Table 1:- Distribution of Samples (n=56)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Cercon (Degudent, Hanau, Germany) (n=28)  [I] | | | | Ziecon (Jyoti Lab Pvt. Ltd, India) (n=28)  [II] | | | |
| Panavia F2.0  (14)  [IA] | | RelyX U200  (14)  [IB] | | Panavia F2.0  (14)  [IIA] | | RelyX U200  (14)  [IIB] | |
| With Thermocycling  (n=7)  [ IA1 ] | Without thermocycling (n=7)  [IA2] | With Thermocycling  (n=7)  [IB1] | Without thermocycling (n=7)  [IB2] | With Thermocycling.  (n=7)  [IIA1] | Without thermocycling (n=7)  [IIA2] | With Thermocycling  (n=7)  [IIB1] | Without thermocycling (n=7)  [IIB2] |

Table 2: Inter-comparision of the Shear Bond Strengths between two Zirconia (Cercon and Ziecon) to Dentine by Bonding with two Resin Cements (Panavia F2.0, Rely XU200) with and without Thermocycling.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Comparative evaluation of the Shear Bond Strengths between the two different Zirconia systems to Dentine by bonding with two Resin Cements with and without Thermocycling. | | | | | |
| Groups | No of samples (n) | Mean±Std. Deviation | 95% Confidence Interval of the Difference | | P value |
| Lower | Upper |
| IA1\* | 7 | 9.45 ±1.14159 | -1.50 | 1.22 | .825# |
| IIA1\*\* | 7 | 9.59±1.19840 |
| IA2\*\*\* | 7 | 13.45 ±1.47383 | -.507 | 2.65 | .165# |
| IIA2\*\*\*\* | 7 | 12.37 ±1.23539 |
| IB1\*\*\*\*\* | 7 | 8.10 ±.69049 | -1.01 | .97 | .961# |
| IIB1\*\*\*\*\*\*\* | 7 | 8.12 ±.98846 |
| IB2\*\*\*\*\*\*\* | 7 | 11.81 ±1.44295 | -.478 | 2.84 | .147# |
| IIB2\*\*\*\*\*\*\*\* | 7 | 10.63 ±1.40672 |

#p value> 0.05 insignificant

**IA1\***Shear bond strength of Zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O with thermocycling

**IA2\*\*** Shear bond strength of Zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O without thermocycling

**IB1\*\*\***Shear bond strength of Zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 with thermocycling

**IB2\*\*\*\*** Shear bond strength of Zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 without thermocycling

**IIA1\*\*\*\*\***Shear bond strength of Zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O with thermocycling

**IIA2\*\*\*\*\*\*** Shear bond strength of Zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O without thermocycling

**IIB1\*\*\*\*\*\*\***Shear bond strength of Zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 with thermocycling

**IIB2\*\*\*\*\*\*\*\*** Shear bond strength of Zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 without thermocycling.

Table 3: Comparative evaluation of effect of Thermocycling on Shear Bond Strength of Cercon (Degudent, Hanau, Germany) when bonded with PanaviaF2.O and RelyX U200 with and without Thermocycling

| Groups | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | p value |
| --- | --- | --- | --- | --- | --- | --- |
| Lower | Upper |
| IA1\*, IA2\*\* | 4.00143 | 2.29179 | .86622 | 1.88187 | 6.12098 | .004# |
| IB1\*\*\*, IB2\*\*\*\* | 3.71000 | 1.74940 | .66121 | 2.09207 | 5.32793 | .001# |

#p value> 0.05 significant

**IA1\***Shear bond strength of Zirconia Discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O with thermocycling

**IA2\*\*** Shear bond strength of Zirconia Discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O without thermocycling

**IB1\*\*\***Shear bond strength of Zirconia Discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 with thermocycling

**IB2\*\*\*\*** Shear bond strength of Zirconia Discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 without thermocycling

Table 4: Comparative evaluation of effect of Thermocycling on Shear Bond Strength of Zirconia Discs made of Ziecon (Jyoti Lab Pvt Ltd, India) when bonded with PanaviaF2.O and RelyX U200 with and without Thermocycling

| Groups | Mean Difference | Std. Deviation | 95% Confidence Interval of the Difference | | p value |
| --- | --- | --- | --- | --- | --- |
| Lower | Upper |
| IIA1\*, IIA2\*\* | 2.78429 | 1.82998 | 1.09184 | 4.47674 | .007# |
| IIB1\*\*\*, IIB2\*\*\*\* | 2.50571 | 1.51845 | 1.10138 | 3.91005 | .005# |

#p value> 0.05 significant

**IIA1\***Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O with thermocycling

**IIA2\*\*** Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O without thermocycling

**IIB1\*\*\***Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 with thermocycling

**IIB2\*\*\*\*** Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 without thermocycling

Table 5: Comparative evaluation of Shear Bond Strength of Cercon (Degudent, Hanau, Germany) when bonded with PanaviaF2.O and RelyX U200 with and without Thermocycling.

| Groups | Mean Difference | Std. Deviation | 95% Confidence Interval of the Difference | | p value |
| --- | --- | --- | --- | --- | --- |
| Lower | Upper |
| IA1\*, IB1\*\*\* | 1.35143 | 1.43411 | .02509 | 2.67776 | .047# |
| IA2\*\*, IB2\*\*\*\* | 1.64286 | 1.63829 | .12769 | 3.15802 | .038# |

#p value> 0.05 significant

**IA1\***Shear bond strength of zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O with thermocycling

**IA2\*\*** Shear bond strength of zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using PanaviaF2.O without thermocycling

**IB1\*\*\***Shear bond strength of zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 with thermocycling

**IB2\*\*\*\*** Shear bond strength of zirconia discs made of Cercon (Degudent, Hanau, Germany) bonded using RelyX U200 without thermocycling

Table 6: Comparative evaluation of Shear Bond Strength of Ziecon (Jyoti Lab Pvt Ltd, India) when bonded with PanaviaF2.O and RelyX U200 with and without Thermocycling

| Groups | Mean Difference | Std. Deviation | 95% Confidence Interval of the Difference | | T | d.f. | p value |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Lower | Upper |
| IIA1\*, IIB1\*\*\* | 1.47000 | 1.57911 | .00956 | 2.93044 | 2.463 | 6 | .049# |
| IIA2\*\*, IIB2\*\*\*\* | 1.74857 | 1.73556 | .14344 | 3.35370 | 2.666 | 6 | .037# |

#p value> 0.05 significant

**IIA1\***Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O with thermocycling

**IIA2\*\*** Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using PanaviaF2.O without thermocycling

**IIB1\*\*\***Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 with thermocycling

**IIB2\*\*\*\*** Shear bond strength of zirconia discs made of Ziecon (Jyoti Lab Pvt Ltd, India) bonded using RelyX U200 without thermocycling