**Table 1: Wire sequence used by the two clinicians during treatment procedure.**

|  |  |  |
| --- | --- | --- |
| Clinician A (MBT) | Clinician B (MBT) | Clinician B (SEW) |
| 0.016 NiTi | 0.016 NiTi | 0.016 NiTi |
| 0.016 Stainless Steel | 0.014 Stainless Steel | 0.014 Stainless Steel |
| 0.018 Stainless Steel | 0.016 Stainless Steel | 0.016 Stainless Steel |
| 0.016 \* 0.022 Stainless Steel | 0.018 Stainless Steel | 0.018 Stainless Steel |
| 0.017 \* 0.025 Stainless Steel  0.019 \* 0.025 NiTi | 0.016 \* 0.022 Stainless Steel | 0.016 \* 0.022 Stainless Steel  or |
|  |  | 0.019 \* 0.025 Beta Ti |

**Table 2: Number of quadrants assessed for root parallelism of canines and 2nd premolars in 1st premolar extraction cases.**

|  |  |  |  |
| --- | --- | --- | --- |
| Quadrants | MBT | SEW | Total |
| Upper right | 55 | 59 | 114 |
| Upper left | 55 | 59 | 114 |
| Lower right | 55 | 57 | 112 |
| Lower left | 56 | 57 | 113 |

**Table 3: Comparative analysis of treatment procedure duration in 1st premolar extraction cases assessed for root parallelism of canines and 2nd premolars.**

|  |  |  |  |
| --- | --- | --- | --- |
| Treatment procedures duration (day)  Mean + SD | Group | | P. value |
| MBT | SEW |
| Class II elastic | 117.93 +165.27 | 90.08 + 100.33 | 0.106 |
| Class III elastic | 13.93 + 49.72 | 28.13 + 62.97 | 0.047 |
| Maxillary gable | 1.14 + 6.78 | 0.49 + 3.91 | 0.511 |
| Mandibular gable | 7.19 + 25.53 | 12.75 + 29.33 | 0.257 |
| Maxillary rectangular wire | 88.38 + 106.77 | 2.71 + 21.54 | <0.0001 |
| Mandibular rectangular wire | 113.00 + 129.11 | 3.59 + 19.02 | <0.0001 |

**Table 4: Comparative analysis of post-treatment angulation between canines and 2nd premolars in 1st premolar extraction cases.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Parallelism | Maxilla | | |  | Mandible | | |
| MBT  N (%) | SEW  N (%) | p.value | MBT  N (%) | SEW  N (%) | p.value |
| Good | 62 (56.4) | 60 (50.8) | 0.207 | 62 (55.9) | 65 (57) | 0.563 |
| Acceptable | 15 (13.6) | 21 (17.8) | 26 (23.4) | 19 (16.7) |
| Poor | 13 (11.8) | 7 (5.9) | 6 (5.4) | 8 (7) |
| Over | 20 (18.2) | 30 (25.4) | 17 (15.3) | 22 (19.3) |
| Mean + SD | 1.03 + 7.83 | -0.37 + 7.46 | 0.170 | 7.23 + 8.39 | 6.35 + 8.84 | 0.443 |