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 CONSTRICHT 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 SEQUELAE
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