# Four Bicuspid Extraction – Deep Bite Suggested Treatment Protocol

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| I. Initial Light-Wire  | Damon Optimal-Force Copper Ni-Ti® | • Begin leveling and alignment  
• Initiate arch development without RPEs or W-arches  
• Resolve 90% of rotations  
• Extrude buccal segments  
• Begin vertical correction and PRN, A/P correction. | 10                | 10                | Always place stops anterior to crowding.  
Use Bite Turbos (preferably behind U1s) to allow buccal segments to extrude. Disarticulation is also TMJ favorable.  
Elastics assist in eruption of teeth: lower posterior teeth (L6 to U5) if slightly CL II; lower anterior teeth (L5 to U3) if more CL II.  
Reverse curve Ni-Ti is not recommended on upper arch.  |
|                        | .014 U/L PRN, .013 U/L if crowding is severe or periodontal support is compromised |                                                                                           |                   |                   |                                                                      | Quail 3/16", 2 oz – Shorty CL II L6 to U5 or PRN, L5 to U3 – Full time | When 90% of rotations are resolved.  
Do not rush this Phase. It must be possible to insert the first edgewise wires with minimal active engagement. If not, let the current wire work longer. Avoid the use of any wire “icing” product that would apply too high a force when the wire warms. |
|                        | .018 U/L                          |                                                                                           |                   |                   |                                                                      |                                               |                           |
| II. High-Tech Edgewise | Damon Optimal Force Copper Ni-Ti  | • Complete leveling and alignment  
• Continue arch development  
• Resolve remaining rotations  
• Begin torque control  
• Consolidate minor spacing 3 to 3 | 10                | 10                | Typically use power chain under wire to consolidate space 3 to 3. Once all spaces close, transition from power chain to .008 or .010 wire to lace anteriors together. | Quail 3/16", 2 oz – Shorty CL II L5 to U3 – Full time | When all brackets and teeth are aligned.  
It should be possible to insert the working wires with minimal active engagement. If not, the case is not ready for Phase III. Avoid “icing” products. |
|                        | .014 x .025 U/L                   |                                                                                           |                   |                   |                                                                      |                                               |                           |
|                        | 10 weeks into this stage:         | Take Panorex & reposition brackets. Follow with .018 Cu Ni-Ti if brackets are drastically repositioned. |                   |                   |                                                                      |                                               |                           |
|                        | .018 x .025 U/L or PRN, .018 x .025 L | .017 x .025 Ni Ti® with 20° anterior torque U.  
See Notes. Follow pretorqued wire with same wire in .019 x .025 for 6 to 8 weeks if more torque desired. | 6 – 8             | 6 – 8             | Pretorqued wires counter effects of CL II elastics to keep upper incisors from retroclining. |                                               |                           |
### Four Bicuspid Extraction – Deep Bite (continued)

#### Suggested Treatment Protocol

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| **III. Major Mechanics** | **Posted Stainless Steel**  | - PRN, For efficient tooth movement, put lingual root torque in U/L wires 3 to 6.<sup>4</sup>  
- For additional posterior transverse width, expand wires slightly in the posterior. | **0.019 x 0.025 U/L** | 20 – 30           | To close spaces, end U/L wires distal to the 6s, leaving 2 mm of wire on which to engage Ni-Ti coil springs. Bend distal loop of springs 90°. Engage .010 ligature wire through mesial loop of spring and pigtail-tie over Post, activating about 10 mm.<sup>5</sup> | PRN, **Quail** 3/16", 2 oz or **Kangaroo** 3/16", 4.5 oz – Full CL II L6 to U Post – Full time | When case is CL I and has been in an overcorrected position for 8 weeks. |
|                        |                            | • Take wax bite; coordinate patient-specific arch form  
• Close extraction spaces  
• Express majority of remaining torque  
• Overcorrect A/P vertical  
• Make final A/P, buccolingual, torque and occlusal adjustments. |                  |                  |                                                                                                                                  |                                                        |                                                                         |
| **After Space Closure** |                            | **Damon Optimal Force Cu Ni-Ti**  
**0.018 x 0.025 U/L** – Extend wires to 7s. to align them. |                  | 8                 | Once all spaces close, lace together (.008 or .010 wire) U/L 3 to 5, then tie back to 6s to avoid reopening space. |                                                          |                                                                         |
|                        |                            |                                                                          |                  |                  |                                                                                                                                  |                                                        |                                                                         |
| **IV. Finishing**      | **TMA**<sup>®</sup>  
**0.019 x 0.025 U**  
**0.017 x 0.025 L** | • Take wax bite; coordinate patient-specific arch form  
• Close extraction spaces  
• Express majority of remaining torque  
• Overcorrect A/P vertical  
• Make final A/P, buccolingual, torque and occlusal adjustments. | **0.019 x 0.025 U** | 15 – 20           | 4 – 6 until sectioning wire, then 2 | To engage elastics. crimp surgical posts on TMA wires.  
PRN to perfect occlusion, cut upper wire mesial to the teeth that still require better articulation.  
Adjust posterior interferences with a high-speed handpiece and diamond bur; then polish, PRN. | PRN, **Quail** 3/16", 2 oz – or **Kangaroo** 3/16", 4.5 oz – Shorty CL II – L 5 to U Post – Often enough to prevent relapse  
Overlay **Zebra** 5/16", 4.5 oz Posterior V – U6 to L5 to U Post Full time until socked in, then 12 hours daily (after school & nights) | When case is CL I and has been in an overcorrected position for 8 weeks. |
|                        |                            |                                                                          |                  |                  |                                                                                                                                  |                                                        |                                                                         |

<sup>4</sup>Lingual root torque fosters more efficient space closure by keeping roots away from the buccal plate.  
<sup>5</sup>Most clinicians find little need for additional posterior anchorage because of the posterior transverse arch adaptation that the Damon System fosters through the first two Phases of treatment.

These wire/elastics sequence recommendations have been shown to be effective when treating with Damon System mechanics. They are not a replacement for professional expertise.