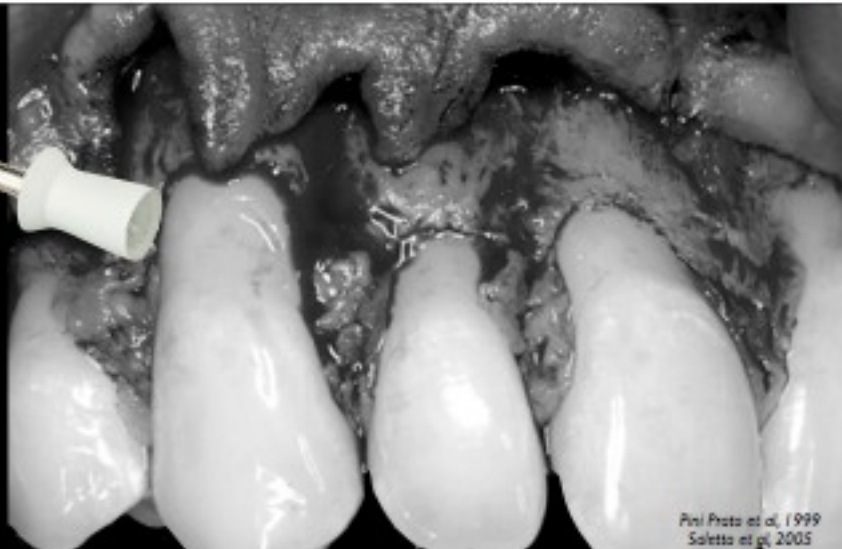


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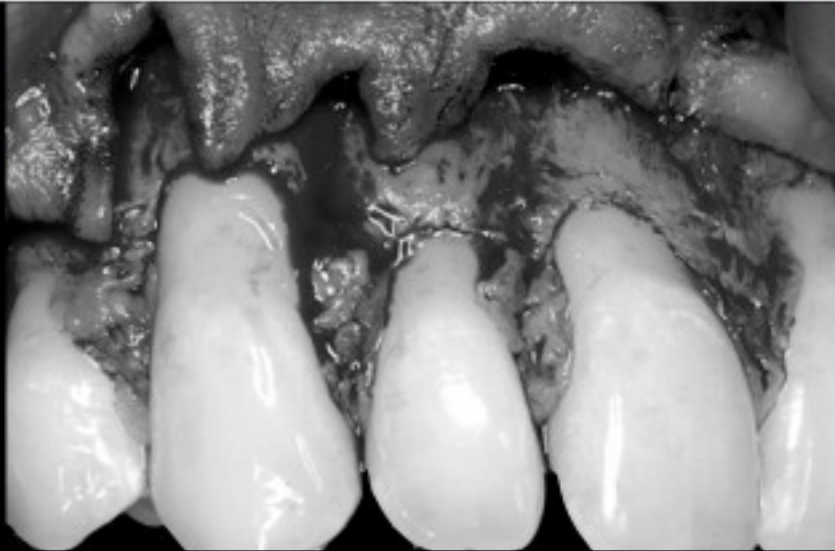
## Coronally Advanced Flap

SRP  
Polishing

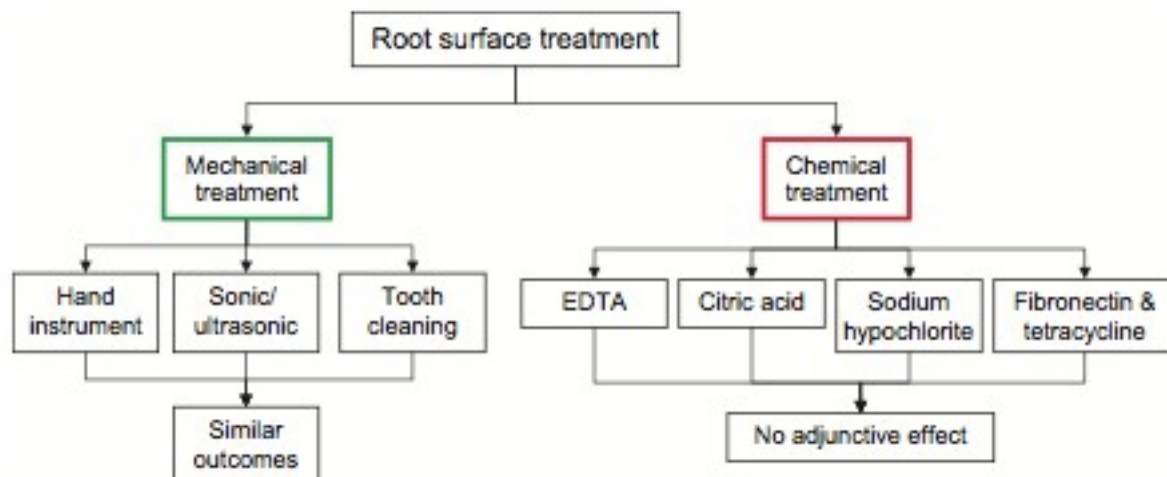


# Coronally Advanced Flap

Citric Acid  
Tetracycline  
EDTA



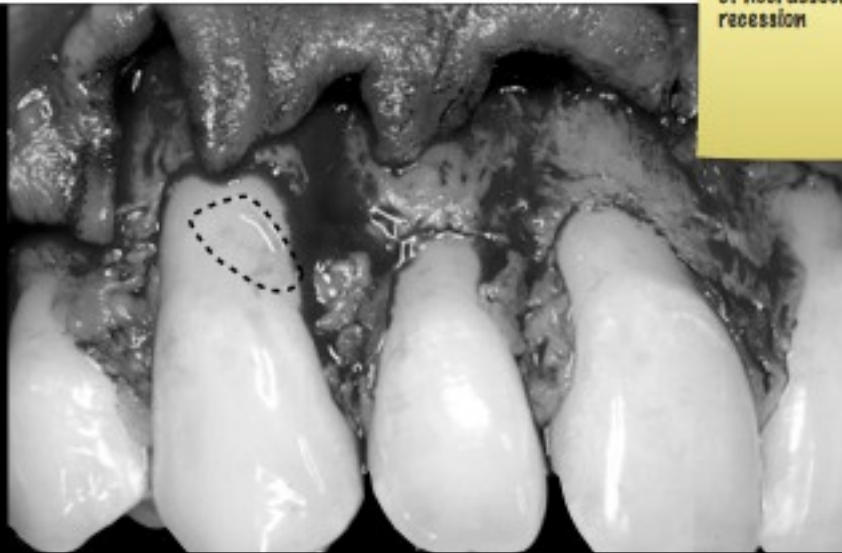
# Coronally Advanced Flap





# Coronally Advanced

Protocol for treatment of neck associated with recession

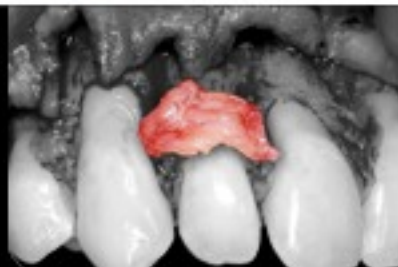


# Coronally Advanced Flap



**Guided Tissue Regeneration**

Regeneration  
Re-entry surgery



**Connective Tissue**

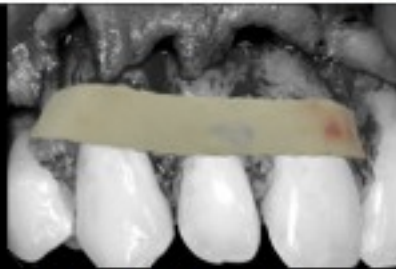
Increase in tissue volume  
Need for a done site



**Growth Factor**

Regeneration  
Post-op sensitivity

# Coronally Advanced Flap



**Acellular Dermal Matrix**  
*Harris, 1998*

No donor site

?



**Platelet Concentrated Graft**  
*Griffin & Cheung, 2004*  
*Cheung & Griffin, 2004*

Facilitate tissue healing

?

# Guided Tissue Regeneration

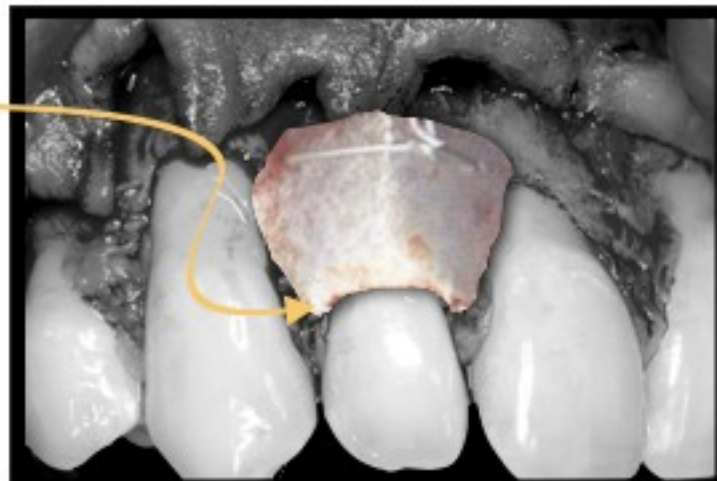
Placed past CEJ



Barrier bent for space keeping

No difference between  
Resorbable & Nonresorbable

*Reccuzzo et al, 2002*



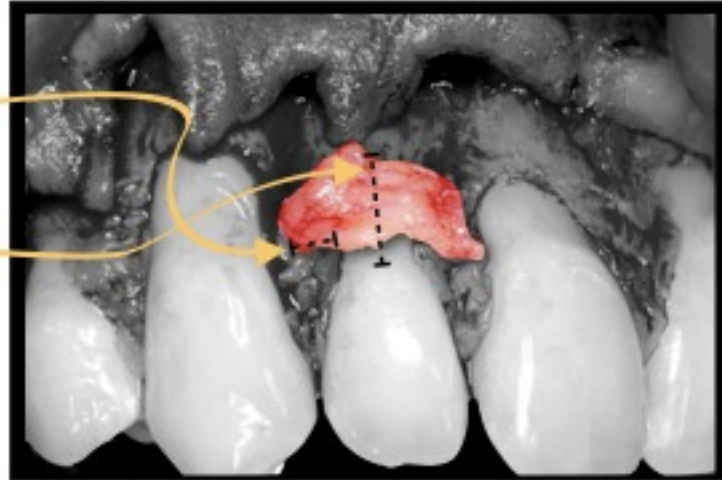
# Size of Connective Tissue Graft

6mm wider than recession

1mm thickness of CT graft

Height = REC - KT

Zucchelli et al, 2003



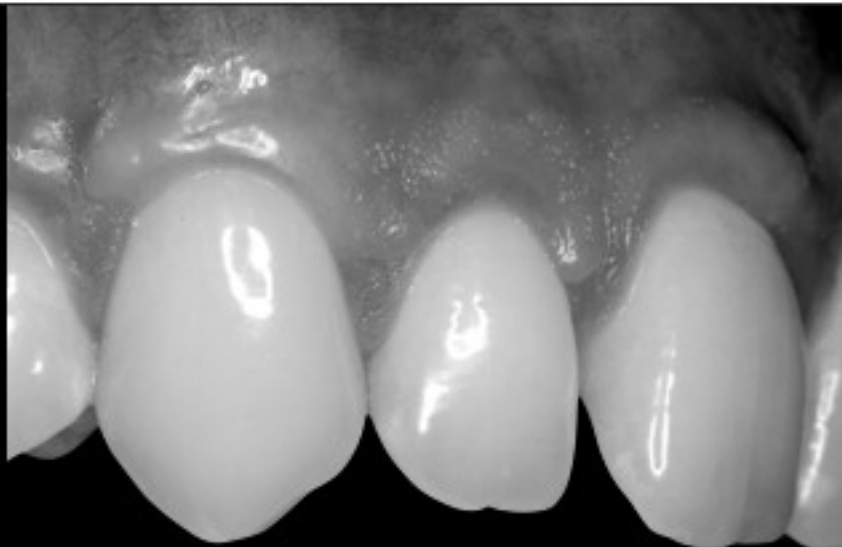
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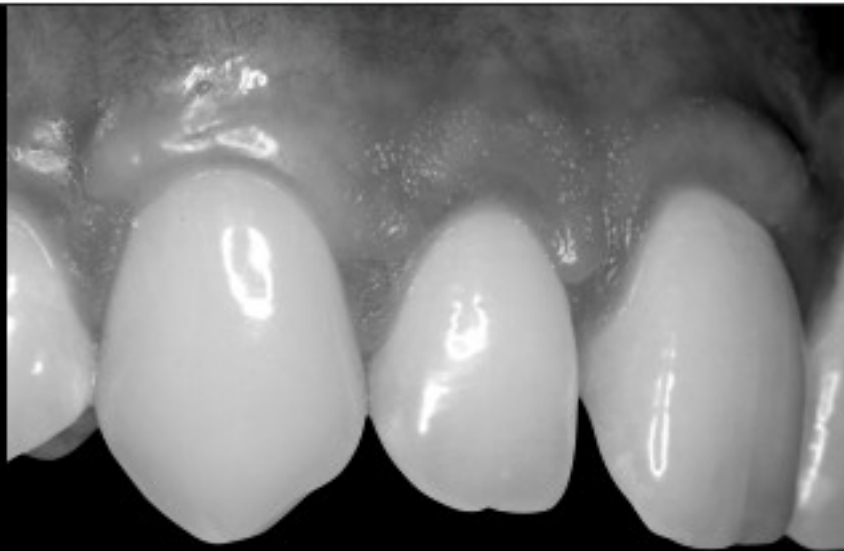
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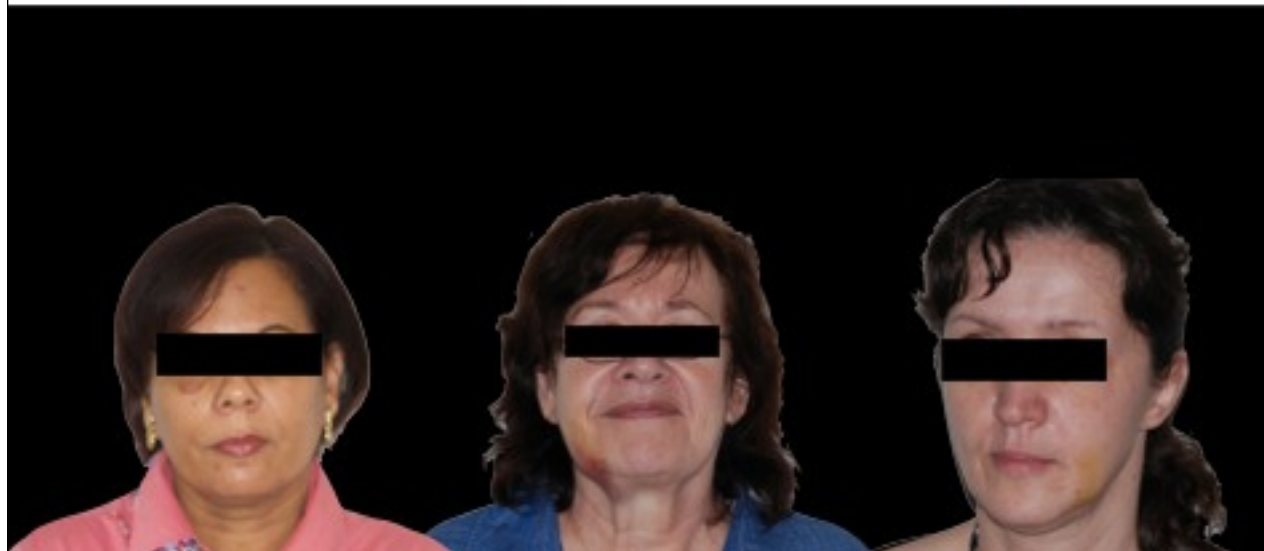
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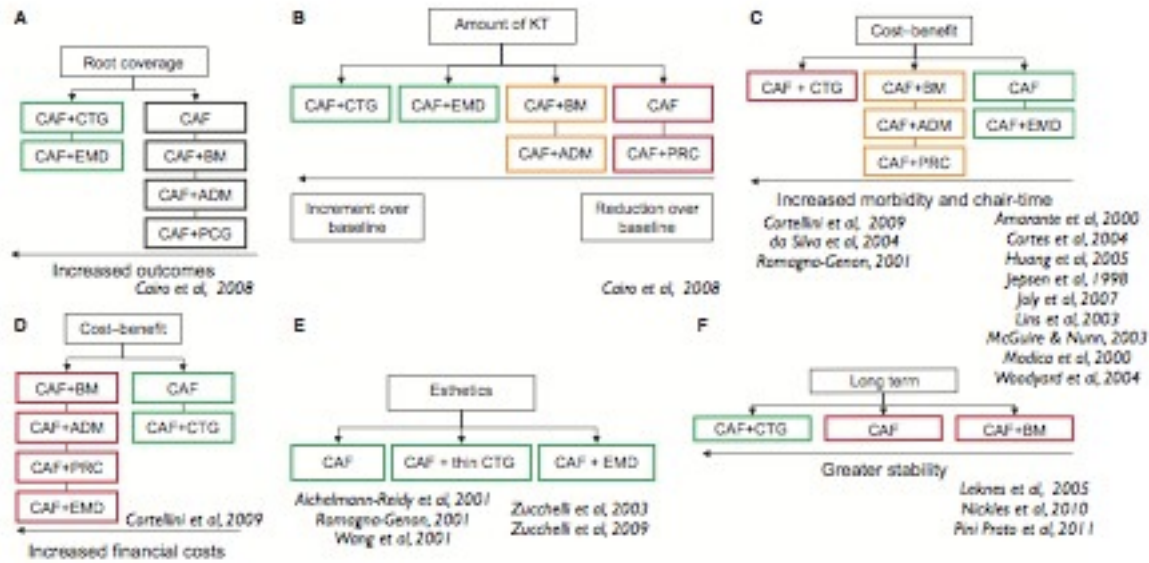
## Coronally Advanced Flap



## Coronally Advanced Flap



# Conclusions



Thank You!