

adha **CELL 2015**
92ND ANNUAL SESSION **JUNE 17-23*2015**
SESSION **NASHVILLE, TN**

CE Course Handout

**The Secret to Power, Precision and Prevention:
Advanced Reinforced Periodontal Scaling
Techniques**

**Thursday, June 18, 2015
9:30am-12:30pm**



American
Dental
Hygienists'
Association

Strategies for Injury Prevention to the Hands and Arms while Scaling

The following recommendations are worth consideration for implementation while practicing to help prevent pain and injury to a clinician's hands and arms and to enhance scaling efficacy with biomechanical and ergonomic principles.

- Establish a modified pen grasp where the thumb and finger oppose one another and the instrument handle is visible between the fingers
- All fingers should work together as a unit while scaling
- Use wider, lighter instruments to reduce excessive pinch force
- Always establish a neutral hand, wrist and arm position while scaling
- Orient the instrument with the tooth surface to be instrumented taking into consideration the angulation of all teeth
- Keep the instrument parallel to the long axis of the surface of the tooth being worked on. This will encourage a neutral hand, wrist and arm posture
- Utilize intraoral and extraoral fulcrums to enhance a neutral position of the hand, wrist and arm
- Avoid flexion and extension of the hand as much as possible while scaling
- Avoid sustained awkward wrist postures to prevent carpal tunnel syndrome
- Practice palm up fulcrums as often as possible and avoid palm down fulcrums that increase strain on the hand and wrist
- Establish a "built-up" fulcrum keeping fingers together as a unit while scaling
- Keep the ring finger straight, with the tip of the finger supporting the weight of the hand when using intraoral fulcrums
- Pivot on the fulcrum finger to support the hand to allow for hand repositioning
- Utilize advance reinforced fulcrums using intraoral and extraoral rests to gain access to root surfaces and to prevent hand stress and strain
- Incorporate the non-dominant hand by pressing on the instrument for more lateral pressure, power and precision
- Implement thumb-to-thumb reinforcement for more stability and precision and to engage the use of the larger muscle groups in both arms while scaling
- Consider bringing the elbow out and over the patient at times to keep wrist in alignment with the long axis of the forearm
- Keep hand neutral to prevent radial and ulnar deviation while scaling
- Utilize fulcrum pressure equal to the pressure of the instrument blade against the root surface being scaled
- Increase fulcrum pressure if slipping or lack of lateral pressure occurs
- Implement pull strokes instead of side to side rocking strokes in order to enhance instrument placement to the epithelial attachment and reduce repetitive motions
- Use sharp instruments to minimize lateral pressure and number of strokes
- Consider utilizing instruments with wider handles to reduce pinch force
- Consider using sharpen-free instruments to always have sharp instruments which will help to reduce repetitive strokes
- Make every stroke count to reduce repetitive motion injuries
- Implement intermittent rests between strokes to prevent pain and injury
- Listen to your body and take mini-breaks to avoid prolonged, static postures
- Stretch hands, arms and upper body routinely to prevent pain and injury