align education

Invisalign® Palatal Expander System

Case compendium

Dr Sandra Tai

Clinical Assistant Professor
Graduate Orthodontics, Faculty of Dentistry
University of British Columbia, Vancouver, Canada
Adjunct Assistant Professor of Orthodontics
University of the Pacific, San Francisco, USA
Diamond Plus Provider



Case report 1

10 yo male, 18 expanders, Unilateral Posterior Crossbite

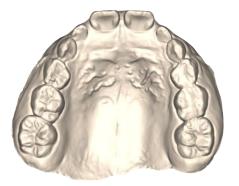
Initial



After active expansion has been achieved

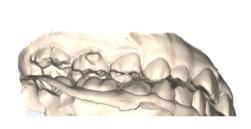








Initial buccal occlusion with unilateral posterior crossbite







After active expansion, where lingual cusps of upper molars are contacting buccal cusps of lower molars

Patient: Male, 10 years, 0 months	
Clinical conditions	Unilateral posterior crossbite
Treatment goal	Eliminate functional shift, correct posterior cross bite
Treatment plan	Expand maxillary arch until the lingual cusps of the upper molars touch the buccal cusps of the lower molars
Orthodontic treatment	Upper Invisalign® Palatal Expander
Planned expansion (mm)	4.25mm
Results	Expansion was achieved as desired
Last worn active expander stage	18
Expander change frequency	Daily
Holding protocol	3 months/12 weeks using Invisalign Palatal Holders
Holder change frequency	Every 2 weeks

Additional comments:

- Attachments on maxillary first molars came off and were re-bonded at 2-week regular appointment.
- Treatment proceeded uneventfully without any emergency appointments



Case report 2

7.11 yo female. Full treatment of Bilateral posterior crossbite, Anterior open bite

Initial







After active expansion has been achieved. 34 expanders (8.5 mm) of expansion.











After 2 months of Holding phase. Scanned for Invisalign First treatment.

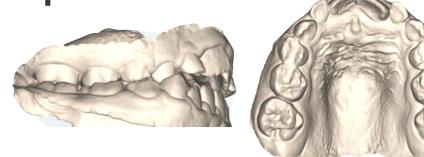






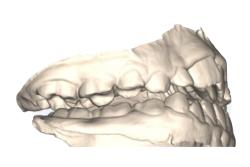








Initial buccal occlusion with bilateral posterior crossbite & anterior open bite



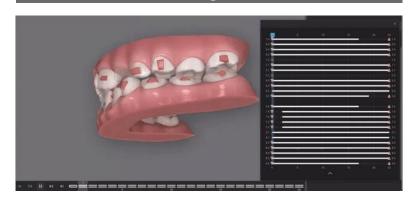




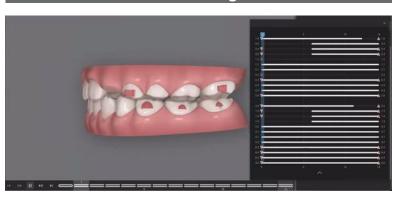
After active expansion, After 2 months of Holding phase. Scanned for Invisalign First treatment

7.11 yo female, 34 expanders. Full treatment of Bilateral posterior crossbite, Anterior open bite

Scanned for Invisalign First™ treatment



Additional Aligners





Case report 3

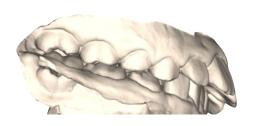
8 yo male, 15 expanders. Narrow arch, Flared teeth, Deep bite, Overjet, Posterior crossbite

Initial

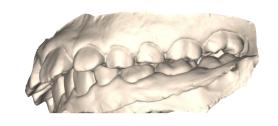


After active expansion has been achieved

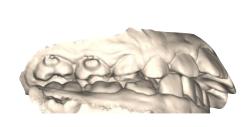








Initial buccal occlusion with narrow, tapered upper arch







After active expansion, where lingual cusps of upper molars are contacting buccal cusps of lower molars

Patient: Male, 8 years, 9 months	
Clinical conditions	Narrow arch, Flared teeth, Deep bite, Overjet
Treatment goal	Maxillary arch expansion, regain space for future eruption of permanent teeth
Treatment plan	Expand maxillary arch until the lingual cusps of the upper molars touch the buccal cusps of the lower molars. This would be followed by Invisalign First™ aligners to reduce overjet and regain space in lower arch for eruption of lower right canine
Orthodontic treatment	Upper Invisalign® Palatal Expander
Planned expansion (mm)	3.50mm
Results	Expansion was achieved as desired: the upper arch was expanded until the lingual cusps of the upper molars touched the buccal cusps of the lower molars. Less expanders than anticipated were required.
Last worn stage	15
Expander change frequency	Daily
Holding protocol	3 months/12 weeks using Invisalign Palatal Holders
Holder change frequency	Every 2 weeks

Additional comments:

- Attachments on maxillary first molars came off and were rebonded at 2 week regular appointment.
- Less expansion than programmed was required and so we stopped expansion at stage 15.
- · Treatment progressed uneventfully.
- The patient had to cut food up into smaller pieces to eat in the initial 2 weeks.
- Overall, parents were pleased that the appliance could be removed once a day for hygiene measures.
- No parental involvement was required to activate the appliance as the child simply placed the next stage expander after brushing their teeth.