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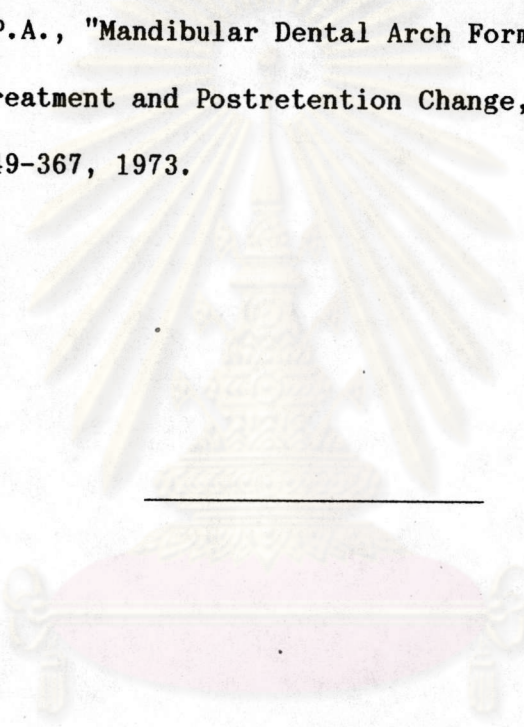
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ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก



ศูนย์วิทยทรัพยากร  
จุฬาลงกรณ์มหาวิทยาลัย



1. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ ICW(U), ICW(L), AAW(U), AAW(L) ระหว่างก่อนและหลังการจัดฟัน ในผู้ป่วยที่ไม่มีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Paired samples t-test: CU UPPER CANINE WIDTH BEFORE TX  
CU1 UPPER CANINE WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| CU       | 60              | 35.3867 | 2.188              | .283           |
| CU1      | 60              | 36.0400 | 1.702              | .220           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -.6533            | 1.925              | .249           | .534 .000          | -2.63   | 59                 | .011         |

Paired samples t-test: CL LOWER CANINE WIDTH BEFORE TX  
CL1 LOWER CANINE WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| CL       | 60              | 27.1133 | 1.991              | .257           |
| CL1      | 60              | 27.2917 | 1.598              | .206           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -.1783            | 1.638              | .211           | .603 .000          | -.84    | 59                 | .402         |

Paired samples t-test: AU UPPER ANTERIOR ARCH WIDTH BEFORE TX  
AU1 UPPER ANTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| AU       | 60              | 36.8583 | 1.655              | .214           |
| AU1      | 60              | 37.6583 | 1.996              | .258           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -.8000            | 1.515              | .196           | .670 .000          | -4.09   | 59                 | .000         |

Paired samples t-test: AL LOWER ANTERIOR ARCH WIDTH BEFORE TX  
AL1 LOWER ANTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| AL       | 60              | 34.9517 | 1.448              | .187           |
| AL1      | 60              | 35.7867 | 1.614              | .208           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -.8350            | 1.223              | .158           | .686 .000          | -5.29   | 59                 | .000         |

2. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ PAW(U), PAW(L), AH(U), AH(L) ระหว่างก่อนและหลังจัดฟัน ในผู้ป่วยที่ไม่มีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Paired samples t-test: PU UPPER POSTERIOR ARCH WIDTH BEFORE TX  
PU1 UPPER POSTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| PU       | 60              | 46.6017 | 1.855              | .239           |
| PU1      | 60              | 48.1883 | 2.503              | .323           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | 2-Tail Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|--------------|---------|--------------------|--------------|
| -1.5867           | 1.891              | .244           | .660               | .000         | -6.50   | 59                 | .000         |

Paired samples t-test: PL LOWER POSTERIOR ARCH WIDTH BEFORE TX  
PL1 LOWER POSTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| PL       | 60              | 48.0733 | 2.504              | .323           |
| PL1      | 60              | 49.8717 | 2.624              | .339           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | 2-Tail Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|--------------|---------|--------------------|--------------|
| -1.7983           | 1.925              | .249           | .719               | .000         | -7.24   | 59                 | .000         |

Paired samples t-test: HU UPPER ANTERIOR ARCH HEIGHT BEFORE TX  
HU1 UPPER ANTERIOR ARCH HEIGHT AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| HU       | 60              | 19.2883 | 2.276              | .294           |
| HU1      | 60              | 18.5350 | 1.573              | .203           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | 2-Tail Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|--------------|---------|--------------------|--------------|
| .7533             | 2.153              | .278           | .421               | .001         | 2.71    | 59                 | .009         |

Paired samples t-test: HL LOWER ANTERIOR ARCH HEIGHT BEFORE TX  
HL1 LOWER ANTERIOR ARCH HEIGHT AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| HL       | 60              | 17.3350 | 1.463              | .189           |
| HL1      | 60              | 17.0483 | 1.333              | .172           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | 2-Tail Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|--------------|---------|--------------------|--------------|
| .2867             | 1.427              | .184           | .482               | .000         | 1.56    | 59                 | .125         |

3. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ ICW(U), ICW(L), PAW(U), PAW(L) ระหว่างก่อนและหลังจัดฟัน ในผู้ป่วยที่มีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Paired samples t-test: CU UPPER CANINE WIDTH BEFORE TX  
CU1 UPPER CANINE WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| CU       | 60              | 35.8117 | 2.507              | .324           |
| CU1      | 60              | 37.4833 | 1.925              | .249           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -1.6717           | 1.870              | .241           | .673               | -6.93   | 59                 | .000         |

Paired samples t-test: CL LOWER CANINE WIDTH BEFORE TX  
CL1 LOWER CANINE WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| CL       | 60              | 27.2717 | 2.233              | .288           |
| CL1      | 60              | 28.5150 | 1.343              | .173           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| -1.2433           | 1.740              | .225           | .627               | -5.54   | 59                 | .000         |

Paired samples t-test: PU UPPER POSTERIOR ARCH WIDTH BEFORE TX  
PU1 UPPER POSTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| PU       | 60              | 47.4033 | 2.768              | .357           |
| PU1      | 60              | 45.6667 | 2.225              | .287           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| 1.7367            | 1.433              | .185           | .857               | 9.39    | 59                 | .000         |

Paired samples t-test: PL LOWER POSTERIOR ARCH WIDTH BEFORE TX  
PL1 LOWER POSTERIOR ARCH WIDTH AFTER TX

| Variable | Number of Cases | Mean    | Standard Deviation | Standard Error |
|----------|-----------------|---------|--------------------|----------------|
| PL       | 60              | 49.0200 | 3.002              | .388           |
| PL1      | 60              | 47.6167 | 2.640              | .341           |

| (Difference) Mean | Standard Deviation | Standard Error | 2-Tail Corr. Prob. | t Value | Degrees of Freedom | 2-Tail Prob. |
|-------------------|--------------------|----------------|--------------------|---------|--------------------|--------------|
| 1.4033            | 1.804              | .233           | .803               | 6.02    | 59                 | .000         |

4. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ ICW(U), ICW(L) ก่อนการจัดฟัน ระหว่างผู้ป่วยที่ไม่มีการถอน และมีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: ICW(U) UPPER CANINE WIDTH BEFORE TX

|         | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--------------------|---------|-----------------------|-------------------|
| Group 1 | 60                 | 35.3867 | 2.188                 | .283              |
| Group 2 | 60                 | 35.8117 | 2.507                 | .324              |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 1.31    | .299         | -.99                     | 118                | .325         | -.99                       | 115.88             | .325         |

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: ICW(L) LOWER CANINE WIDTH BEFORE TX

|         | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--------------------|---------|-----------------------|-------------------|
| Group 1 | 60                 | 27.1133 | 1.991                 | .257              |
| Group 2 | 60                 | 27.2717 | 2.233                 | .288              |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 1.26    | .380         | -.41                     | 118                | .683         | -.41                       | 116.48             | .683         |

5. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ PAW(U), PAW(L) ก่อนการจัดฟัน ระหว่างผู้ป่วยที่ไม่มีการถอน และมีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: PAW(U) UPPER POSTERIOR ARCH WIDTH BEFORE TX

|         | Number of Cases | Mean    | Standard Deviation | Standard Error |
|---------|-----------------|---------|--------------------|----------------|
| Group 1 | 60              | 46.6017 | 1.855              | .239           |
| Group 2 | 60              | 47.4033 | 2.768              | .357           |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 2.23    | .003         | -1.86                    | 118                | .065         | -1.86                      | 103.10             | .065         |

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: PAW(L) LOWER POSTERIOR ARCH WIDTH BEFORE TX

|         | Number of Cases | Mean    | Standard Deviation | Standard Error |
|---------|-----------------|---------|--------------------|----------------|
| Group 1 | 60              | 48.0733 | 2.504              | .323           |
| Group 2 | 60              | 49.0200 | 3.002              | .388           |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 1.44    | .167         | -1.88                    | 118                | .063         | -1.88                      | 114.32             | .063         |

6. เปรียบเทียบความแตกต่างของ ICW(U), ICW(L) หลังการจัดฟัน ระหว่างผู้ป่วยที่ไม่มี  
การถอน และมีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: ICW(U)1 UPPER CANINE WIDTH AFTER TX

|         | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--------------------|---------|-----------------------|-------------------|
| Group 1 | 60                 | 36.0400 | 1.702                 | .220              |
| Group 2 | 60                 | 37.4833 | 1.925                 | .249              |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 1.28    | .346         | -4.35                    | 118                | .000         | -4.35                      | 116.25             | .000         |

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: ICW(L)1 LOWER CANINE WIDTH AFTER TX

|         | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--------------------|---------|-----------------------|-------------------|
| Group 1 | 60                 | 27.2917 | 1.598                 | .206              |
| Group 2 | 60                 | 28.5150 | 1.343                 | .173              |

|         |              | Pooled Variance Estimate |                    |              | Separate Variance Estimate |                    |              |
|---------|--------------|--------------------------|--------------------|--------------|----------------------------|--------------------|--------------|
| F Value | 2-Tail Prob. | t Value                  | Degrees of Freedom | 2-Tail Prob. | t Value                    | Degrees of Freedom | 2-Tail Prob. |
| 1.42    | .185         | -4.54                    | 118                | .000         | -4.54                      | 114.61             | .000         |

7. เปรียบเทียบความแตกต่างของความกว้างของขากรรไกรที่ PAW(U), PAW(L) หลังการ  
จัดฟัน ระหว่างผู้ป่วยที่ไม่มีการถอน และมีการถอนฟันกรามน้อยซี่แรก

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: PAW(U)1 UPPER POSTERIOR ARCH WIDTH AFTER TX

|         |  | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--|--------------------|---------|-----------------------|-------------------|
| Group 1 |  | 60                 | 48.1883 | 2.503                 | .323              |
| Group 2 |  | 60                 | 45.6667 | 2.225                 | .287              |

|      |                       | Pooled Variance Estimate |                       |                 | Separate Variance Estimate |                       |                 |
|------|-----------------------|--------------------------|-----------------------|-----------------|----------------------------|-----------------------|-----------------|
| F    | 2-Tail<br>Value Prob. | t                        | Degrees of<br>Freedom | 2-Tail<br>Prob. | t                          | Degrees of<br>Freedom | 2-Tail<br>Prob. |
| 1.27 | .368                  | 5.83                     | 118                   | .000            | 5.83                       | 116.40                | .000            |

SPSS/PC+

Independent samples of TX TREATMENT TYPES

Group 1: TX EQ 1 Group 2: TX EQ 2

t-test for: PAW(L)1 LOWER POSTERIOR ARCH WIDTH AFTER TX

|         |  | Number<br>of Cases | Mean    | Standard<br>Deviation | Standard<br>Error |
|---------|--|--------------------|---------|-----------------------|-------------------|
| Group 1 |  | 60                 | 49.8717 | 2.624                 | .339              |
| Group 2 |  | 60                 | 47.6167 | 2.640                 | .341              |

|      |                       | Pooled Variance Estimate |                       |                 | Separate Variance Estimate |                       |                 |
|------|-----------------------|--------------------------|-----------------------|-----------------|----------------------------|-----------------------|-----------------|
| F    | 2-Tail<br>Value Prob. | t                        | Degrees of<br>Freedom | 2-Tail<br>Prob. | t                          | Degrees of<br>Freedom | 2-Tail<br>Prob. |
| 1.01 | .964                  | 4.69                     | 118                   | .000            | 4.69                       | 118.00                | .000            |



ประวัติผู้เขียน

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บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย ในปีการศึกษา 2530

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