

UNIVERSITY OF WASHINGTON SEATTLE



**CLINICAL IMPLICATIONS --
UNIVERSITY OF WASHINGTON
POST-RETENTION
ALIGNMENT STUDIES**

ROBERT M. LITTLE, DDS, MSD, PhD

**PROFESSOR EMERITUS
UNIVERSITY OF WASHINGTON**

SUMMARY



LESSON # 1:
NATURE & EXTENT
OF POST-RETENTION CHANGE
ARE UNKNOWN

CLINICAL IMPLICATION:
PLAN ON LIFETIME
PERMANENT RETENTION



LESSON # 2a:

ARCH LENGTH & ARCH WIDTH
TYPICALLY CONSTRICT POST-RETENTION

CLINICAL IMPLICATION:

1. AVOID INCREASING ARCH LENGTH AND WIDTH DURING TREATMENT
2. PLAN ON LIFETIME PERMANENT RETENTION



LESSON # 2b:

ARCH LENGTH & ARCH WIDTH
TYPICALLY CONSTRICT POST-RETENTION,
BUT LESS SO FOR A FEW LUCKY ONES

CLINICAL IMPLICATION:

EXPECT MINIMAL RELAPSE IN CASES THAT
HAVE ADEQUATE OR EXCESS PRETREATMENT

ARCH LENGTH



LESSON # 3:

EARLY STABILITY MAY BE A MIRAGE --
FOR MOST, IN A FEW YEARS THE
HONEYMOON WILL BE OVER

CLINICAL IMPLICATION:

LIFETIME PERMANENT RETENTION
IS THE ONLY WAY TO ENSURE
ALIGNMENT STABILITY



LESSON # 4

ROTATIONS ARE UNPREDICTABLE

CLINICAL IMPLICATIONS:

PLAY IT SAFE

BOND EACH INCISOR TO THE MANDIBULAR FIXED RETAINER

KEEP THE FIXED RETAINER FOR LIFE

UTILIZE **SUPRACRESTAL FIBEROTOMY** FOR INCISORS THAT WERE ROTATED PRE-TREATMENT

LESSON # 5

LABIAL AND LINGUAL RELAPSE
ARE UNPREDICTABLE

CLINICAL IMPLICATION:

MANDIBULAR ANTERIOR STABILITY
IS A RARE OCCURRENCE

LIFETIME PERMANENT RETENTION IS
THE ONLY RELIABLE METHOD TO ENSURE
LONG-TERM SUCCESS



LESSON # 6

EARLY TREATMENT CAN PAY OFF



CLINICAL IMPLICATION:



MAINTAIN LEEWAY SPACE
IN CASES WHERE ARCH LENGTH
IS FAVORABLE

(NANCE WAS RIGHT !)

LESSON # 7

SERIAL EXTRACTION YIELDS NO
BETTER POST-RETENTION RESULTS
THAN LATER PREMOLAR EXTRACTION

CLINICAL IMPLICATION:

PERMANENT RETENTION
EVEN IF SERIAL EXT DRIFT
STAGE IS FAVORABLE



LESSON # 8

ARCH DEVELOPMENT IS UNSTABLE
(THE MOST SEVERE RELAPSE
THAT WE HAVE STUDIED)

CLINICAL IMPLICATION:

PERMANENT RETENTION IS MANDATORY

GINGIVAL RECESSION AND DEHISCENCE
ARE POSSIBLE SEQUELLA

LESSON # 9

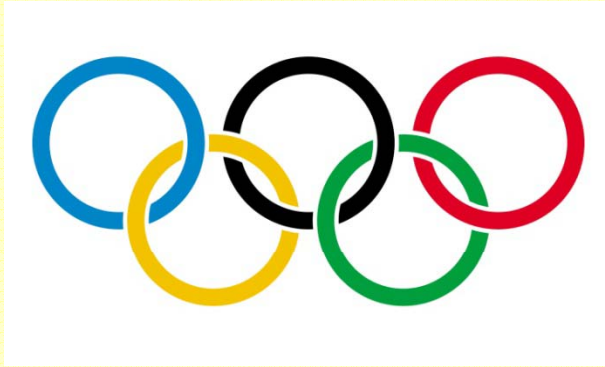
- A. RETENTION POSTPONES RELAPSE
- B. RELAPSE IS PROGRESSIVE THROUGHOUT LIFE
- C. RATE OF RELAPSE SLOWS WITH AGE

CLINICAL IMPLICATION:

LIFETIME PERMANENT
RETENTION TO ENSURE
LONG-TERM SUCCESS



LESSON # 10



QUALITY MATTERS



CLINICAL IMPLICATION:

STRIVE FOR THE HIGHEST QUALITY RESULT

MAINTAIN THE CORRECTION WITH
LIFETIME RETENTION

