



**Mandibular Distal Force System Assisted
With Miniscrew Anchorage;
A Clinical Three Dimensional Evaluation**

**A Thesis
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Dedication

To my beloved family for their endless help
and support

To my lovely husband for his care,
encouragement and patience

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List of Abbreviations

Abbreviation	Full Term
TADs	Temporary anchorage devices
CT	Computed tomography
CBCT	Cone beam computed tomography
3D	Three-dimensional
Ti-6Al-4V	Titanium alloy
C- TADS	Biocreative temporary anchorage devices
SAS	Skeletal anchorage system
MPAS	Mini-Plate Anchoring Screws
SLA	Sandblasting, large-grit and acid-etching treated
NiTi	Nickel-titanium
2D	Two-dimensional
TMJ	Temporomandibular joint
DICOM	Digital imaging and communications in medicine
DPMD	Direct push mandibular distalizer
Go(Rt and Lt)	Gonion (right and left)
MLC	Mandibular lingual cortex
Me	Menton
LR6 C	Lower right first molar Centroid
LR6 F	Lower right first molar Furcation
LR6 MBC	Lower right first molar Mesio Buccal cusp
LR6 MLC	Lower right first molar Mesiolingual cusp
LR6 DLC	Lower right first molar Distolingual cusp
LR6 MRA	Lower right first molar Mesial root apex
LL6 C	Lower left first molar Centroid

LL6 F	Lower left first molar Furcation
LL6 MBC	Lower left first molar Mesiobuccal cusp
LL6 MLC	Lower left first molar Mesiolingual cusp
LL6 DLC	Lower left first molar Distolingual cusp
LL6 MRA	Lower left first molar Mesial root apex
Go Rt-Go Lt	Gonion right-Gonion left line
Me-Go Rt	Menton-Gonion right line
Me-Go Lt	Mentin-Gonion left line
MP	Mandibular plane
MMP	Mid-mandibular plane
MLC Rt plane	Mandibular lingual cortex right plane
MLC Lt plane	Mandibular lingual cortex left plane
LR6 LA	Lower right first molar Long axis line
LR6 CL	Lower right first molar Cuspal line
LL6 LA	Lower left first molar Long axis line
LL6 CL	Lower left first molar Cuspal line
LR6 CD	Lower right first molar Centroid distalization
LR6 FD	Lower right first molar Furcation distalization
LR6 MBCD	Lower right first molar Mesiobuccal cusp distalization
LR6 MLCD	Lower right first molar Mesiolingual cusp distalization
LR6 MRD	Lower right first molar Mesial root distalization
LL6 CD	Lower left first molar Centroid distalization
LL6 FD	Lower left first molar Furcation distalization
LL6 MBCD	Lower left first molar Mesiobuccal cusp distalization
LL6 MLCD	Lower left first molar Mesiolingual cusp distalization
LL6 MRD	Lower left first molar Mesial root distalization

LR6 MDT	Lower right first molar Mesiodistal tipping
LR6 BLT	Lower right first molar Buccolingual tipping
LR6 R	Lower right first molar Rotation
LL6 MDT	Lower left first molar Mesiodistal tipping
LL6 BLT	Lower left first molar Buccolingual tipping
LL6 R	Lower left first molar Rotation
SD	Standard clicking
CI	Confidence Interval
ICC	Intra-Class Correlation Coefficient
CD	Centroid distalization
FD	Furcation distalization
MBCD	Mesiobuccal cusp distalization
MLCD	Mesiolingual cusp distalization
MRD	Mesial root apex distalization
MDT	Mesiodistal tipping
BLT	BuccoLingual tipping
R	Rotation

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