

# Clinical Studies Supporting Periodontal Endoscopy

## **Subgingival Identification study. SEM evaluation 1**

- 42 teeth, 210 sites
- 4 hygienists

95% accuracy in identifying topographical landmarks and features

## **Extraction Study: SEM evaluation<sup>2</sup>**

- 42 teeth, 210 sites
- Teeth cleaned with aid of dental endoscope (Perioscopy)
- Teeth extracted and SEM evaluated

1.2% of Endoscope aided SRP had residual calculus – mostly at CEJ  
Similar study designs in literature showed 10 – 50% residual calculus remaining following traditional SRP w/out endoscope

## **Endoscopic SRP (Perioscopy)<sup>3</sup>**

- 46 patients, 73 quadrants
  - Sites treatment planned for surgery
  - Used endoscope and non surgical therapy first
  - 1 year follow-up at 3 month intervals
- Treated by 1 hygienist

At 1 year, 71 – 73 quadrants required no flap surgery

Mean attachment gain of 2.06mm

## **Retrospective look at Perioscopy treatment outcomes after three years (626 sites)<sup>4</sup>**

### **In pockets 4 – 6mm**

**PD reduction** of 1.94mm with endoscope as compared with traditional SRP reported in literature of 1.0mm

**Attachment gain** of 1.92mm as compared with traditional SRP reported in literature of 0.38mm

### **In pockets over 6mm**

**PD reduction** of 4.4mm with endoscope as compared with traditional SRP reported in literature of 2.18mm

**Attachment gain** 4.1mm as compared with traditional SRP reported in literature 0.97mm

1. Endoscope Visualization of the Subgingival Dental Sulcus and Tooth Root Surfaces: Stambaugh, R.V., et al, J. Periodontology, 73; 374-382, 2002.

2. Visualization of Submarginal Gingival Root Surfaces with the Dental Endoscope (abstract) Stambaugh, R.V., et al, Journal of Dental Research – Special Issue 2000;79:36-56

3. Improved CAL and PPD with Endoscope-aided Scaling and Root Planing (abstract) Stambaugh, R.V., et al Journal of Dental Research Special Issue 2003;82:532