

Practice Points

To Close or Not To Close

Almost all orthodontic cases will either start with or develop spaces throughout treatment. In order to finish the treatment with stable results, good contacts are imperative (Larry Andrews — Six Keys to Occlusion). The dentists must decide why spaces are present and when they should be closed throughout the treatment.

Spaces may be present before the treatment is initiated. Frequently “spaces” is the patient’s chief concern, particularly when the spacing is in the anterior. The goal of the clinician should be to assess the reason for spacing and treatment plan accordingly. Some common reasons and solutions for spacing include:

<u>REASON</u>	<u>SOLUTION</u>
1. Flared Incisors	Detorque Incisors
2. Habits (Tongue Thrust, Thumbsucking)	Stop the Habit
3. Heavy Frenums	Frenectomy
4. Tongue-tied	Frenectomy
5. Microdontia	Cosmetic Bonding
6. Missing Teeth	Implant, Bridge, Partial Denture
7. Damaged/Restored Teeth	Restore Properly
8. Malformed Teeth	Reshape
9. Periodontal Disease	Perio Tx (may include tissue or bone graft)

Spaces may develop throughout orthodontic/orthopedic treatment as a result of arch development and preparation phases as well as the “unravelling” effect of levelling archwires. This type of spacing is good, however a systematic approach to closing the spaces should be thought out so as not to back track the treatment.

Clinical Tip: Level and align the brackets and teeth prior to closing spaces.

To close anterior spaces, move the cuspids and incisors into Class I (Class I cuspid, ideal torque/tip, dental midlines on). This can be achieved in rectangular working archwires that will move the teeth along the wire without overpowering the wire as well as torque and tip the incisors to

ideal position. One can move one tooth at a time (open coils, intras, closing coil springs, elastics) or several teeth at once using power chain. If microdontia presents, leave the spaces and finish with cosmetic bonding when treatment is complete.

Clinical Tip: Power chain will move teeth, close spaces, and detorque all teeth involved. Consider effects of power chain



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Prior to closing posterior spaces, anchorage must be considered and a Class I occlusion the goal. Posterior anchorage can be a fixed appliance (holding arch, nance button), stops in the working archwire, holding coil on the archwire, the anterior sextant (cuspid to cuspid) or the opposing arch. Space closure is achieved on a working archwire with enough stiffness to accommodate tooth sliding mechanics. One can move a single tooth (open coil, intras, closing coil springs, elastics) or several teeth at once using power chain. Microdontia in the posterior should also be finished with cosmetic bonding.

Clinical Tip: When moving teeth there will always be equal force applied from the mechanics used. Consider anchorage

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