Orthodontic management in localized aggressive periodontitis: a case report

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Introduction
Interdisciplinary approach of orthodontist and periodontist is required in orthodontic management of cases with compromised periodontium.1 This is especially true for adult patients and also young patients who suffer from advanced periodontitis.2,3

Case Description
Case History:
• 21 year old female
• Chief complain of gap between upper front teeth and extruded left upper front tooth
• No significant medical history
Clinical examination:
• Midline diastema
• Extrusion of 21
• Grade I mobility – 21, 36, 46
• Gingival swelling
• Small sized maxillary laterals

Pretreatment records

Periodontal Therapy
➢ Phase I therapy- non surgical (antibiotic + mechanical debridement)
➢ Flap surgery in all posterior segments

Before periodontal therapy
1 yr follow up after periodontal therapy

Cephalometric values:

Variable | Value
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SN-A | 80°
Ph-A | 1mm
Cond-A | 76mm
SNB | 78.5°
Pr-Pog | -1mm
Cond-Gn | 106mm
Wits | -2mm
ANB | 1.5°
Max-Mand | 29mm
NA/Ng | 4°
FMA | 27°
SN-GoGn | 34.8°
PO-GoS | 6.1°
S-Gn-Y-Me | 63mm
ANS-Me | 63mm
S line to U lip | 3mm
S line to L lip | 6mm
E line to U lip | 1mm
E line to L lip | 4mm
H angle | 48°

Treatment plan
➢ Bonding in upper arch only
➢ Closure of midline diastema
➢ Intrusion of 21
➢ Build up the maxillary laterals to close the space

Treatment progress
➢ 0.022” Roth brackets,
➢ Bondable buccal tubes
➢ 0.014” NiTi

References