



Bone born Rapid Maxillary Expansion (RME) Dresden Distractor (DD-RME)



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- **Rapid maxillary expansion (RPE) is indicated in the orthopedic treatment of transverse maxillary deficiency for correction of severe scissor bite.**
- **The fixation of the appliance at the teeth crowns leads to more tipping at the two halves of the maxilla.**
- **Additional resorptions at tooth roots and the buccal cortical bone with fenestration were observed.**
- **There is a loss of anchorage if molar roots stick into the maxillary sinus.**

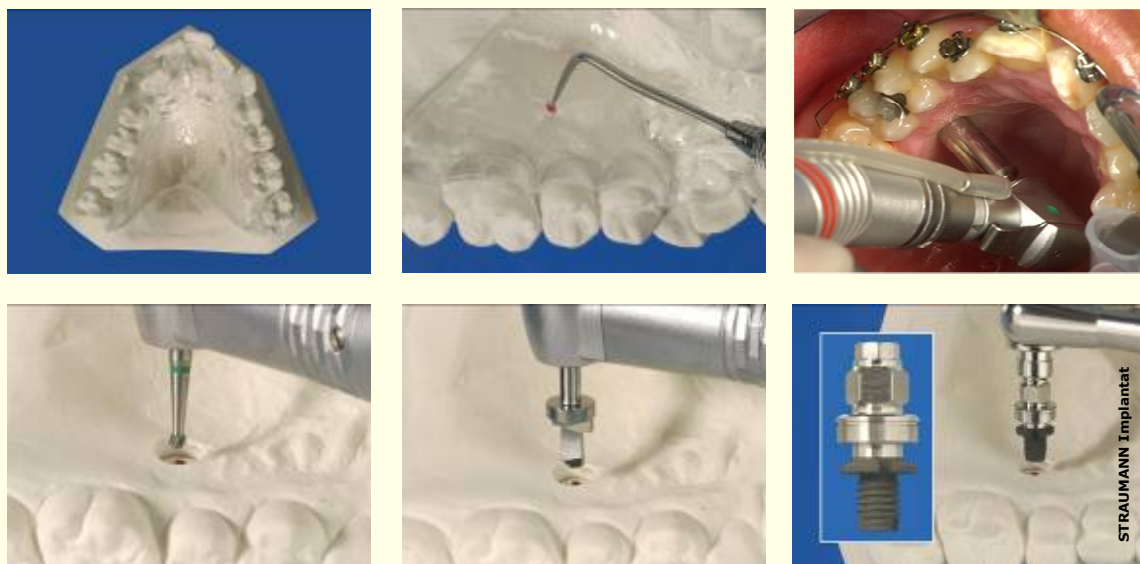
DD-RME is a minimal invasive bone born device, e.g. two point distraction with sectional wire guidance.

Advantages are:

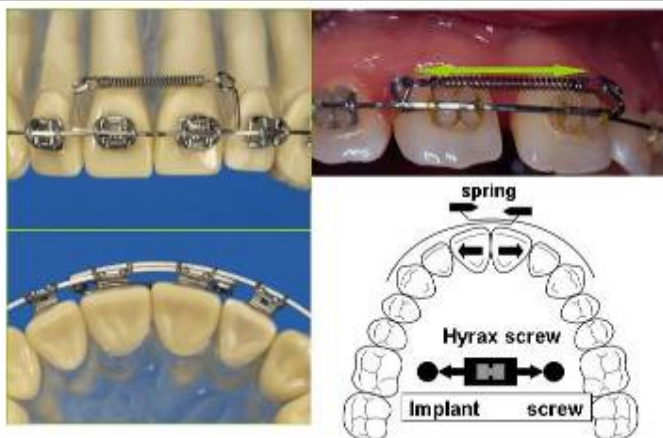
- **Short time procedure**
- **Fixation with implant or mini-screws**
- **Save retention , no relapse**
- **Bodily movement of maxillary half**
- **Prevention of buccal bone loss and root resorption.**



Process of preparation and insertion



Guidance of maxillary halves





Patient with narrow maxillary bone



Expansion of 8 mm after 12 days

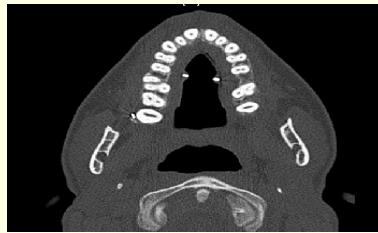
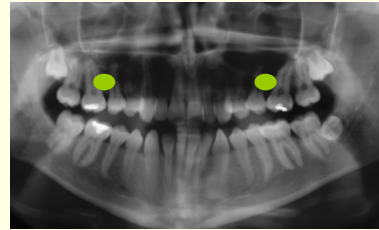


Retention with TPB fixed at the re-mained implant

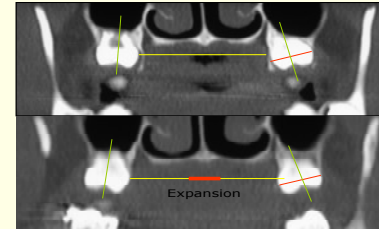
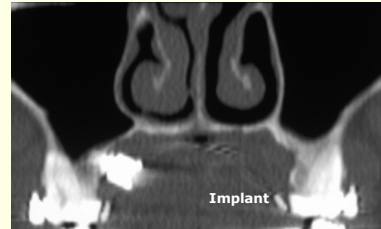




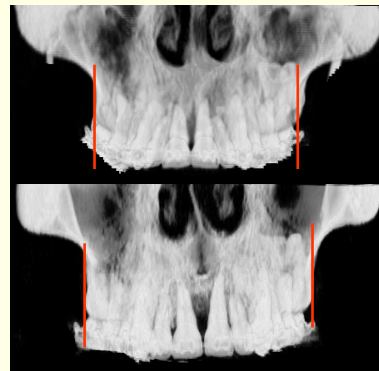
Radiographic diagnosis and assessment



Position of implant and screw



Expansion after 6 months



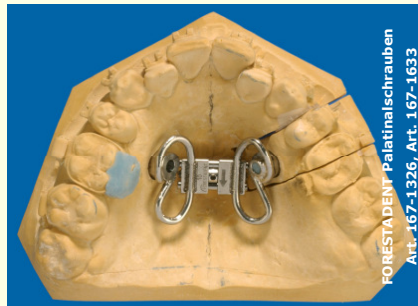
Parallel movement of maxillary halves



Laboratory process



Splint for marking



Manufacture of bone born hyrax screw

References:

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Direct Palatal Expansion. J Orofac
Orthop 5, 419-24 (2004)

Harzer W, Schneider M, Gedrange T:
Direct bone placement of the hyrax
fixation screw for surgically assisted
rapid palatal expansion (SARPE). J
Oral Maxil Surg (in press)

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