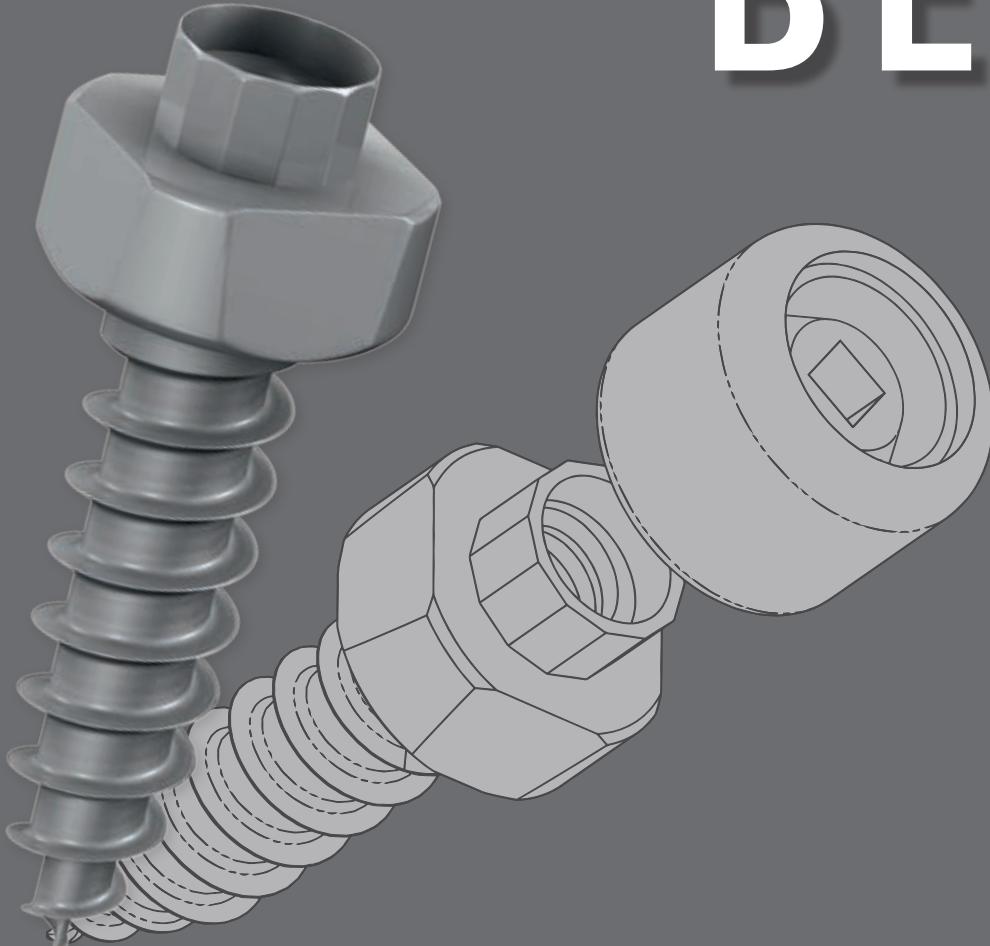


Handout – Manuel d'information

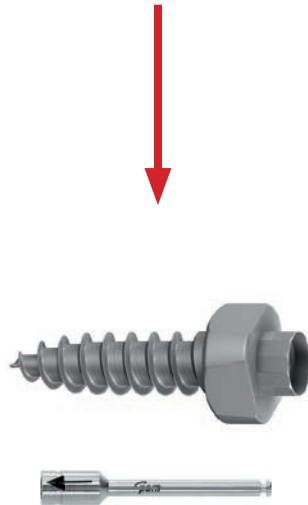
BENEFIT[®]- SYSTEM



Prof. Dr. Benedict Wilmes
Düsseldorf, Germany



BENEfit® Mini-implant
BENEfit® Mini-implant



Abutments
Ecrou de fixation pour Mini-Implant



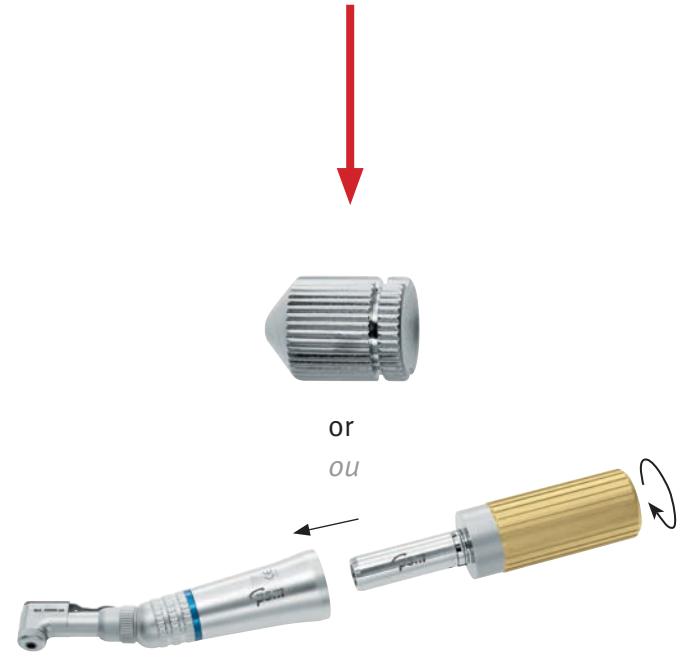
or
ou

or
ou

or
ou



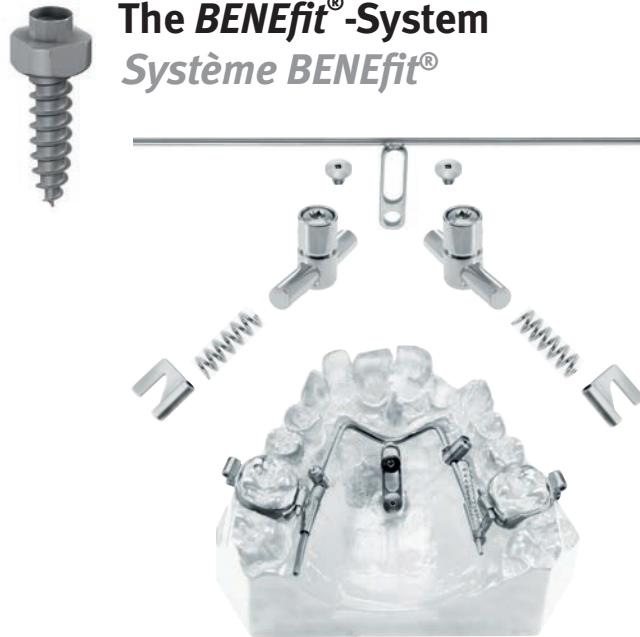
Screwdrivers
Tournevis



or
ou

Coupling with the appliance
En combinaison avec le dispositif





The **BENEFit®-System** Système BENEFit®

The **BENEslider**

The most classical indication for skeletal anchorage using Mini-Implants with abutments is molar-distalization and/ mesialization in the maxilla. By means of the so called "**BENEslider**" the molars can be bodily distalized and/or mesialized using the Mesialslider. In many cases, tooth extraction or dental implants can be avoided.

To couple two **BENEFit®** Mini-Implants, a **BENEplate** with welded wire is connected to the Implants and the **BENEslider** parts (mobilizer, springs, **BENETube**) are placed on the wire. Active force is applied by springs (240g or 500g) and activated with the Mobilizer.

Le système **BENEslider**

L'indication usuelle d'un ancrage squelettique à l'aide de mini-implants est la distalisation ou mésialisation au maxillaire. Grâce au système **BENEslider** les molaires peuvent être mésialées (Mesialslider) ou distalées (**BENEslider**). Dans la plupart des cas cela permettra d'éviter les extractions.

Pour coupler deux mini-implants **BENEFit®**, une plaque **BENEplate** sur arc est connectée aux mini-implants et agrémentée des accessoires **BENEslider** (Ecrous mobiles d'activation, ressorts, **BENETube**) qui sont fixés sur l'arc. La force est activée par le biais des ressorts (240 gr. ou 500 gr.) et des écrous mobiles d'activation.

The **BENEplate-System** Système **BENEplate**



LITERATURE – PUBLICATIONS:

Wilmes B., Drescher D.
Benefit – A mini-implant system with interchangeable abutments.
J Clin Orthod 2008; 42:574-580

Wilmes B., Drescher D., Nienkemper M.
Beneplate – A miniplate system for improved stability of skeletal anchorage. J Clin Orthod 2009; 43:494-501

Adaptation

Adaptation



intraorally
En intra-oral



on the plaster model
Sur moulage de travail en laboratoire



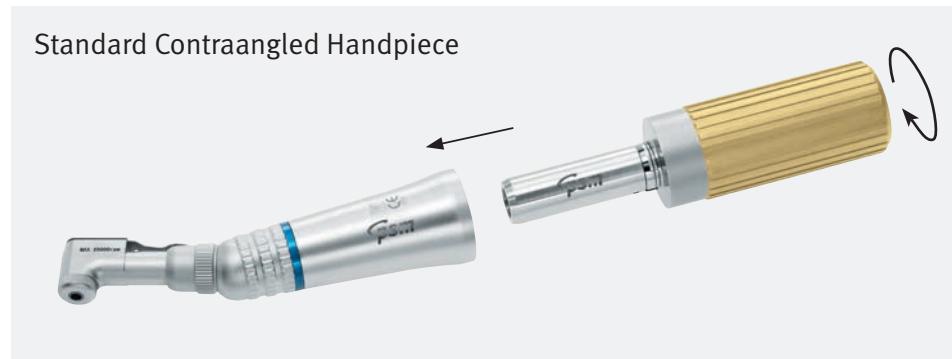
Anaesthesia
anesthésie



Pre-drilling through cortex (adult)
Pré-forage du cortex (adultes)



Implant Insertion
Insertion de l'implant



The manually turned unit is connected to your existing contra-angled handpiece (blue 1:1) that enables its use with an angled screwdriver.

Le manche de vissage manuel pour contre-angle est connecté directement à votre instrumentation existante (Bleu 1:1).

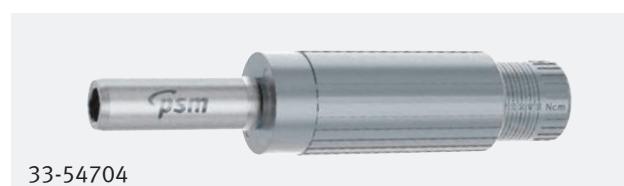


Manually turned PSM unit
Manchon PSM pour contre-angle (Universel)



Manually turned unit for contra-angled handpieces

Manche de vissage manuel pour contre-angle

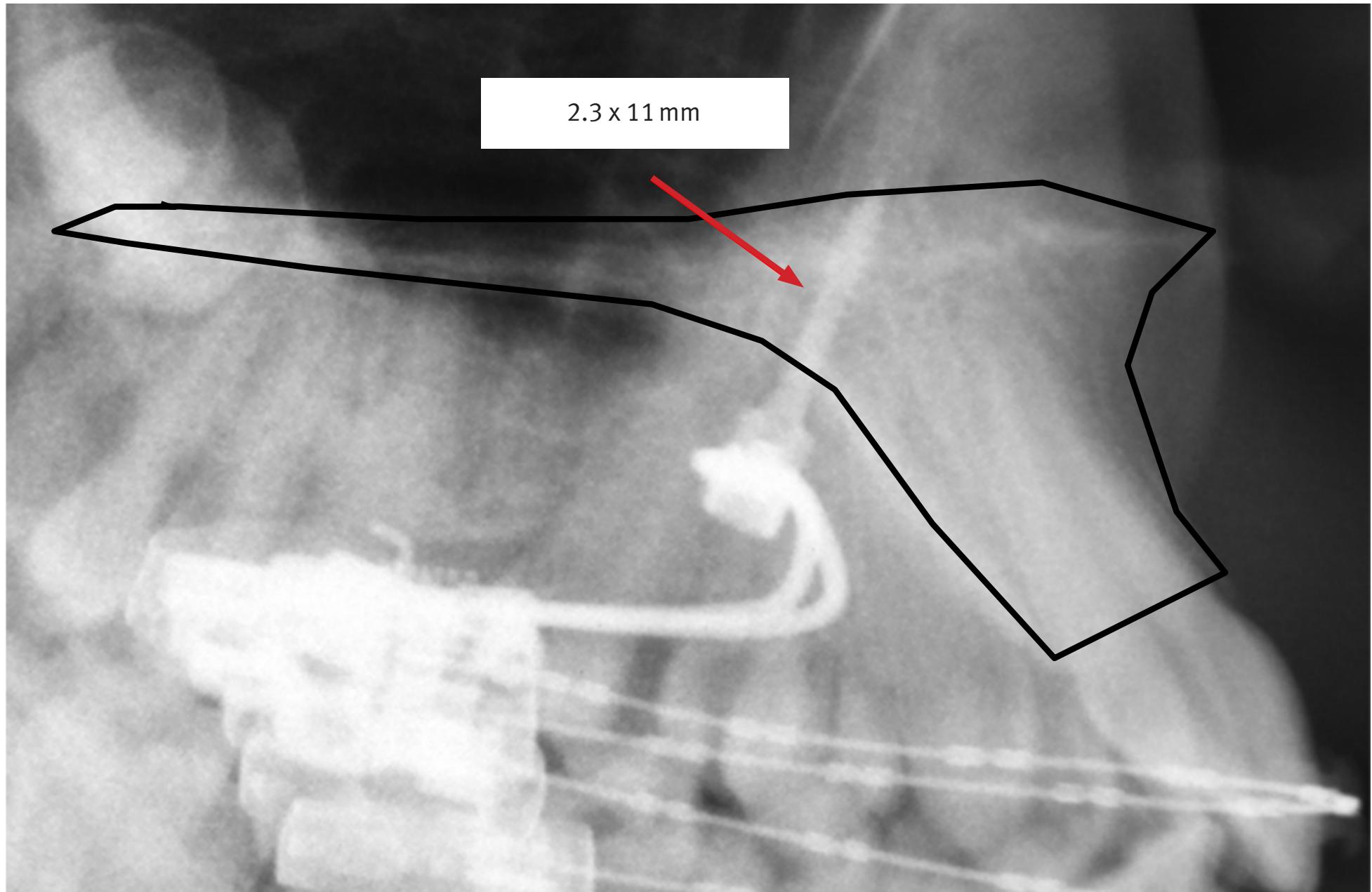


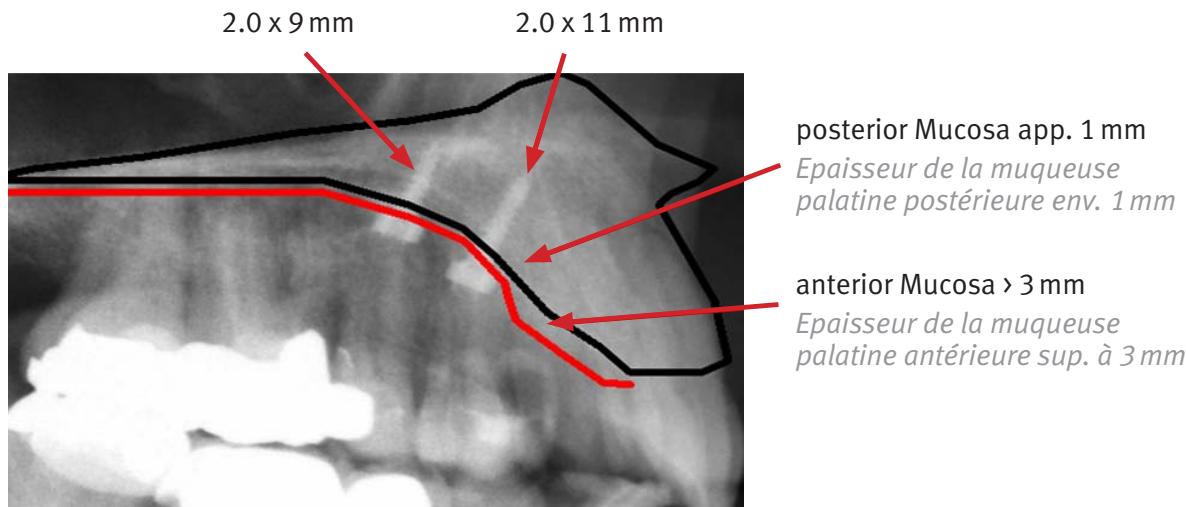
Manually turned unit mod. to Pauls, with adjustable torque from 0 – 40 Ncm

Manche de vissage manuel modèle Pauls, avec ajustage du couple de 0 à 40 Ncm

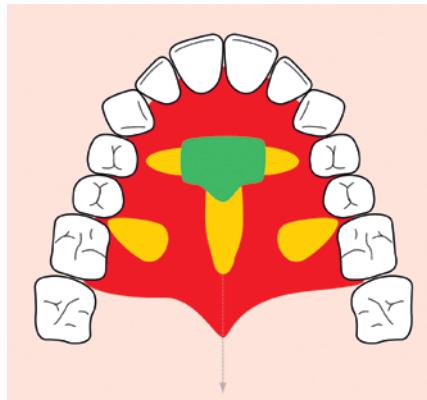


Orthodontist could / should insert
Suggestion d'insertion pour le praticien





Best insertion area
Site d'insertion idéal



3rd palatal rugae
3ème crête palatine

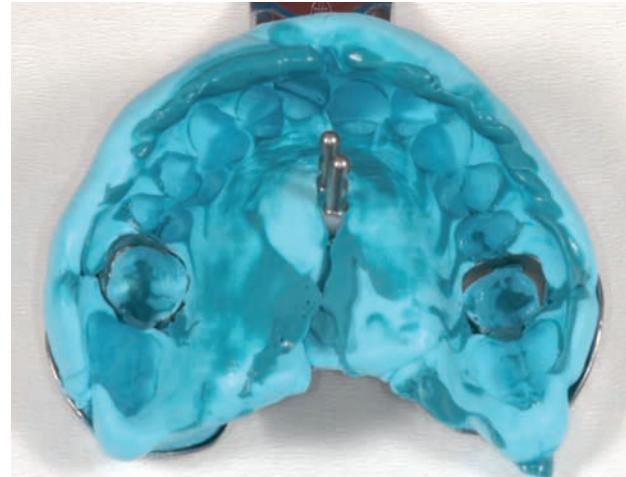
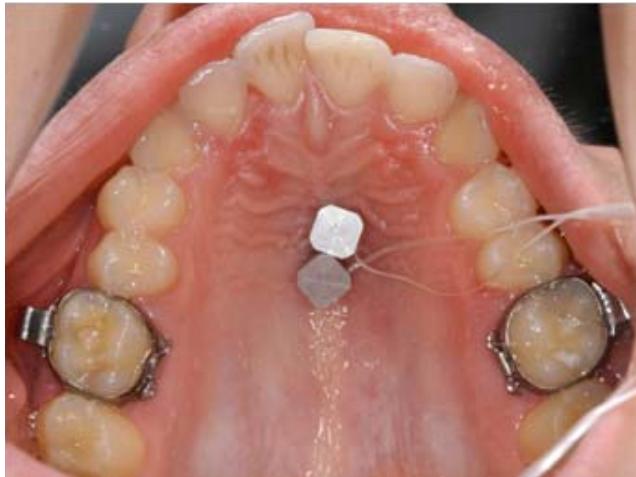


Ideal position of Benefit screws in 2nd and 3rd palatal rugae.

Placement du mini implant antérieur sur le plan transversal des secondes papilles palatines
Placement du mini implant postérieur sur le plan transversal des troisièmes papilles palatines

LITERATURE – PUBLICATIONS:

Ludwig B, Glasl T, Bowman J, Wilmes B, Kinzinger G, Lisson G. Anatomical Guidelines for Miniscrew Insertion: Palatal Sites. *J Clin Orthod.* 2011;45(8):433-441



(33-54410)

Impression cap

Tête pour prise d'impression



(33-54425)

Laboratory analog

Implant de transfert pour travaux sur moules





Molar distalization

Distalisation Molaire

BENEslider
BENEslider

Pendulum B
Pendulum B



Molar mesialization

Mesialisation Molaire

Mesialslider
Mesialslider

T-Bow
T-Bow



RPE (and facemask) Hybrid-Hyrax
RPE (avec masque facial) Hyrax Hybride

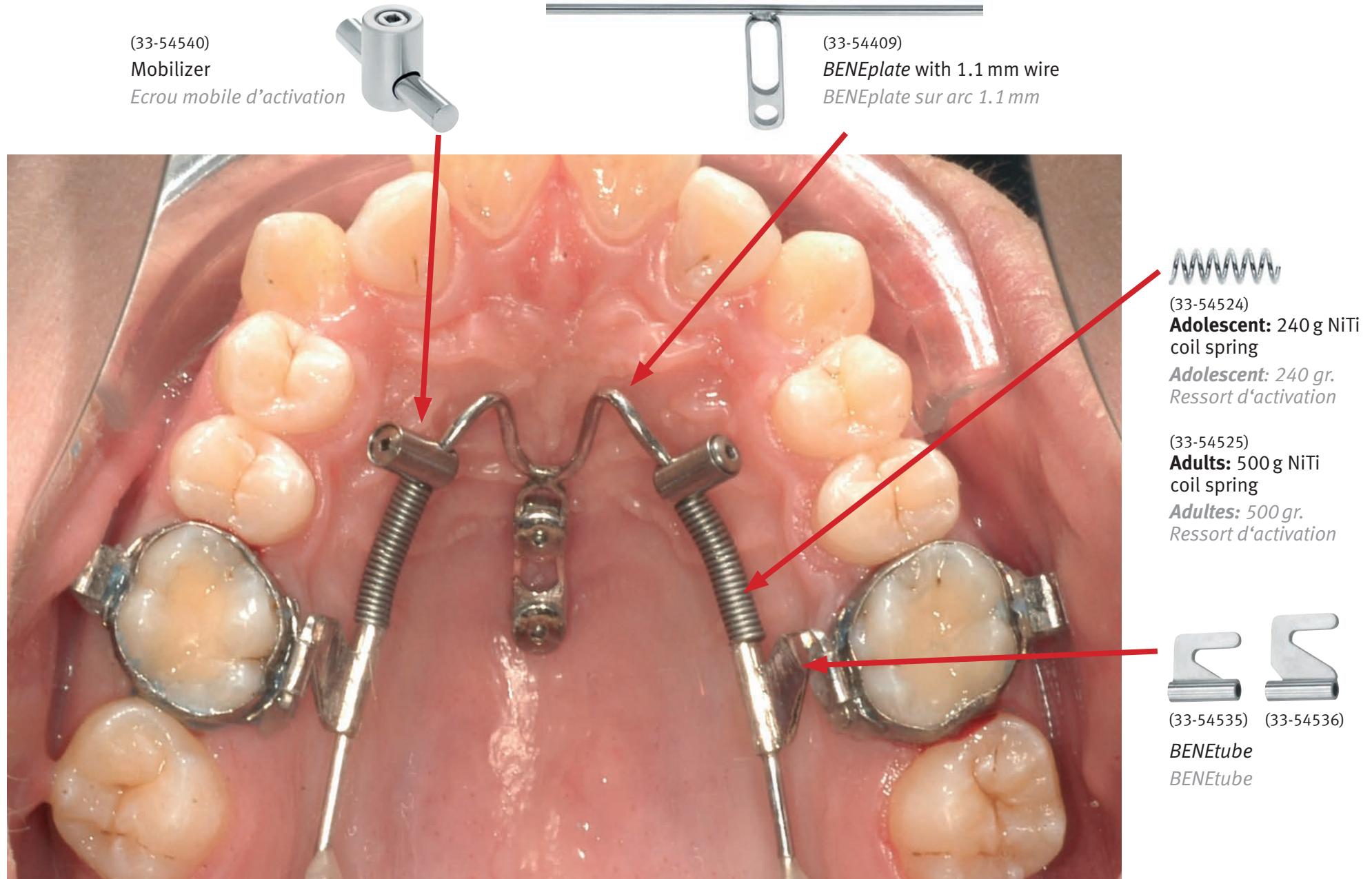
Alignment of retained teeth
Implants dentaires temporaires



Temporary pontics
Canines incluses- dents ankylosées

Molar uprighting
Redressement des axes Molaires





BENEplate with 1.1 mm stainless steel wire

BENEplate sur arc acier inox 1.1 mm



5,5 months later
Après 5,5 mois

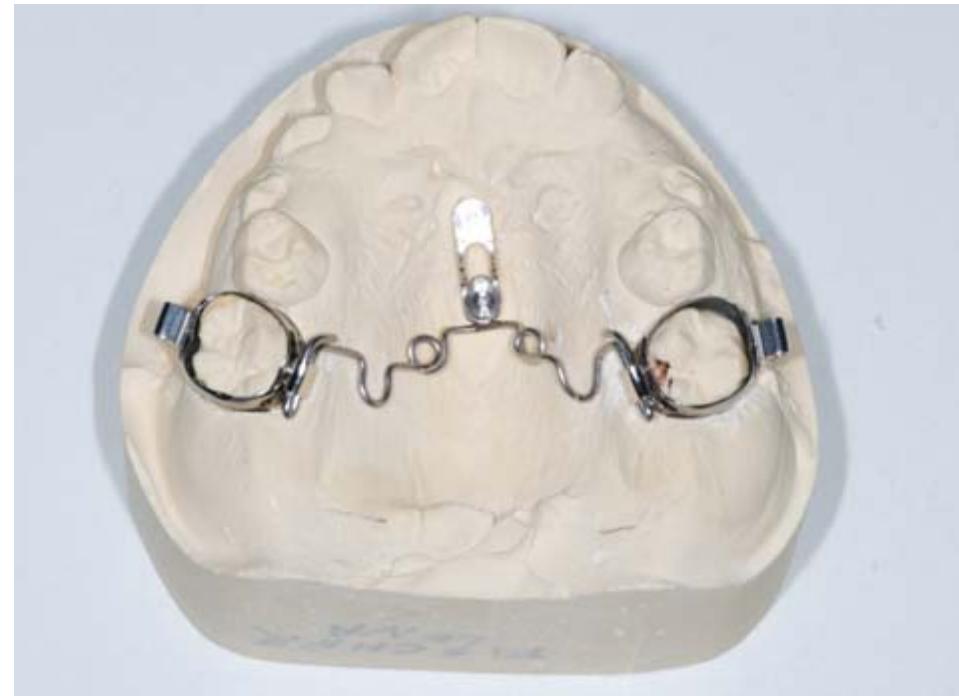
LITERATURE – PUBLICATIONS:

- Wilmes B, Nienkemper M, Ludwig B, Kau CH, Pauls A, Drescher D. Esthetic Class II Treatment with the Beneslider and Aligners. JCO 2012;46:390-8
Wilmes B, Drescher D., Application and effectiveness of the Beneslider. A device to move molars distally. World J Orthod 2010;11:331–340



BENEplate with 0.8 mm stainless steel wire (33-54428)
or TMA (33-54420)

BENEplate sur arc acier inox 0.8 mm (33-54428)
ou TMA (33-54420)



BENEplate with 0.8 mm stainless steel wire (33-54428)

or TMA (33-54420)

BENEplate sur arc acier inox 0.8 mm (33-54428)

ou TMA (33-54420)



Treatment Start

Début de traitement



4 months later

Après 4 mois



- › Total treatment time: 12 months
- 6 months Pendulum
- 6 months MB

Patient traité en 12 mois:

- 6 mois par le système Pendulum B
- 6 mois par multi-attaches

Pendulum B

Système Pendulum B

16

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany

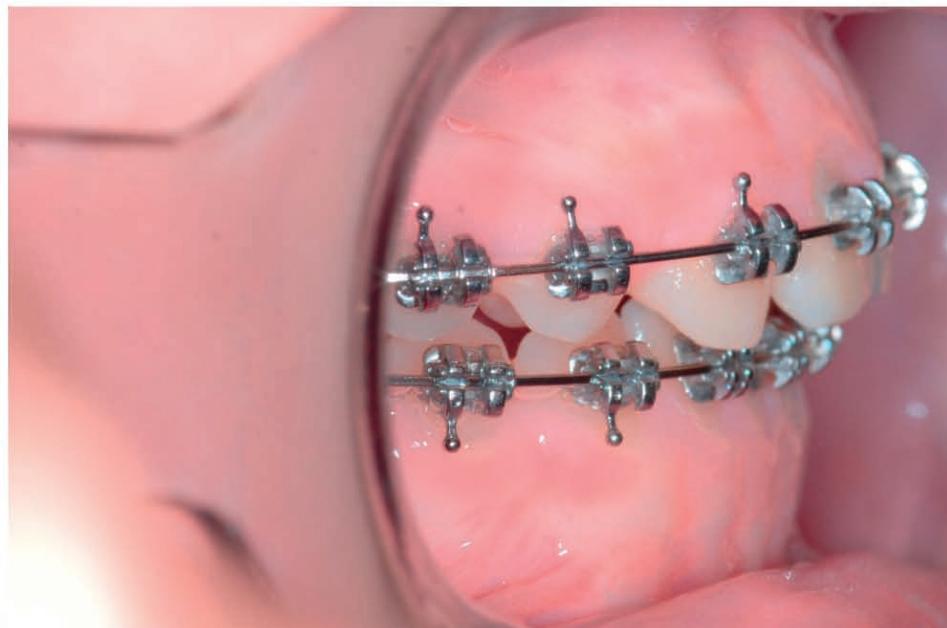
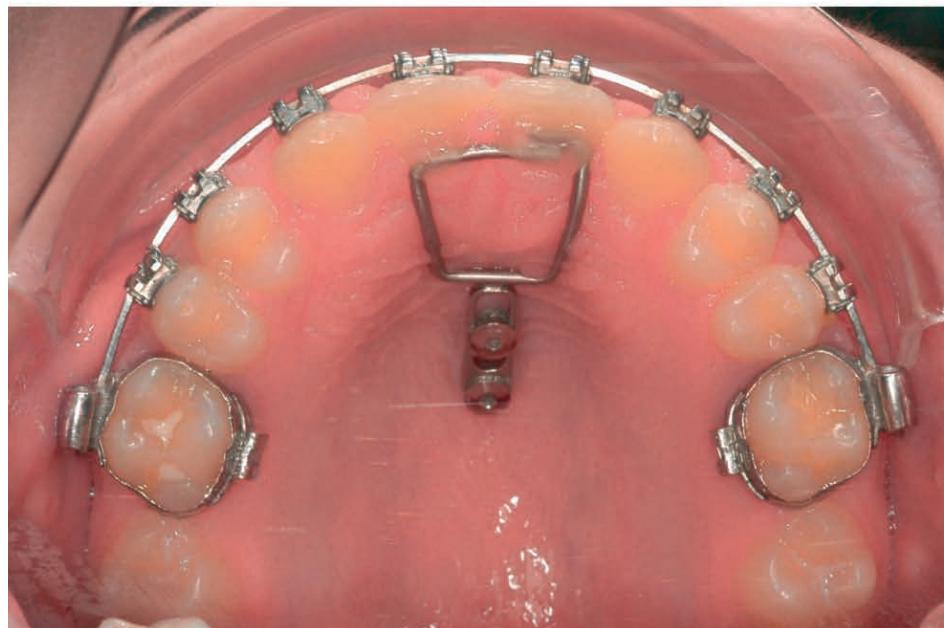
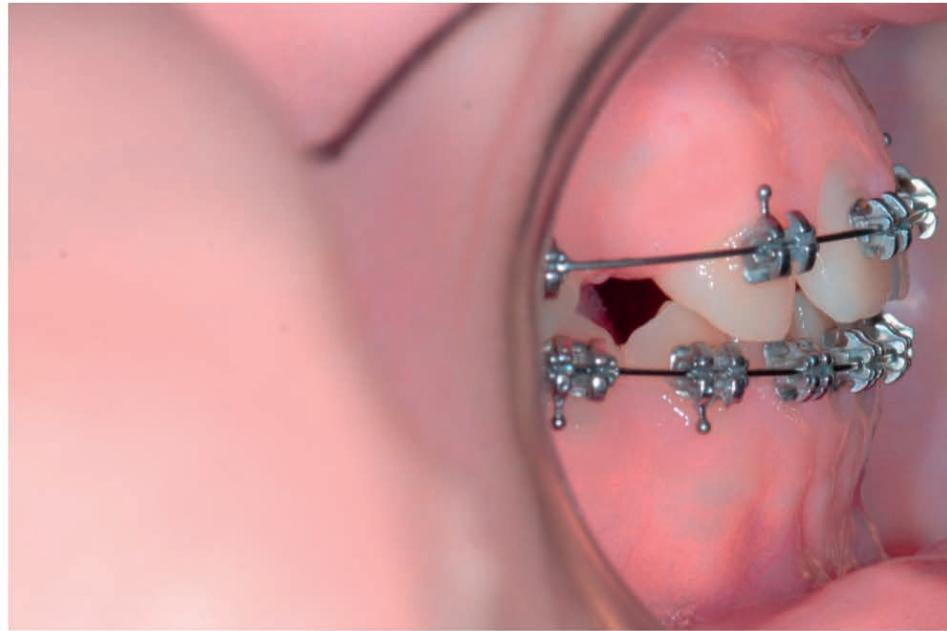
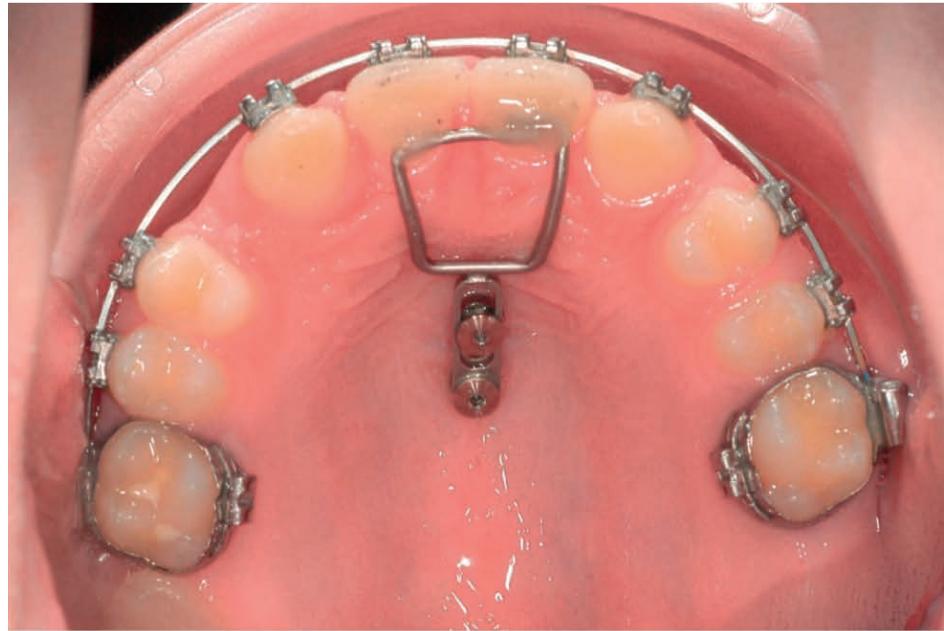


Anterior anchorage, T-bow

Système T-Bow: Anchrage antérieur

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany

17



BENEplate for mesialization
BENEplate système de mésialisation



(33-54541)
Mobilizer with hook
Ecrou d'activation mobile



(33-54539)
Mesialtube
Tube mesial



Niti spring
Ressort d'activation en nickel titane



LITERATURE – PUBLICATIONS:

- Wilmes B, Nienkemper M., Drescher D. A miniplate system for improved stability of skeletal anchorage. *J Clin Orthod* 2009; 43:494-501
Wilmes B, Nienkemper M, Nanda R, Lübbertink G, Drescher D. Palatally anchored maxillary molar mesialization using the Mesialslider. *J Clin Orthod* 2013;47:172-79

Mesial-Distal-Slider

Système Distal-Mesial Slider

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany

19

7 months later

Après 7 mois d'activation



Molar uprighting

20

Système de redressement d'axes des Molaires

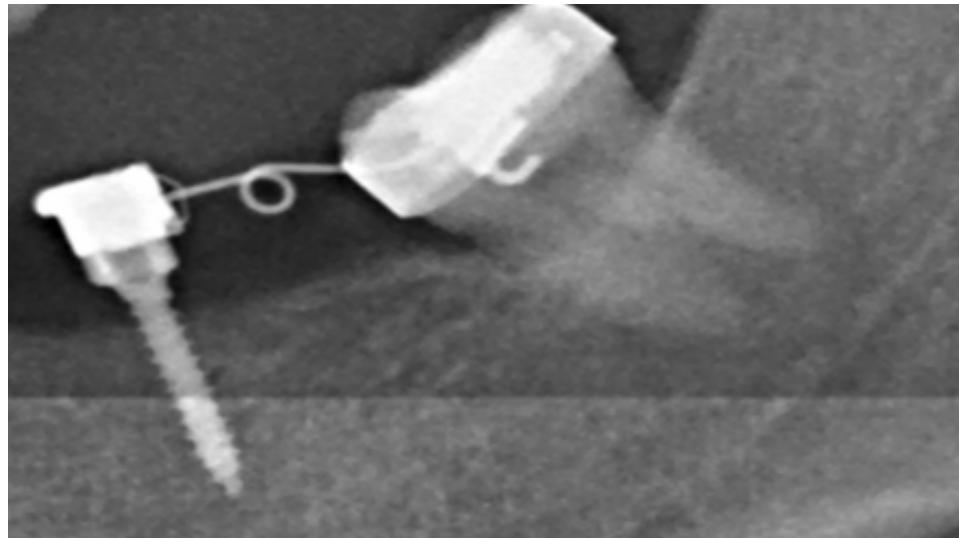
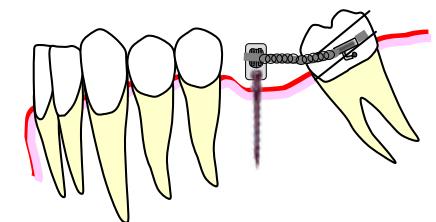
Prof. Dr. Benedict Wilmes, Düsseldorf, Germany



33-54450

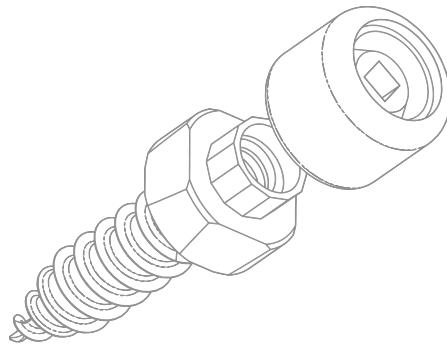


33-54452



LITERATURE – PUBLICATIONS:

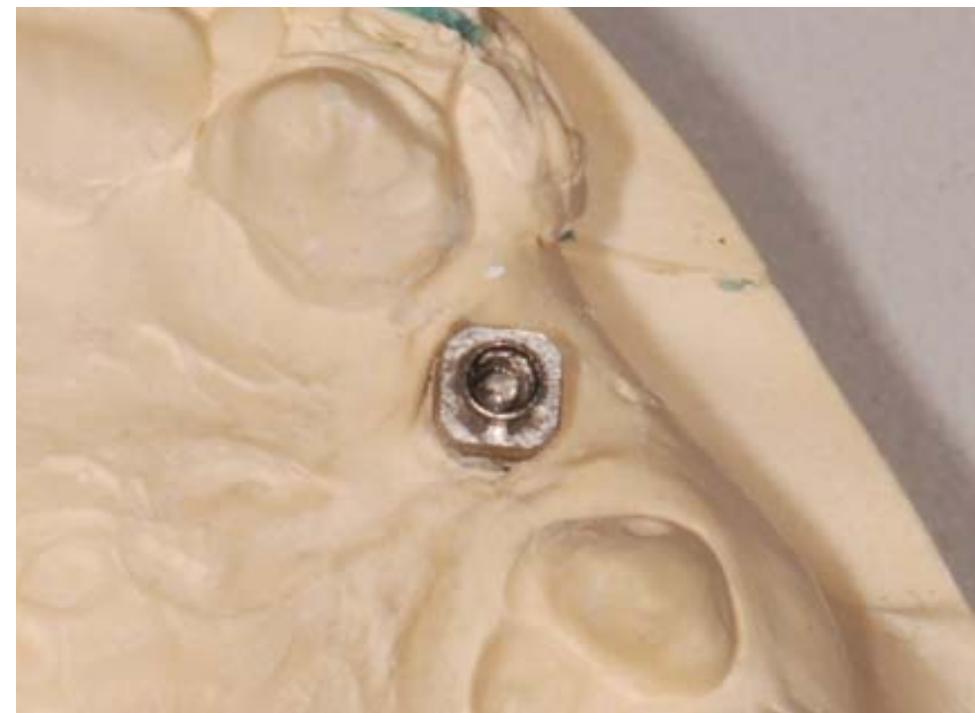
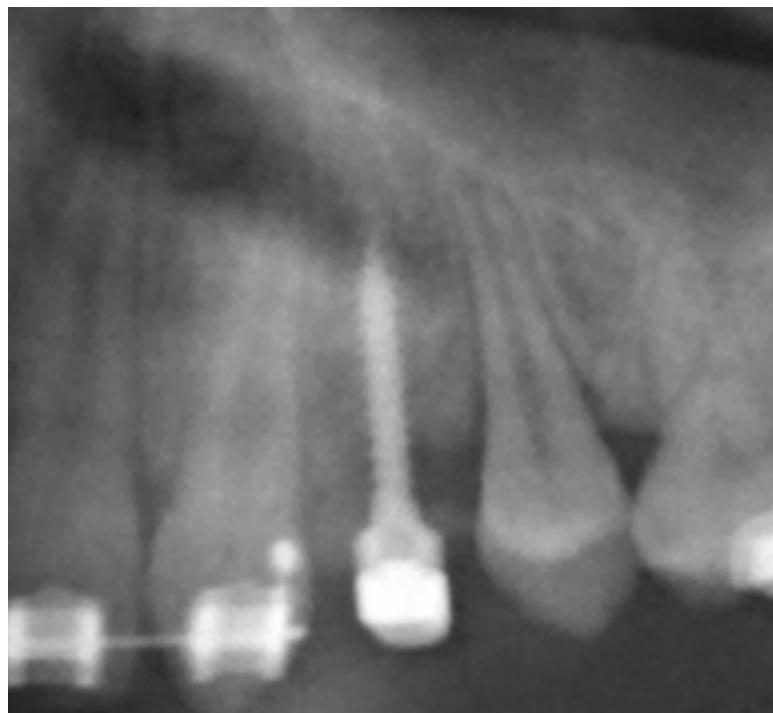
Nienkemper M, Wilmes B, Pauls A, Drescher D. Preprosthetic molar uprighting using skeletal anchorage. J Clin Orthod 2013, 47:433-7



(33-54430)
Abutment Standard
Ecrou de fixation standard



or
(33-54466)
Abutment Peek
tête d'écrou pour implant temporaire



Temporary pontic

22

Système d'implant dentaire temporaire

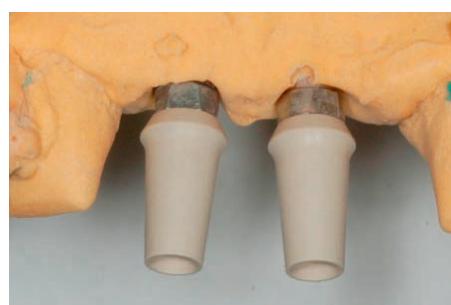
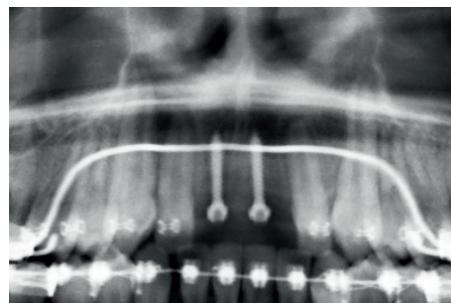
Prof. Dr. Benedict Wilmes, Düsseldorf, Germany



(33-54466)

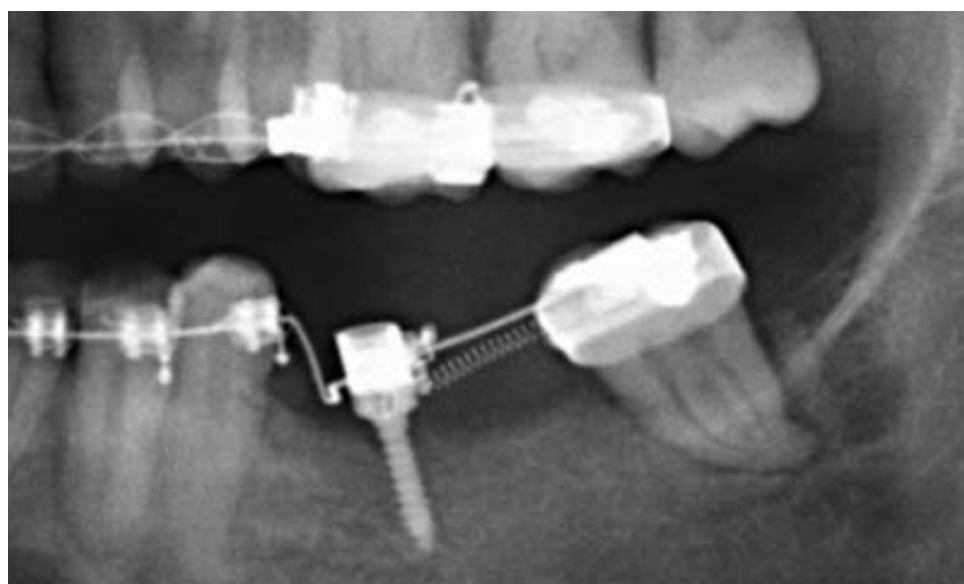
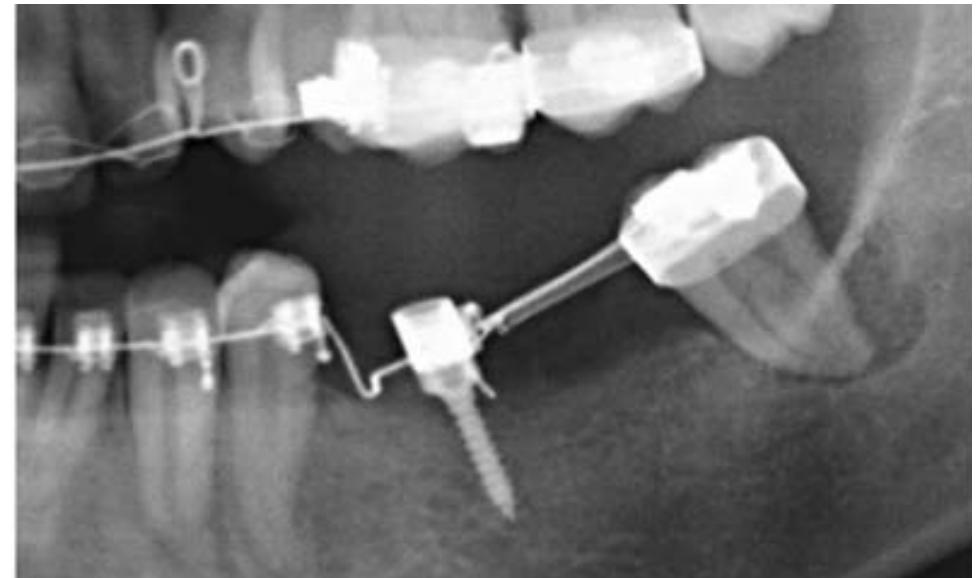
BENEFit Peek Abutment, 1 ea. incl. 1 fixation screw

Système **BENEFit**: Embout pour implant temporaire, 1 pièce avec vis de fixation



“Bridge technique”

Méthode dite du “Bridge Technique”



Bracket-Abutment TMA-Wire 16/22"

Ecrou de fixation pour mini-implant à double bracket. (reçoit des arcs en TMA 16x22)



LITERATURE – PUBLICATIONS:

Nienkemper M, Wilmes B, Ludwig B, Lübbertink G, Drescher D. Extrusion of impacted teeth using mini-implant-borne mechanics. J Clin Orthod. 2012;46: 150-155

Molar intrusion

Système pour l'intrusion molaire

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany

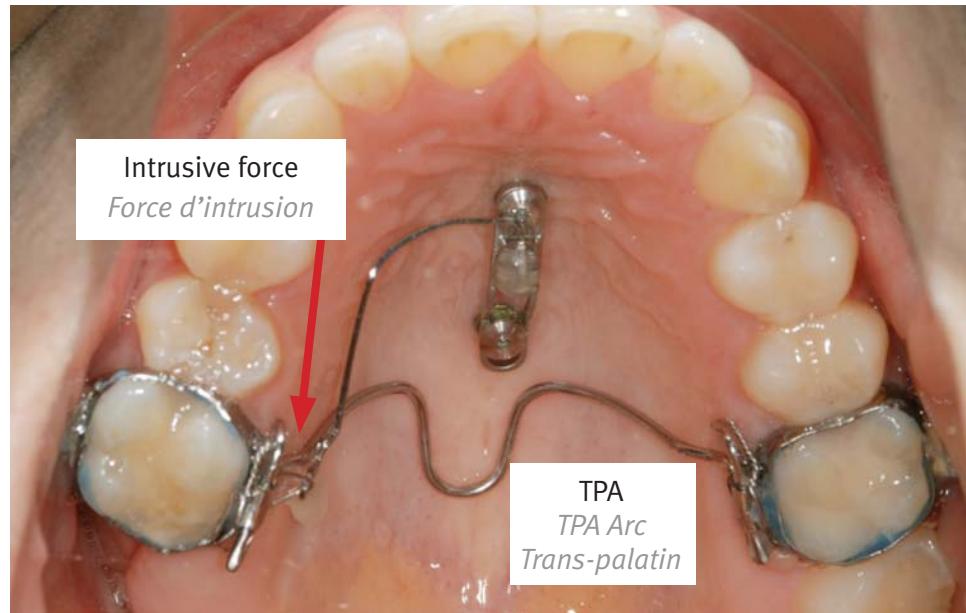
25



(95-13012)

Model Mouse Trap Intrusion

Modèle de présentation du système "Mouse trap"



LITERATURE – PUBLICATIONS:

Wilmes B, Nienkemper M, Ludwig B, Nanda R, Drescher D. Upper-Molar Intrusion Using Anterior Palatal Anchorage and the Mousetrap Appliance. J Clin Orthod 2013;47:314-20

Peridontal distraction of ankylosed teeth

26

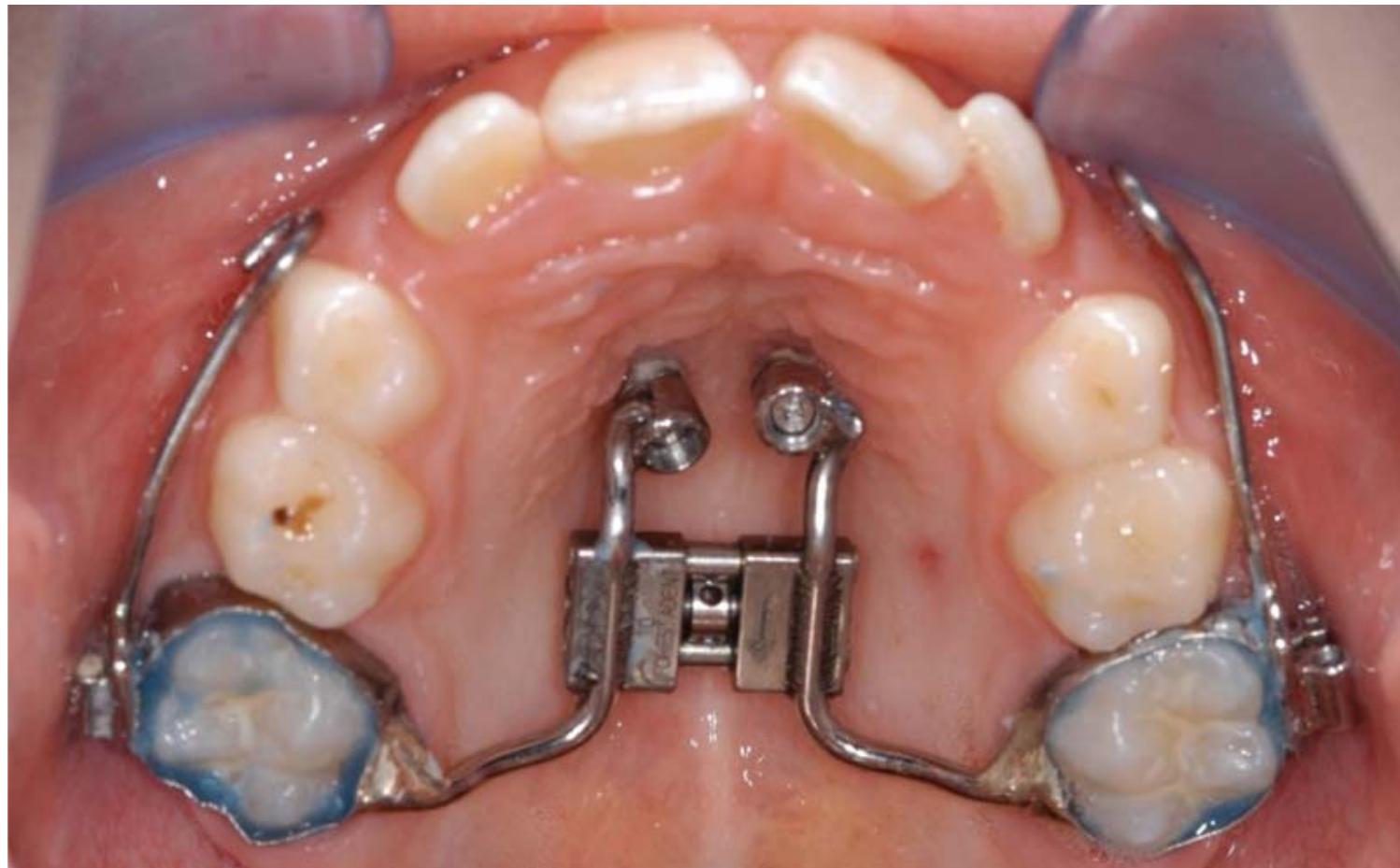
Distraction des dents ankylosées

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany



LITERATURE – PUBLICATIONS:

Wilmes B., Drescher D., Vertical Periodontal Ligament Distraction – a New Method for Aligning Ankylosed and displaced Canines.
J Orofac Orthop. 2009; 70:213-223



BENEFit 2.0 Screw
Mini Implant BENEFit 2.0



2x
(33-54430)

or
ou



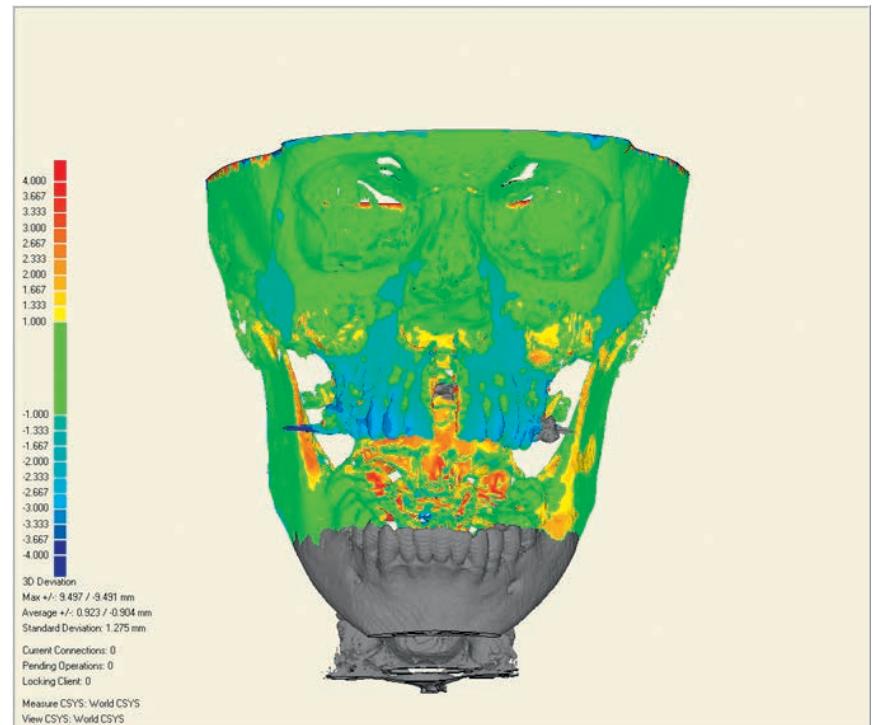
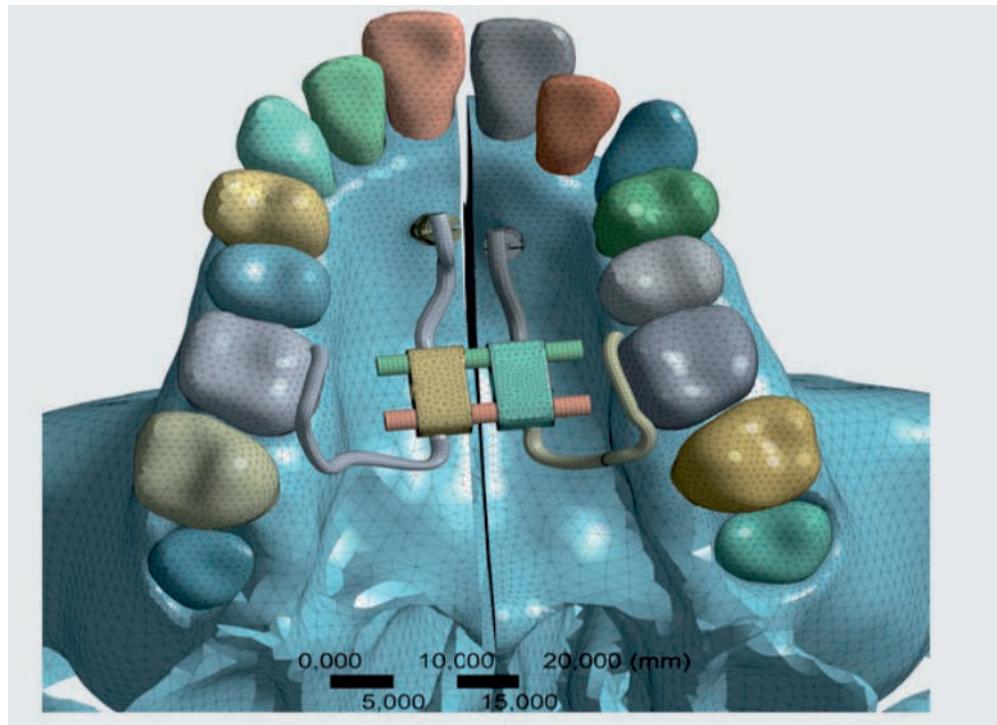
2x
(33-54462)

LITERATURE – PUBLICATIONS:

- Wilmes B, Fields of Application of Mini-Implants. In: Ludwig, Baumgaertel, Bowman: Mini-Implants in orthodontics. Innovative anchorage concepts. London, Berlin etc. Quintessence. 2008: 91- 122
- Wilmes B, Nienkemper M, Drescher D. Application and effectiveness of a new miniimplant and tooth-borne rapid palatal expansion device. World J Orthod. 2010

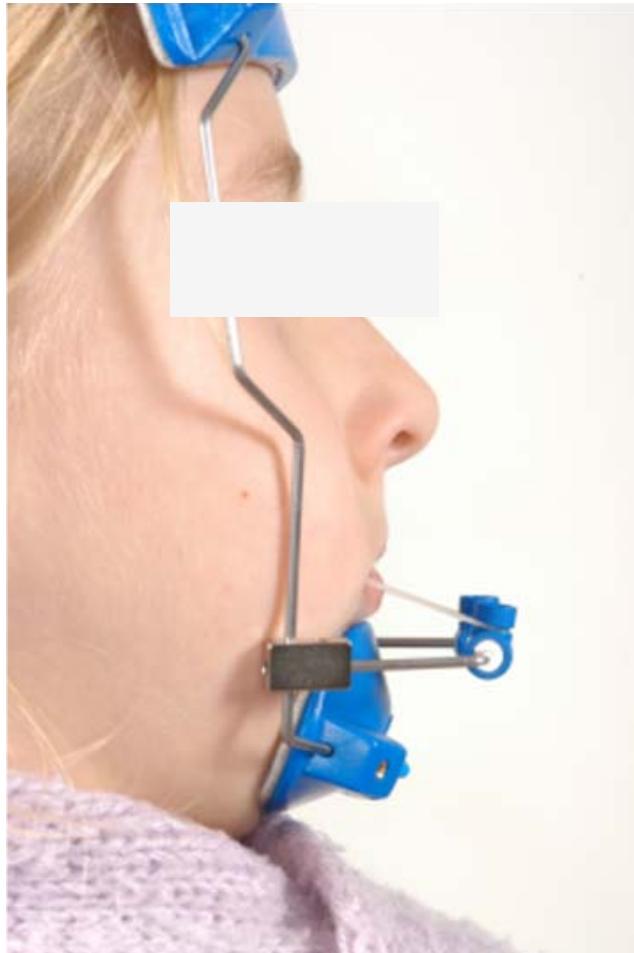
Goal 1: Less tipping of the teeth

→ Cranial force application



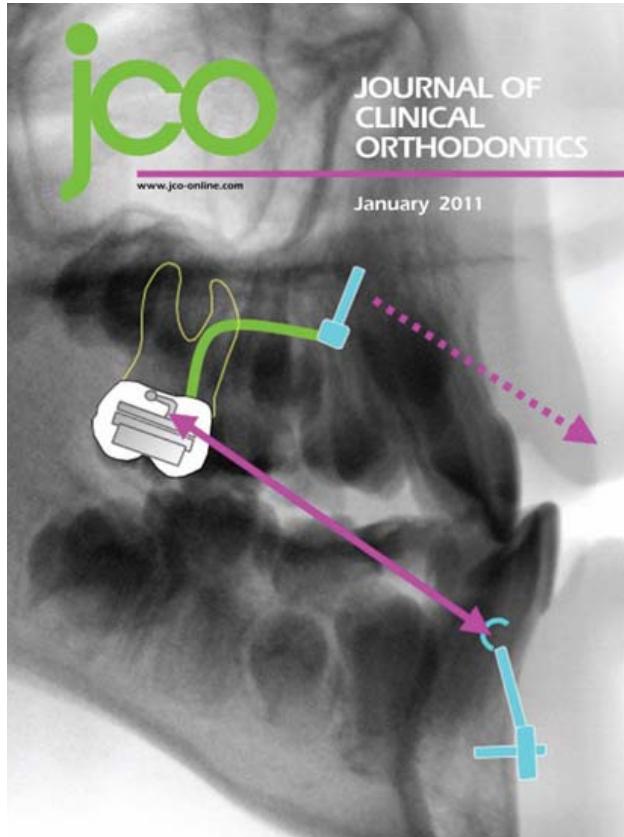
LITERATURE – PUBLICATIONS:

Ludwig B, Baumgaertel S, Kinzinger G, Zorkun B, Glasl B, Wilmes B. Application of a new visco-elastic FEM-Model and analysis of miniscrew supported Hybrid-Hyrax treatment. Am J Orthod Dentofacial Orthop 2013



Intraoral alternative?
Une alternative aux traitements intra-oraux?

Goal 2: Avoid mesial migration when using a facemask



LITERATURE – PUBLICATIONS:

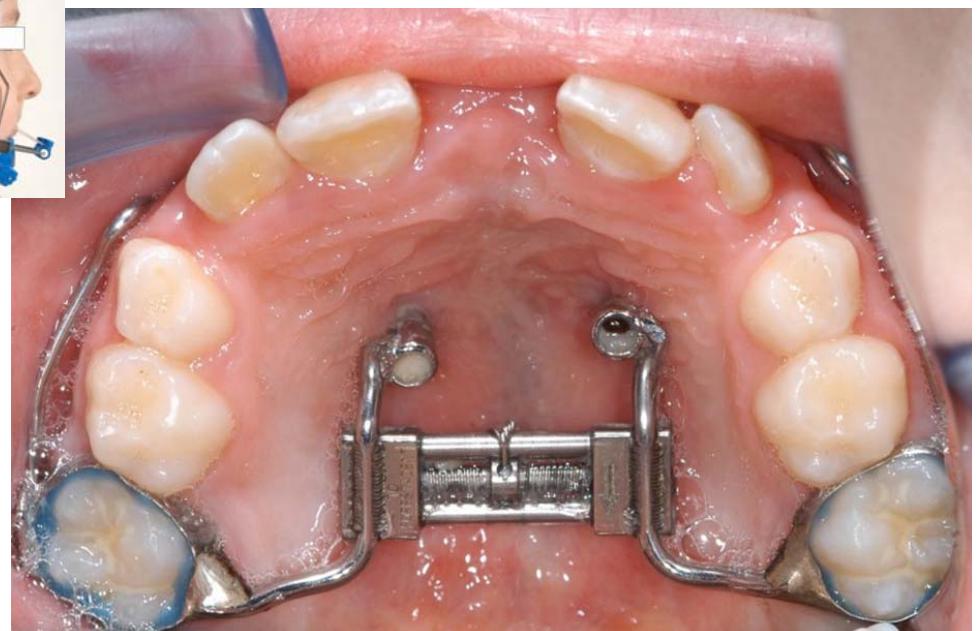
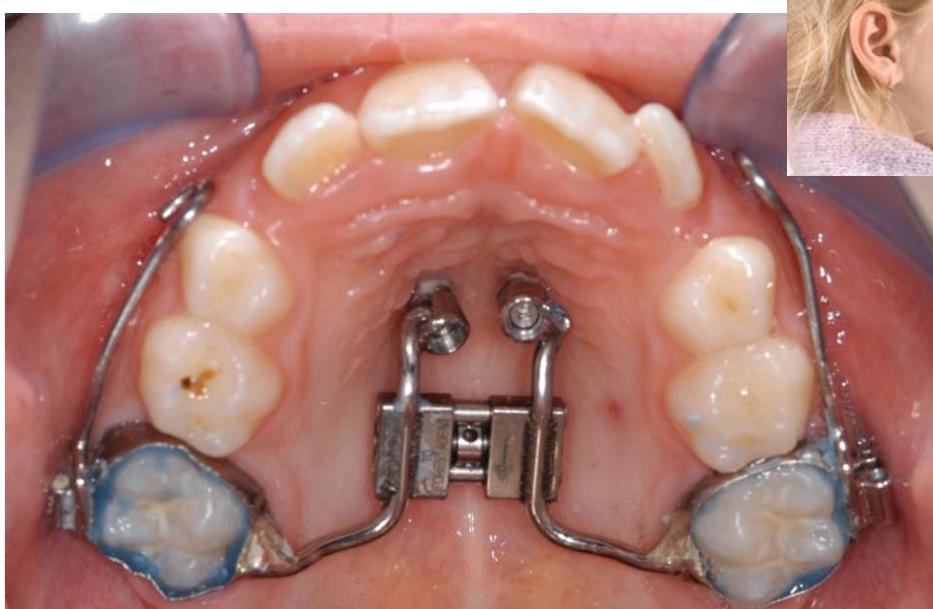
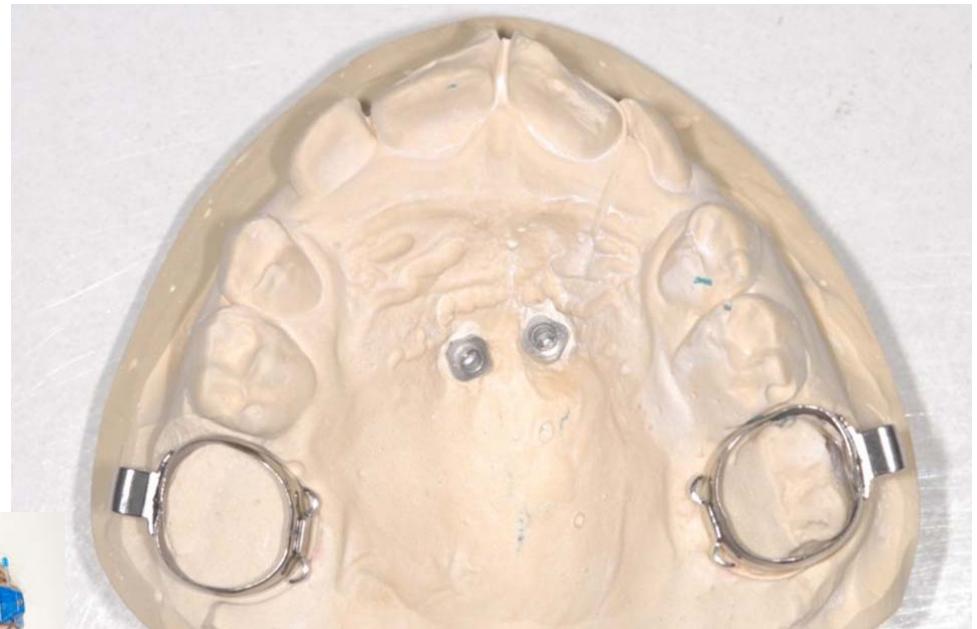
Wilmes B, Kau CH, Ludwig B, Drescher D. Early Class III Treatment with a Hybrid Hyrax-Mentoplaste Combination J Clin Orthod, 45:1-7



LITERATURE – PUBLICATIONS:

Ludwig B, Glasl B, Bowman J, Drescher D, Wilmes B. Miniscrew supported Class III Treatment with the Hybrid RPE Advancer. J Clin Orthod 2010; 44:533-539

Nienkemper M, Wilmes B, Pauls A, Drescher D. Maxillary protraction using a hybrid hyrax - face-mask combination. Prog Orthod 2013;14:5

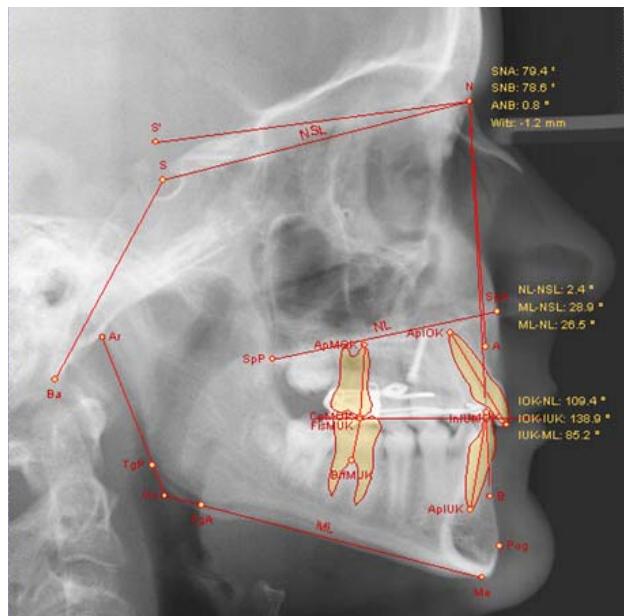
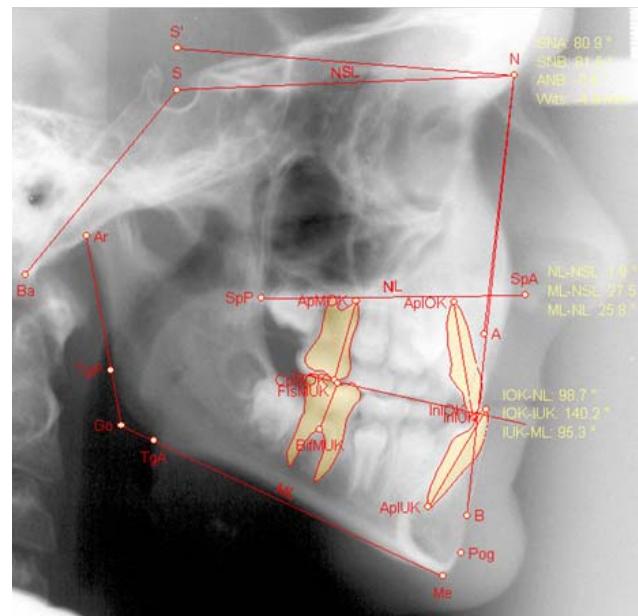


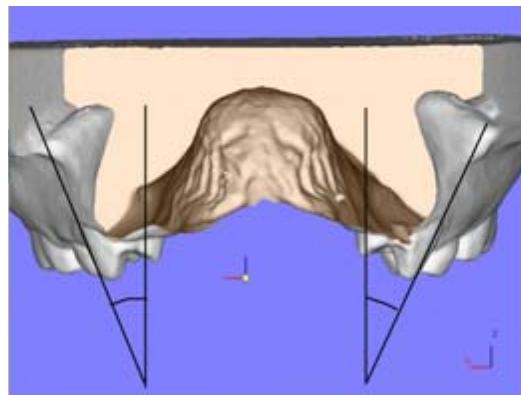
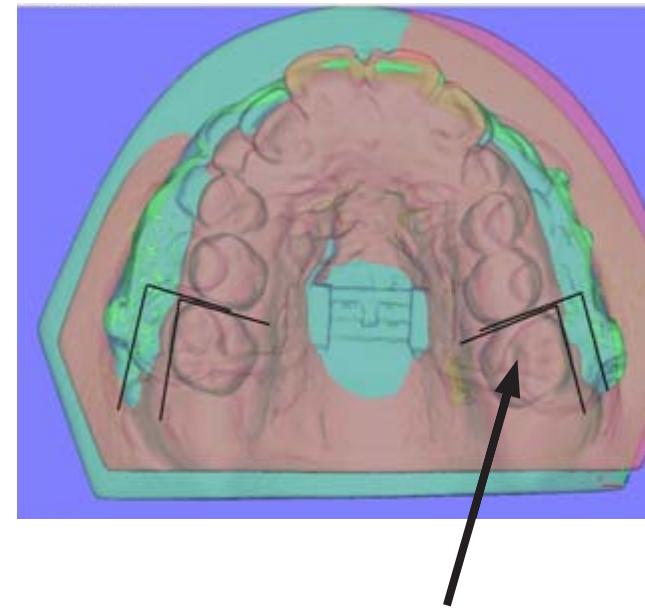
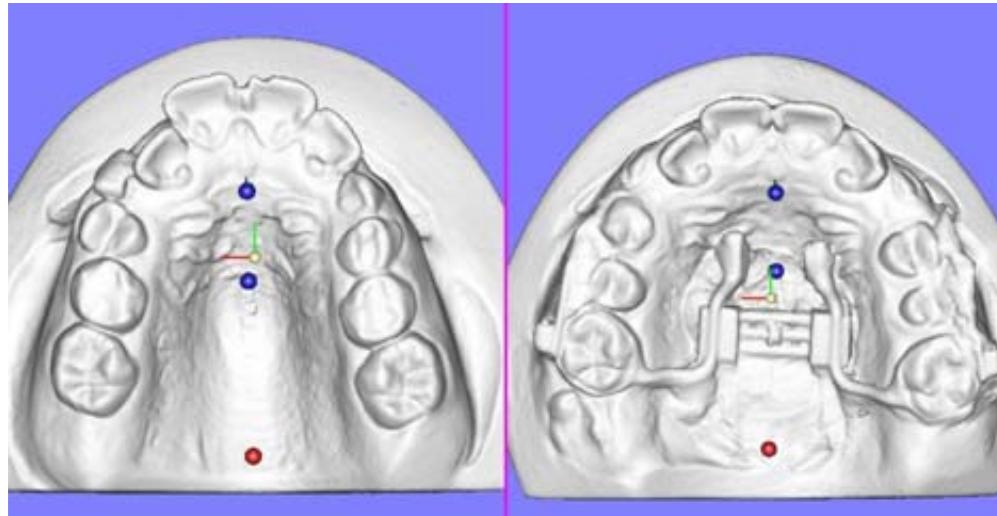
Hybrid-Hyrax / Facemask

Hyrax Hybride et Masque facial

Prof. Dr. Benedict Wilmes, Düsseldorf, Germany

31





Less tipping
Réduit le risque de version

Less mesial migration using a facemask
Réduit la migration mésiale grâce au masque facial

LITERATURE – PUBLICATIONS:

Wilmes B, Nienkemper M, Drescher D. Application and effectiveness of a new mini-implant and tooth-borne rapid palatal expansion device. World J Orthod. 2010

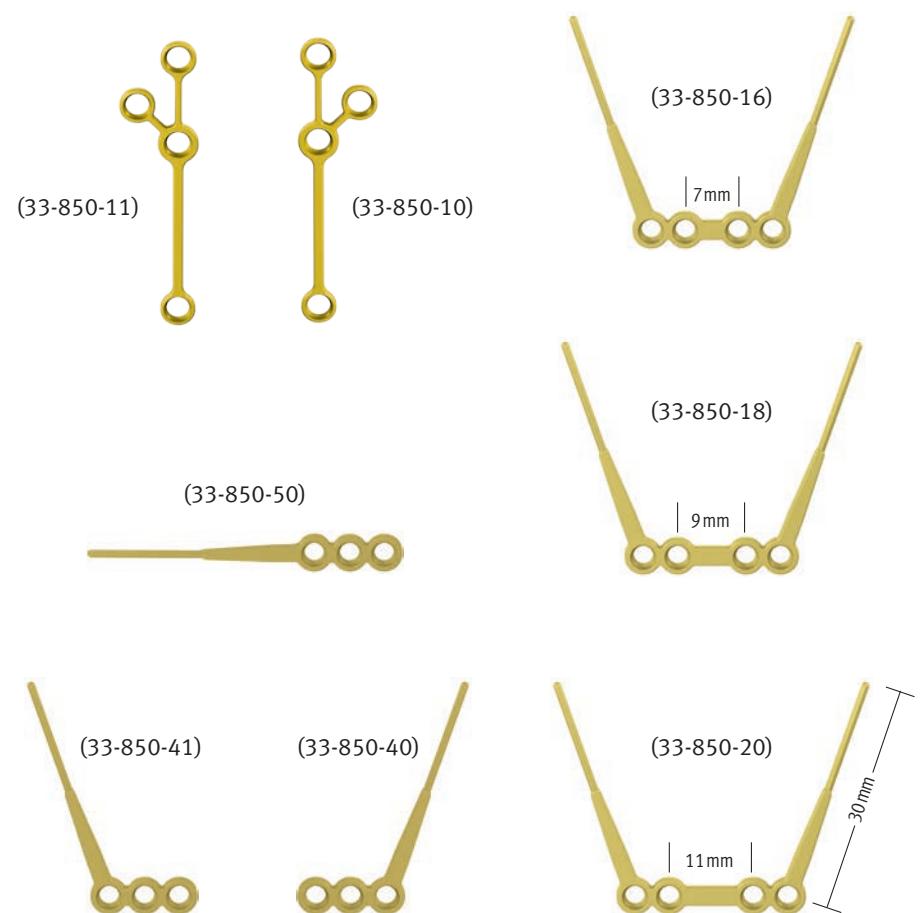


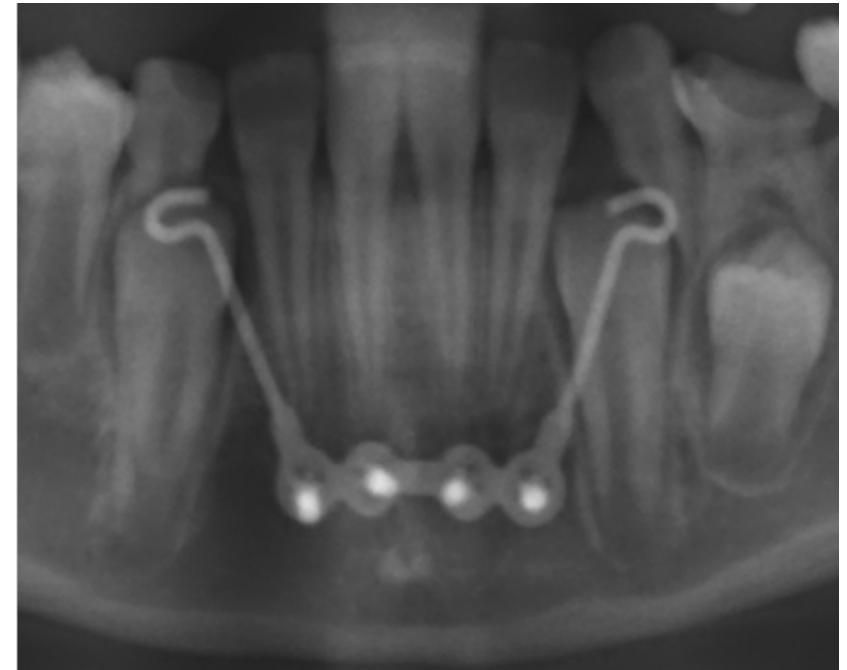
Size (d x length)
Dimensions (Diamètre x longueur)

2.0	33-820-04	2.0 x 4 mm
	33-820-05	2.0 x 5 mm
	33-820-07	2.0 x 7 mm

TX Bone Screw 2.0 mm
TX Vis pour fixation dans l'os 2,0mm

length **d**





Advantages:

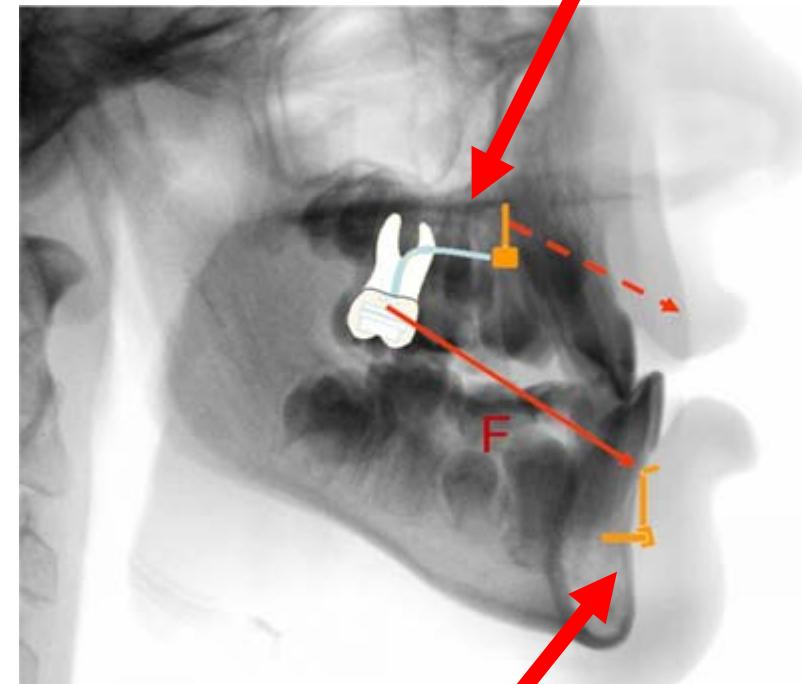
- The MentoPlate can be inserted before eruption of the canines
we can start at the age of 8 years
- Loosening of the midface sutures (RPE effect)

Avantages:

- la Mentoplastie peut être mise en place en amont de l'éruption des canines,
possibilité de démarrage du traitement dès 8 ans
- action sur la suture palatine grâce à l'effet RPE

LITERATURE – PUBLICATIONS:

Wilmes B, Nienkemper M, Ludwig B, Kau CH, Drescher D. Early Class III Treatment with a Hybrid Hyrax-Mentoplate Combination. J Clin Orthod 2011; 45:1-7



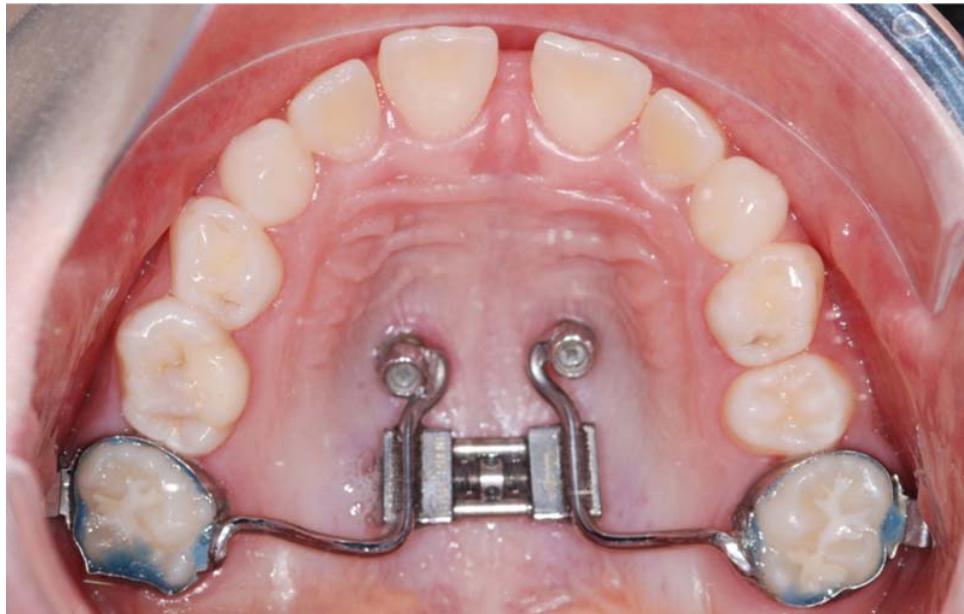
Hybrid-Hyrax
Hyrax Hybride

MentoPlate
MentoPlate

LITERATURE – PUBLICATIONS:

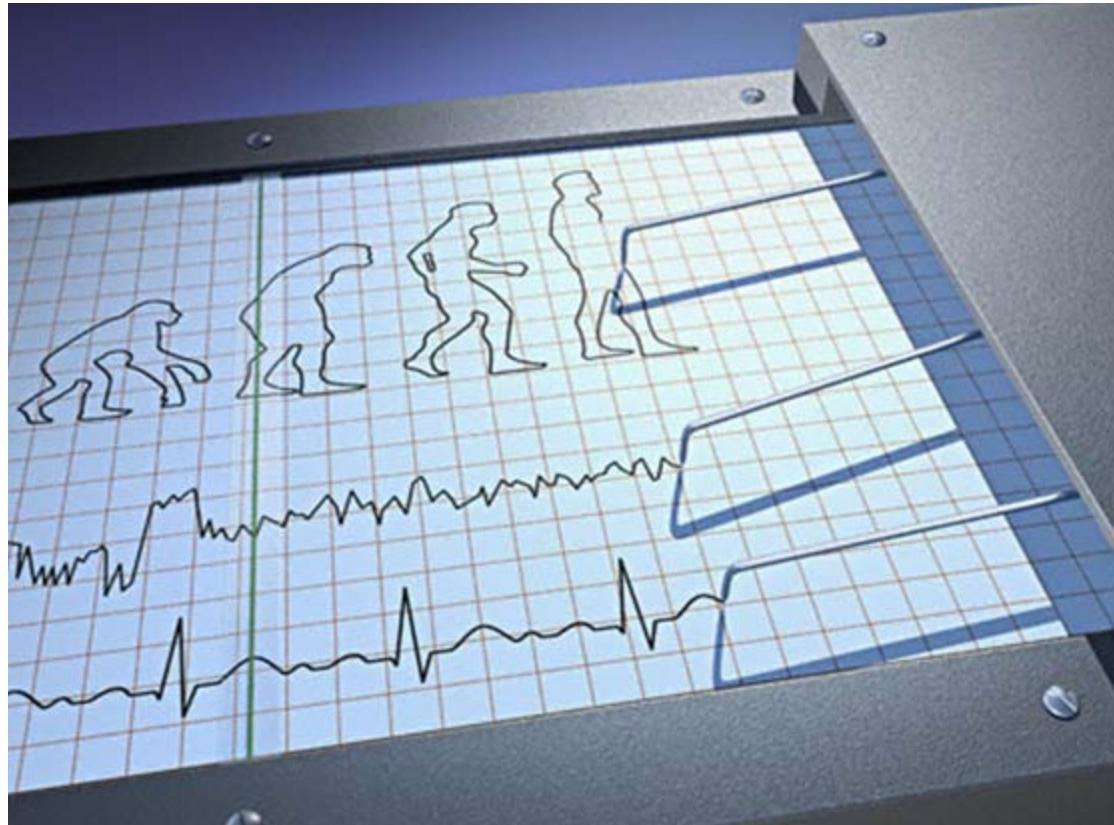
Wilmes B, Nienkemper M, Ludwig B, Kau CH, Drescher D. Early Class III Treatment with a Hybrid Hyrax-Mentoplate Combination. J Clin Orthod 2011; 45:1-7





5 months later
Après 5 mois





- Less failures
Réduit les risques d'échec
- Safer mechanics
Mécanique sûre et éprouvée.

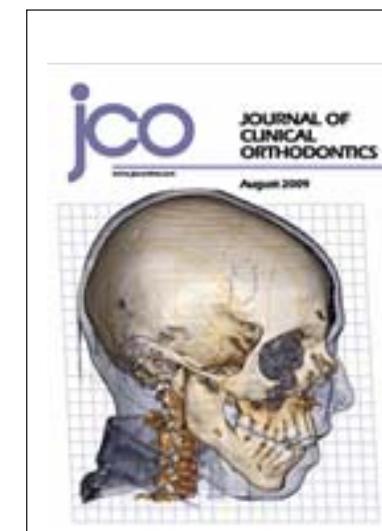


Benefit-System

„A Breakthrough in Miniscrew Stability“

Robert G. Keim, Editor JCO

The Editor's Corner J Clin Orthod 2009;43:485-386



Keim: The Editor's Corner
[A Breakthrough in Miniscrew Stability](#)
 As with all other practical innovations in orthodontics, temporary anchorage devices (TADs) have involved a significant learning curve. Although Creekmore and Eklund's seminal paper on skeletal anchorage appeared in JCO more than 25 years ago,¹ it remained on the fringes of the profession until around the turn of the century, when the concept took off like a rocket. Since then, paper after paper has illustrated successful treatment of most categories of malocclusion... [\[more\]](#)
 Access to the Editor's Corner ar free. For more free articles [click here](#)

August 2009 corner: This month's cover features a 30 volume rendering of a CT scan using software from Anatomage, Icc, as described in The Cutting Edge.

www.uniklinik-duesseldorf.de/kieferorthopaedie

2.0		sterile
	33-54207	2.0 x 7 mm
	33-54209	2.0 x 9 mm
	33-54211	2.0 x 11 mm
	33-54213	2.0 x 13 mm
	33-54215	2.0 x 15 mm
	BENEFit® Orthodontic Screw 2.0 mm	
	BENEFit® mini-implant 2.0 mm	

2.3		sterile
	33-54307	2.3 x 7 mm
	33-54309	2.3 x 9 mm
	33-54311	2.3 x 11 mm
	33-54313	2.3 x 13 mm
	33-54315	2.3 x 15 mm
	BENEFit® Orthodontic Screw 2.3 mm	
	BENEFit® mini-implant 2.3 mm	

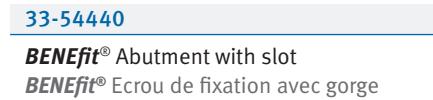


33-54599	BENEslder Set 240 gr. complete consisting of:	BENEslder Kit 240 gr. complet de démarrage:
33-54409	BENEplate short, with 1.1 mm wire, incl. fixation screws	BENEplate court sur arc 1.1mm; Kit d'une plaque et deux vis
33-54540	Mobilizer for wires from 0.5 to 1.2 mm, 2 ea.	Ecrou mobile d'activation (pour arcs de 0,5mm à 1,2mm), Kit de 2
33-54524	BENEslder springs, 240gr., 2 ea.	BENEslder ressorts, 240grs., Kit de 2
33-54535	BENEslder Hook lock, 2 ea.	BENEslder Tube standard à crochet pour foureaux, Kit de 2
33-54597	as 33-54599 but with 500 gr. springs	identique au kit 33-54599 mais avec ressorts 500gr.

For the complete BENEFit product range please consult our BENEFit product flyer KAT-002.
Pour la gamme complète des dispositifs BENEFit, merci de consulter notre brochure KAT-002.



33-54460 1.1 stainless steel
Abutment Standard with 1.1 mm wire (12 cm)
Ecrou de fixation standard sur arc 1,1 mm
(longueur de l'arc 12cm)



33-54440
BENEFit® Abutment with slot
BENEFit® Ecrou de fixation avec gorge



33-54450 Abutment mit 1 avec un bracket
33-54452 Abutment mit 1 avec deux bracket

BENEFit® Abutment with brackets
BENEFit® Ecrou de fixation avec brackets



33-54544
BENEtube acc. to. Dr. Banach, with wire 1.1 mm, 40 mm, 2 ea.
BENEtube selon le Dr. Banach, sur fil 1.1 mm, longueur
40 mm. Vendu par 2.



33-54535
BENEtube, Standard, 2 ea.
BENEtube, Standard, Kit de 2

33-54536
BENEtube, large, 2ea
BENEtube, large, Kit de 2



33-54539
Mesialtube, with hook
Mesialtube, Tube mesial
avec crochet



33-54524 240g
33-54525 500g

BENEslder NiTi springs, 2 ea.
BENEslder Ressorts d'activation,
Kit de 2

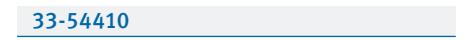
33-54540
Mobilizer for wires from
0.5 to 1.2 mm, 2 ea.
Vis d'activation pour arcs de
0,5 à 1,2 mm. Vendus par 2



33-54541
Mobilizer with hook
Vis d'activation avec
crochet



33-54425
BENEFit® laboratory analog
BENEFit® implant de transfert pour travail
sur moules



33-54410
BENEFit® impression cap
BENEFit® tête de prise d'impression



33-54400 stainless steel 1:1

BENEplate, long, incl. fixation screws
BENEplate, long avec écrous de fixation



33-54402 stainless steel 1:1

BENEplate, short, incl. fixation screws
BENEplate, court avec écrous de fixation



33-54429 1.1 stainless steel 1:1

BENEplate, long, with 1.1 mm wire (12 cm),
incl. fixation screws
BENEplate, long sur arc 1.1 mm (12 cm)
avec écrous de fixation



33-54428 0.8 stainless steel 1:1

BENEplate, long, with 0.8 mm wire (12 cm),
incl. fixation screws
BENEplate, long sur arc 0.8 mm (12 cm)
avec écrous de fixation



33-54409 1.1 stainless steel 1:1

BENEplate, short, with 1.1 mm wire (12 cm),
incl. fixation screws
BENEplate, court sur arc 1.1 mm (12 cm)
avec écrous de fixation



33-54408 0.8 stainless steel 1:1

BENEplate, short, with 0.8 mm
steel wire (12 cm), incl. fixation screws
BENEplate, court sur arc 0.8 mm (12 cm)
avec écrous de fixation



33-54407 1:1

BENEplate long, with bracket
incl. fixation screws
BENEplate long avec bracket
et écrous de fixation



33-54420 0.8 TMA 1:1

BENEplate, short, with 0.8 mm
TMA wire (12 cm), incl. fixation screws
BENEplate, court sur arc TMA 0.8 mm
(12 cm) avec écrous de fixation



for 2.0 mm screws

Pour Mini Implants 2.0 mm



10-67513



Drill, 1.4x33 mm WL 15 mm, red
for 2.0 mm screws

Foret 1.4x33 mm, travaillant sur 15 mm,
rouge, pour Mini Implants 2.0 mm



10-63025



Manually turned unit for contra-angled
handpieces

Manchon manuel pour contre-angle



33-54533

FlexiTube, 2 ea.
FlexiTube, 2 pièces



33-54466

BENEfit Peak Abutment, 1 ea. incl. 1 fixation screw
Système **BENEfit**: Tête d'écrou pour implant
temporaire avec 1 vis de fixation



33-54462

Hyrax Ring, incl. fixation screws, 2 ea.
Anneau de fixation pour Hyrax, Incluant les vis de fixation, 2 pièces



73-31990

BENEfit Starter tray, plastic, empty

BENEfit Support pour instrumentation,
plastique, (support seul sans instrumentation)

for 2.3 mm screws
Pour Mini Implants 2.3mm



11-18452



Drill, 1.8x28 mm WL 15 mm, grey
for 2.3 mm screws

Foret 1.8x28mm, travaillant sur 15 mm,
gris pour Mini Implants 2.3 mm



33-54704



Manually turned unit mod. to Pauls,
with adjustable torque from 0 – 40 Ncm

Manchon manuel selon Pauls avec vitesse de
rotation adjustable de 0 à 40 Ncm.



33-54403

Spare fixation screws, 2 ea.
Ecrous de fixation seuls, vendus par deux



**95-13001**

Model **BENEslider**, mesial., distal.
Modèle de présentation du système
BENEslider mesial-distal.

**95-13002**

Model Anchorage for upper Molars
Modèle de présentation du système
d'ancrage maxillaire.

**95-13003**

Model Pendulum B
Modèle de présentation du
système Pendulum B

**95-13005**

Model Molar uprighting
Modèle de présentation du
système de redressement d'axe
pour molaires

**95-13006**

Model Hybridhyrax
Modèle de présentation du
système Hyrax Hybride

**95-13010**

BENEFit® Model Case with
9 models of your choice
BENEFit® Valise avec
9 modèles de présentation
de votre choix.

**95-13007**

Model Anchorage Anterior Teeth
Modèle de présentation du
système d'ancrage antérieur

**95-13008**

Model Tooth Eruption
Modèle de présentation du
système d'éruption

**95-13009**

Model "Temporary Implant"
Modèle de présentation du
système d'implant temporaire

**95-13011**

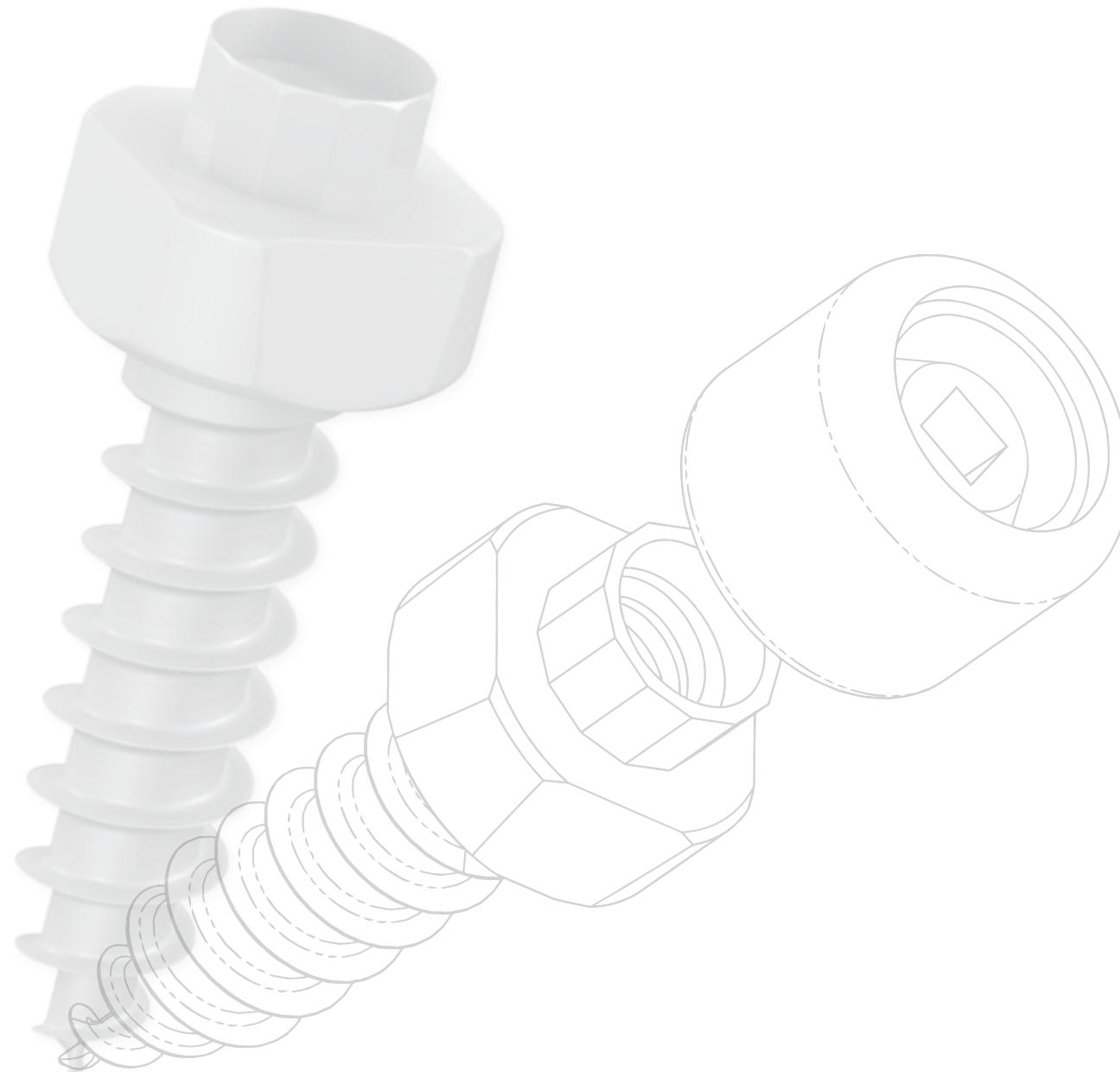
Plaster Model with laboratory implants
Modèle de présentation du
système de transfert pour travaux
en laboratoire

**95-13012**

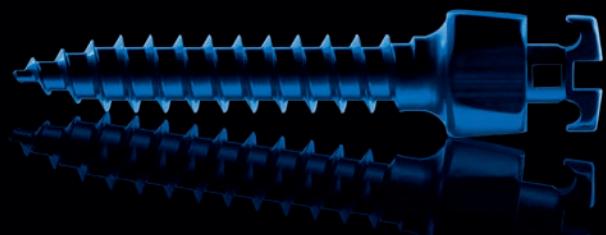
Model Mouse Trap Intrusion
Modèle de présentation du
système "Mouse trap"

**95-13013**

Model Hybridhyrax Distalizer
Modèle de présentation du système
de distalisation Hyrax Hybride



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BENEPLATE.KFO



MENTOPLATE.KFO



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- **BENEFit®**
- **MENTOPLATE**

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of German made Implant Quality.

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pratique quotidienne.*

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