

**Prevention of Periodontal Pockets on  
Mandibular Second Molars  
After Third Molar Removal**

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## Aim of Study

**To investigate the effects of periodontal care delivered to mandibular 2<sup>nd</sup> molars along with impacted mandibular 3<sup>rd</sup> molar surgical removal.**

## Objective

**To compare  
the 6-month treatment outcomes in terms of  
periodontal condition of adjacent mandibular  
2<sup>nd</sup> molars  
following conventional extraction  
and  
following extraction along with periodontal  
interventions**

**MATERIALS  
&  
METHODS**

# Inclusion Criteria

## Patient selection

- Referred from Reception Clinic of PPDH
- Not under comprehensive care during the research period
- No medical history that may affect periodontal healing
- No CPI > 3 (excluding the mandibular 2<sup>nd</sup> molar)

Each patient contributed only one impacted mandibular 3<sup>rd</sup> molar removal and one adjacent 2<sup>nd</sup> molar to this study

# Inclusion Criteria

## Tooth Selection

### Mandibular 3<sup>rd</sup> Molar

- mesio-angular Impaction ( $>30^\circ$  to long axis of 2<sup>nd</sup> Molar)
- no sign of cystic / neoplastic change

### Adjacent Mandibular 2<sup>nd</sup> Molar

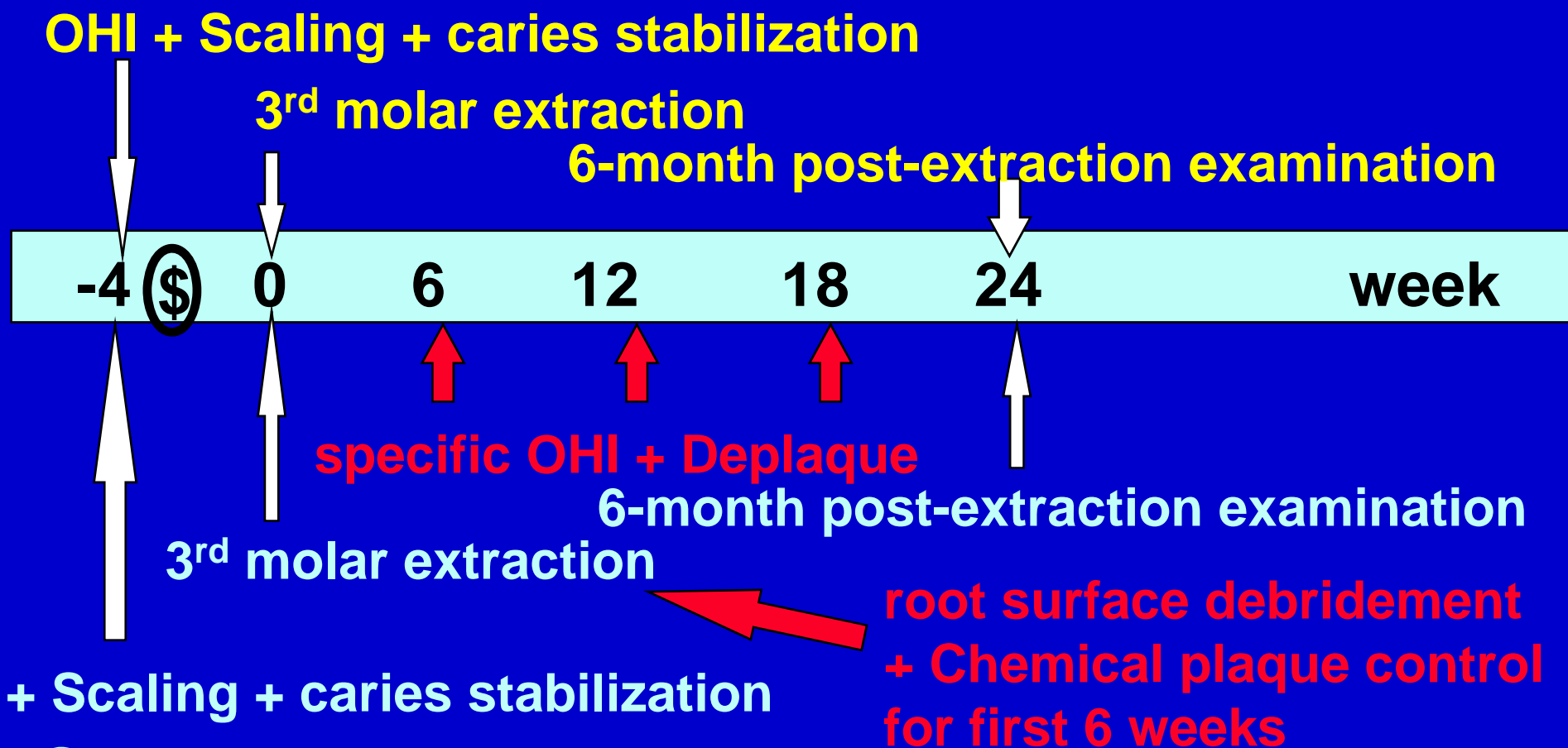
- must be present and EPT +ve
- distal PPD  $\leq 5$ mm and BOP
- Mobility  $\leq 1$

### Crestal Radiolucency

- between the 2<sup>nd</sup> & 3<sup>rd</sup> molar (other than follicular space) apparent on pre-extraction Panoramic Radiograph

# Study Design

## Control Group



OHI + Scaling + caries stabilization  
Test Group

# RESULTS



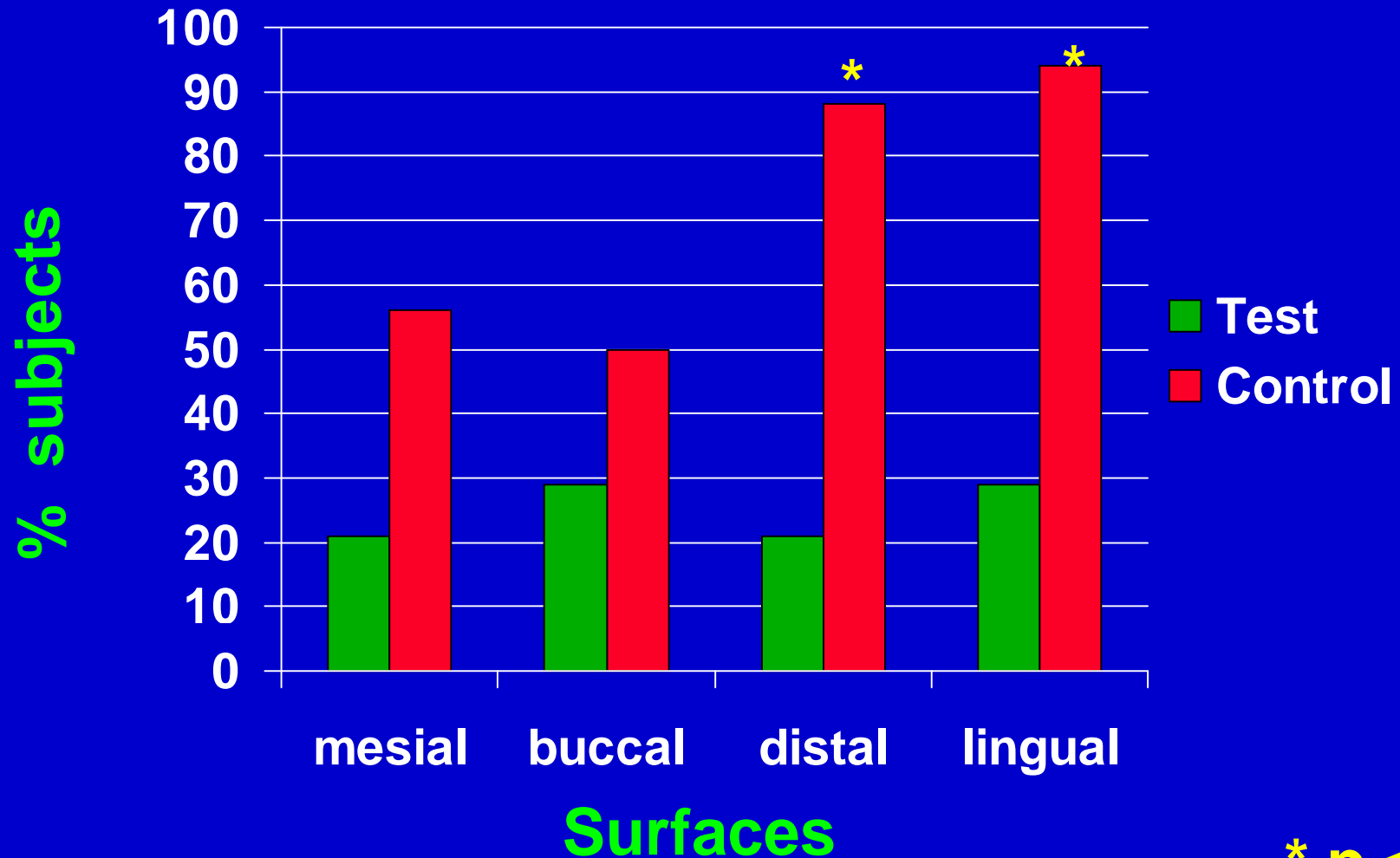
# Subject Demography

	Test Group	Control Group
No. subjects	14	16
Mean age*	35.7*6.8	28.9*7.3
Gender	36% male	63% male
Smoker	22%	38%
Mandibular 2 <sup>nd</sup> molar		
left side	57%	38%
distal caries lesion	21%	38%
distal restoration	0%	0%

\*p<0.05

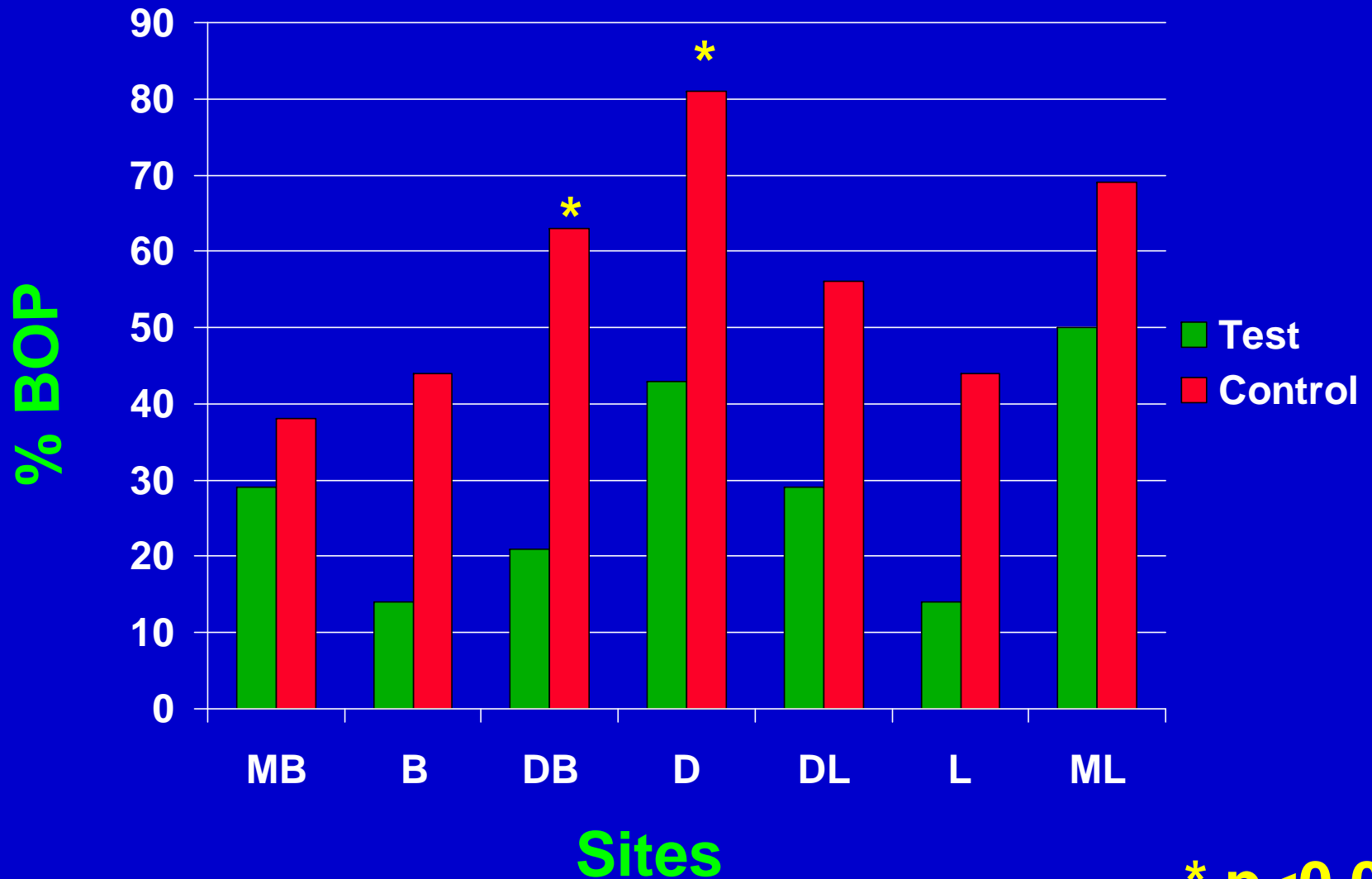
No loss of subject throughout the study

# Local Plaque Detected



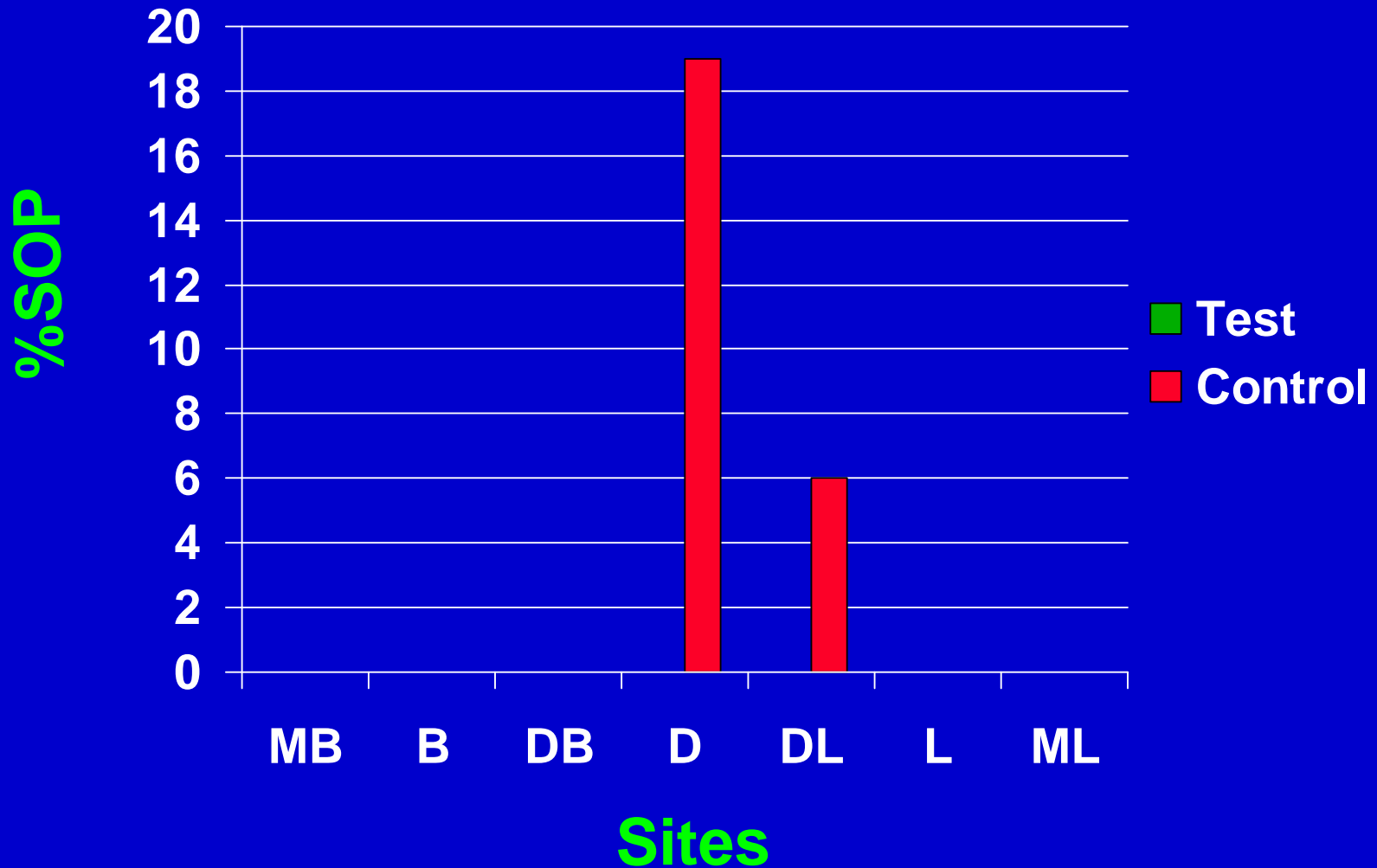
\* p<0.05

# Bleeding On Probing

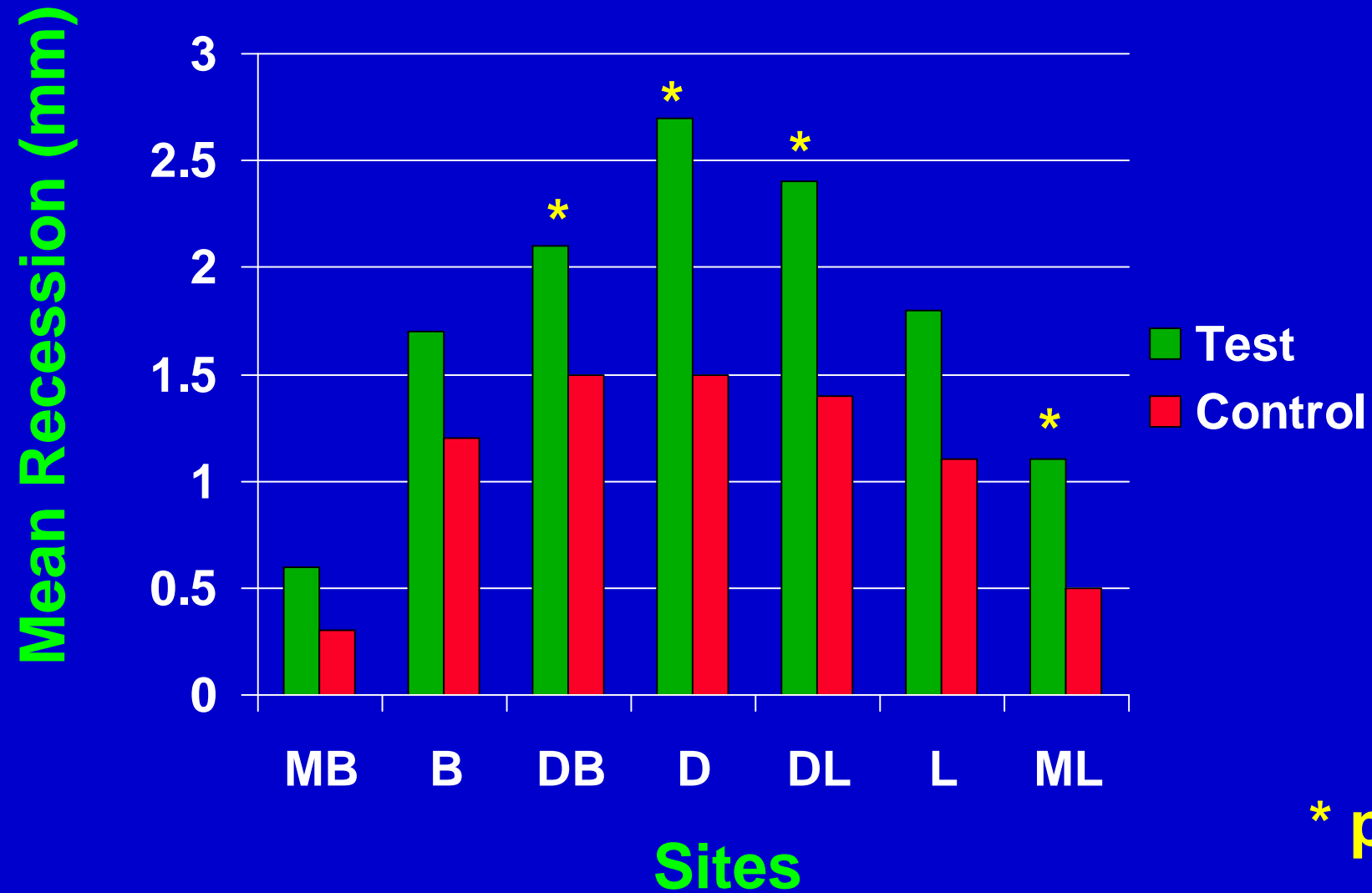


\* p<0.05

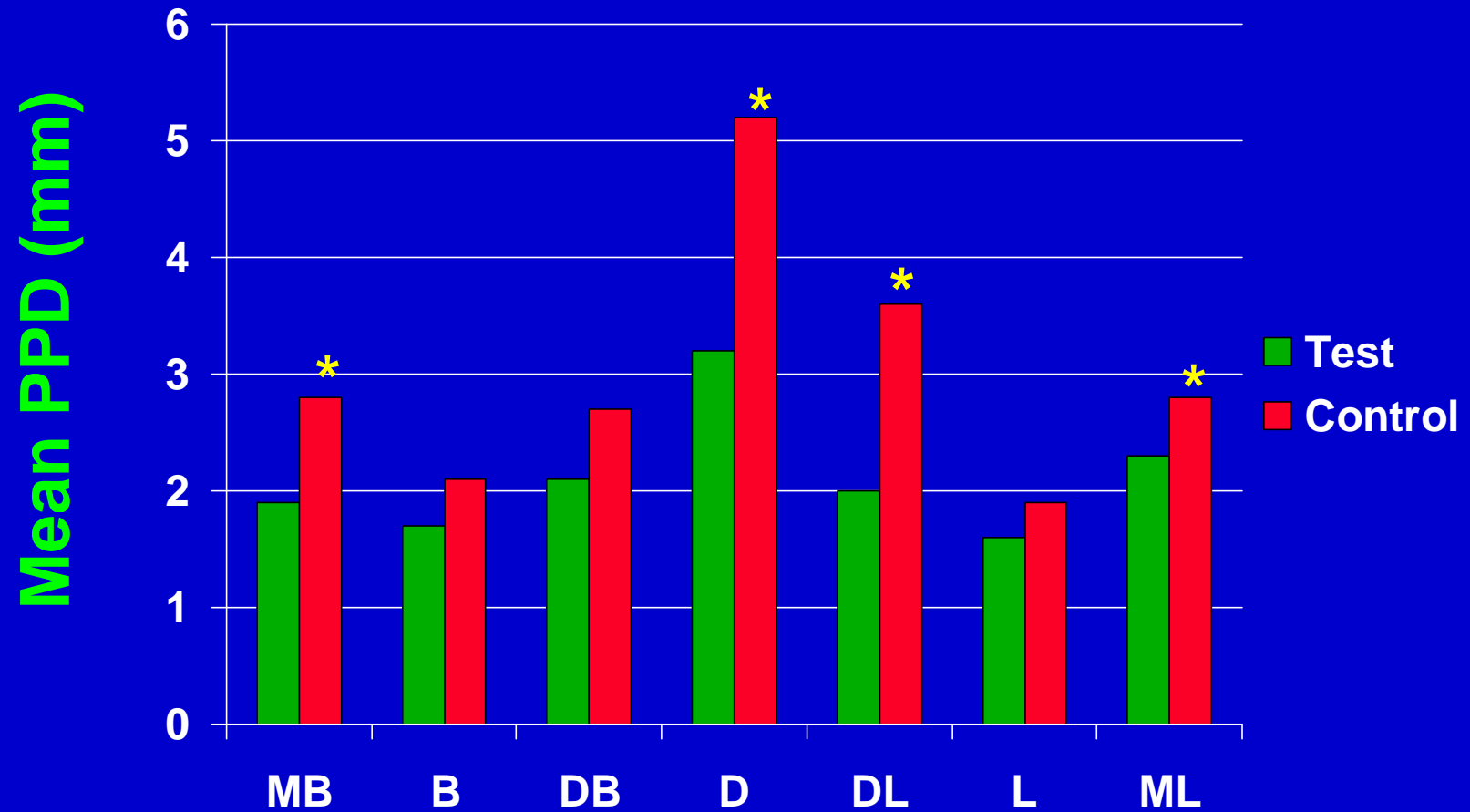
# Suppuration On Probing



# Recession



# Probing Pocket Depth



\*  $p < 0.05$

# Reported Pain or Discomfort in region during preceding 2 months



\*  $p < 0.05$

**DISCUSSIONS  
&  
CONCLUSIONS**



# **Periodontal Interventions,**

**in terms of root surface debridement of mandibular 2<sup>nd</sup> molars, at the time of impacted mandibular 3<sup>rd</sup> molar removal procedures, and a follow-up plaque control programme,**

**were found to be effective in promoting periodontal healing of periodontally diseased mandibular 2<sup>nd</sup> molars in this 6-month clinical study.**

- ☺ **Less plaque deposition**
- ☺ **Less BOP**
- ☺ **Less SOP**
- ☺ **Shallower PPD**
- ☺ **Greater Recession**
- ☺ **Less Reported  
Pain/Discomfort**

# Clinical Applications

- **Pre-extraction assessment (Clinical & Radiographic)**
- **Root surface debridement of diseased Mandibular 2<sup>nd</sup> Molars**
- **Post-extraction personal oral hygiene**
- **Evaluation of periodontal condition**
- **Supportive Periodontal Care**