

Building Blocks of Periodontal Instrumentation

- Stroke
- Finger Rest
- Mirror
- Grasp
- Position

Risk Factors for Musculoskeletal Stress

- ✧ Fixed Working position
- ✧ Excessive use of small muscles
- ✧ Tight Grip
- ✧ Repetitive movement
- ✧ Positioning challenges
- ✧ Confined working space/equipment limitations

MUSCULOSKELETAL DISORDER (MSD)

Parts of the musculoskeletal system are damaged (muscles, tendons, nerves)

1. **Thoracic Outlet Syndrome**
 - a. Painful disorder of numbness, tingling or pain of fingers, hand, and/or wrist due to compression of the brachial nerve plexus and vessels between the neck and shoulder
 - b. Tilting head, hunching shoulders and continuously reaching overhead
2. **Rotator Cuff Tendinitis**
 - a. Severe pain and impaired function of shoulder joint
 - b. Holding elbow above waist level and holding the upper arm away from the body
3. **Pronator Syndrome**
 - a. Painful disorder similar to carpal tunnel to the wrist and hand cause by compression of the median nerve between the heads of the pronator teres muscle
 - b. Holding lower arm away from body
4. **Extensor Wad Strain**
 - a. Numbness, pain, and loss of strength in fingers due to injury of the extensor muscles of the thumb and fingers.
 - b. Extending the fingers independently of each other
5. **Carpal Tunnel Syndrome**
 - a. Numbness, pain and tingling in the fingers caused by compression of the median nerve in the carpal tunnel of the wrist.
 - b. Nerve fibers of median nerve originate in spinal cord in neck; therefore poor posture can cause CTS. Other causes include repeat bending of the hands and continuously pinch-gripping and instrument without muscle rest.
6. **Ulnar Nerve Entrapment**
 - a. Numbness, tingling, loss of strength of the lower arm and wrist caused by compression of the ulnar nerve of the arm as it passes through the wrist
 - b. Bending hand up, down or side to side at the wrist and holding the little fingers a span away from the hand.
7. **Tenosynovitis**
 - a. Pain on the side of the wrist and at the base of the thumb. Sometimes movement of the wrist yields a crackling noise.
 - b. Hand twisting, forceful gripping, bending the hand back or to the side.
8. **Tendinitis**
 - a. Pain in the wrist, especially on the outer edges of the hand, rather than the center of the wrist.
 - b. Repeatedly extending the hand up or down at the wrist.

GOOD

- i. Head tilt of 0-20 degrees
- ii. Ean forward at hips from 0=20 degrees
- iii. Torso in line with long axis of the body
- iv. Shoulders in horizontal line
- v. Weight evenly balanced when seated

- vi. Upper arms hang parallel to long axis of torso
- vii. Elbows at waist level held slightly away from body
- viii. Forearm held parallel to the floor
- ix. Forearm raised or lowered by pivoting at the elbow joint
- x. Little finger side of palm slightly lower than thumb side
- xi. Wrist aligned with forearm

PATIENT POSITIONING

- Feet should be even with or slightly higher than the tip of his nose
- Chair back should be parallel to the floor for Maxillary
- Chair back should be slightly raised above parallel at 15-20 degrees for Mandibular
- Top of head should be even with the upper edge of the headrest Maxillary
- Adjust headrest to chin-down for Mandibular
- Adjust headrest to chin-up position for Maxillary
- Semi-supine position for mandibular treatment
- Supine position for maxillary treatment

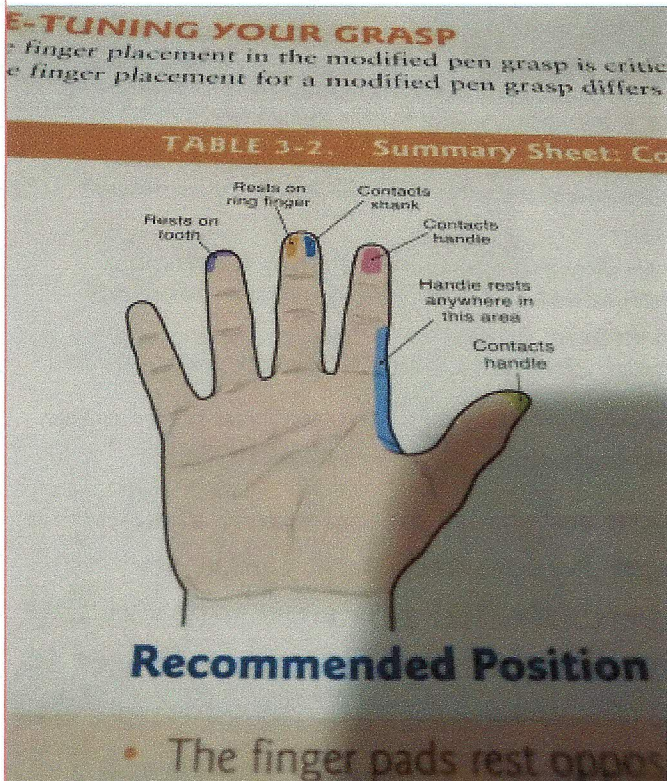
MODULE 2- STUDY CLOCK POSITIONS FROM POWERPOINT

Nield Module 3

Monday, September 22, 2014 10:57 PM

Pg.69-86 Periodontal Instrumentation

- Handle
- Shank
- Working-end



Placements

INDEX AND THUMB

-On instrument of handle to hold the instrument

MIDDLE FINGER

-Lightly on the shank to guide working end and feel vibrations

RING FINGER

-On oral structure, advanced ahead of other fingers. Stabilizes and supports for control and strength

LITTLE FINGER

-Near ring finger, held in natural relaxed manner. Has no grasp function

JOINT HYPERMOBILITY= "double jointed"

IDEAL GRASP

