Table 1: Comparision of tooth size between males & femlaes

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Sex | Mean ±S.D. | Range  | p-value |
| ∑Mandibular incisors | M | 22.4±1.6 | 19.2-26.1 | 0.90 |
| F | 22.5±1.6 | 18.8-25.9 |
| ∑Maxillary CPM | M | 20.9±1.5 | 18.2-24.9 | 0.64 |
| F | 20.8±1.2 | 17.0-23.6 |
| ∑ Mandibular CPM | M | 20.8±1.6 | 20.8-24.9 | 0.48 |
| F | 20.6±1.4 | 17-23.6 |

Table-2: Comparison of width of canines & premolars between right and left side

|  |  |  |  |
| --- | --- | --- | --- |
|  | Right side  | Left side  | p-value  |
| ∑CPM (Maxilla) | 20.9±1.4  | 20.8±1.4  | 0.11  |
| ∑CPM (Mandible) | 20.4±1.4  | 20.3±1.3  | 0.24  |

∑CPM ; Combined width of canine and premolars

**Table 3: Comparison of actual tooth size and tooth size predicted by Moyer’s and Tanak-Johnston Method**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Arch | Prediction method | Mean difference (Actual –predicted) | SD | SEM | Sig  |
| Maxilla (male)  | Moyers 75%  | -0.78 | 1.0  | 0.17  | 0.00\*  |
| Moyers 50%  | -0.19 | 1.0  | 0.19  | 0.32  |
| Tanaka-Johnston  | -1.2 | 1.0  | 0.18  | 0.00 \* |
| Mandible(male)  | Moyers 75%  | -0.8 | 1.1  | 0.2  | 0.00\*  |
| Moyers 50%  | -0.01 | 1.1  | 0.2  | 0.93  |
| Tanaka-Johnston  | -0.87 | 1.1  | 0.2  | 0.00\*  |
| Maxilla(female)  | Moyers 75%  | -0.42 | 1.0  | 0.14  | 0.00\*  |
| Moyers 50%  | 0.33 | 1.0  | 0.15  | 0.03\*  |
| Tanaka-Johnston  | -1.4 | 0.86  | 0.12  | 0.00 \* |
| Mandible(Female)  | Moyers 75% | -0.5 | 0.96  | 0.14  | 0.01 \* |
| Moyers 50%  | 0.31 | 0.96  | 0.14  | 0.03 \* |
| Tanaka-Johnston  | -1.1 | 1.1  | 0.14  | 0.00 \* |

Table 4: Characteristics of the regression equation

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ∑CPM  | Sex | r | r2  | Regression coefficient | Standard error of Mean |
| a | b |
| Maxillary  | M  | 0.77  | 0.60  | 4.33  | 0.74  | 0.99  |
| F  | 0.75  | 0.57  | 7.5  | 0.59  | 0.87  |
| M+F  | 0.75  | 0.57  | 6.4  | 0.64  | 0.92  |
| Mandibular  | M  | 0.79  | 0.62  | 2.7  | 0.80  | 1.0  |
| F  | 0.75  | 0.56  | 6.5  | 0.62  | 0.92  |
| M+F  | 0.76  | 0.58  | 5.3  | 0.68  | 0.97  |

∑CPM; combined mesio-distal width of canines and premolars, r; correlation coefficient,r2;coefficient of determination,M;males;F;females

Table5: Regression equation

|  |  |  |
| --- | --- | --- |
| ∑CPM | Sex | Equation  |
| Maxillary  | M  | Y=4.33+0.74x  |
| F  | Y=7.5+0.59x  |
| M+F  | Y=6.4+0.64x  |
| Mandibular  | M  | Y=2.7+0.80x  |
| F  | Y=6.5+0.62x  |
| M+F  | Y=5.3+0.68x  |

∑CPM; combined mesio-distal width of canines and premolars, M;males;F;females

 Table 6: Tooth size prediction table based on regression equation developed by this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Sum of incisors |  ∑ CPM Male maxillary  |  ∑CPM Female maxillary  |  ∑CPM Male Mandibular  |  ∑CPM female Mandibular |
| 18.5 | 18.6 | 18.4 | 17.5 | 18.0 |
| 19 | 19.0 | 18.7 | 17.9 | 18.3 |
| 19.5 | 19.3 | 19.0 | 18.3 | 18.6 |
| 20 | 19.7 | 19.3 | 18.7 | 18.9 |
| 20.5 | 20.1 | 19.6 | 19.1 | 19.2 |
| 21 | 20.5 | 19.9 | 19.5 | 19.5 |
| 21.5 | 20.9 | 20.2 | 19.9 | 19.8 |
| 22 | 21.3 | 20.5 | 20.3 | 20.1 |
| 22.5 | 21.7 | 20.8 | 20.7 | 20.5 |
| 23 | 22.0 | 21.1 | 21.1 | 20.8 |
| 23.5 | 22.4 | 21.4 | 21.5 | 21.1 |
| 24 | 22.8 | 21.7 | 21.9 | 21.4 |
| 24.5 | 23.2 | 22.0 | 22.3 | 21.7 |
| 25 | 23.6 | 22.3 | 22.7 | 22.0 |
| 25.5 | 24.0 | 22.5 | 23.1 | 22.3 |

 ∑CPM; combined mesio-distal width of canines and premolars, M;males;F;females

Table 7: Comparison of regression equation developed by various studies done in Nepalese subjects

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ∑CPM | Study By |  r |  r 2 | Regression coefficient | Standard error of mean |
|  a |  b |
| Maxillary | Jaiswal et al  | 0.51 | 0.26 | 13.35 | 0.35 | 0.88 |
| Gyawali et al | 0.71 | 0.51 | 6.3 | 0.66 | 0.91 |
| Present study | 0.75 | 0.57 | 6.4 | 0.64 | 0.92 |
| Mandibular | Jaiswal et al  | 0.52 | 0.27 | 11.6 | 0.40 | 0.99 |
| Gyawali et al | 0.73 | 0.53 | 4.8 | 0.70 | 0.92 |
| Present study | 0.76 | 0.58 | 5.3 | 0.68 | 0.97 |

 r; correlation coefficient,r2,coefficient of determination