

## Association of symmetric and asymmetric orthodontic extractions with different occlusal characteristics

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Different extraction patterns are employed during orthodontic treatment. The aim of this study was to compare occlusal parameters in symmetric and asymmetric extraction groups that led to the decision of certain extraction pattern. This will help in developing accurate treatment plans in the future which will improve both the efficiency and outcome of the treatment. A cross-sectional study was conducted using orthodontic files of 62 patients at a tertiary care hospital. These patients were divided into two groups according to their treatment approach. Group-1 consisted of 31 patients treated with symmetric extraction patterns, whereas Group-2 consisted of 31 patients treated with asymmetric extraction patterns. Categorical variables such as gender, and canine and molar relationships were reported as frequencies and percentages. The frequencies of canine and molar relationships were compared between the symmetric and asymmetric extraction groups using Chi-square test. The mean midline discrepancy, overjet, overbite and tooth material-arch length discrepancy were compared between the two groups using independent sample t-test. A p-value  $\leq 0.05$  was taken as statistically significant. Greater overjet values were found in the symmetric extraction group, whereas greater values of midline discrepancy were found in the asymmetric extraction group. Molar and canine relationship also showed significantly different values between the symmetric and asymmetric groups. It was concluded that overjet, midline discrepancies, molar and canine relationships play an important role in formulating ideal extraction plans. Customized treatment plans on the basis of comprehensive analysis should be developed to expect reliable results.

### Biography

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