

Peg shaped lateral incisor in Kanpur Orthodontic population

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Abstract

Aims & Objective: To evaluate the prevalence of peg lateral incisors in Kanpur Orthodontic population.

Materials & Methods: A retrospective study was designed in which records (dental casts, OPG, IOPA, history sheets) of 722 patients who visited department of Orthodontics, Rama Dental College, Hospital & Research Centre, were evaluated.

Results: A total of 722 subjects were taken out of which male subjects were 274 (38%) & females were 448 (62%).Distribution of peg laterals among males was 20% & in females it was 80 %. There were 10 cases which were unilateral (Right side 30% & left side 70%).There were nine cases which were bilateral.

Conclusion: 1. Prevalence of peg lateral was found to be 4.1%.2. The male female ratio was found to be 1:4. 3. Out of 19 peg laterals 10 were unilateral (52.63%) & 9 were bilateral (47.37 %). Out of 10 unilateral cases 3 were on right side & 7 were on left side.

Keywords: Adults, Orthodontic Treatment

Introduction

A peg shaped tooth is defined as a tooth in which incisal mesiodistal width of a crown is shorter than the cervical width. [1] Maxillary lateral incisor is commonly found to be peg shaped. [2]

Cause of dental anomalies is multifactorial.Genetics and environment both plays an important role in etiology of dental anomalies. Genetic mechanism which results in agenesis of maxillary lateral incisor also plays a role in the formation of peg laterals. [3, 4]

Present study was undertaken to evaluate the prevalence of peg lateral incisors in Kanpur Orthodontic population.

Materials & Methods

A retrospective study was designed in which records (dental casts, OPG, IOPA, history sheets) of 722 patients who visited department of Orthodontics, Rama Dental College, Hospital & Research Centre, were evaluated. All the patients were in full dentition phase with fully developed canine root. The mean age of the patient was 20.74 years & age range was 10 to 30 years. Patients who had a history of extraction or avulsion of teeth were excluded from the study. Also, patients who had a history cleft lip &

palate or any other craniofacial syndromes were not included in the study. Two investigators evaluated the records at the same time.

Results

Table 1: Gender Distribution of Sample

Gender	Number	Percentage %
Males	274	38
Females	448	62
	722	100

Table 2: Gender Distribution of Peg Lateral Incisors

Total	Percentage %	Number
Males	20%	6
Females	80%	24
Total	100%	30

Table 3: Distribution of Peg Lateral Incisors According to Side

Total	Unilateral		Bilateral
	Right	Left	
19	30% (3)	70% (7)	48% (9)

The results of the present study are shown in Table 1,2,&3. Table 1 shows the gender distribution of the sample. A total of 722 subjects were taken out of which male subjects were 274 (38%) & females were 448 (62%). Table 2 shows distribution of peg laterals among males (20%) & females (80 %). Table 3 shows distribution of peg lateral incisors according to side. There were 10 cases which were unilateral (Right side 30% & left side 70%). There were nine cases which were bilateral.

Prevalence of peg lateral varies from one race to another. Worldwide one in every 55 persons is affected by peg lateral.[2]

In our study the prevalence of peg lateral was found to be 4.1%. Aminet al[5] found the prevalence to be 1.3% in their study. Aral al[6] in their study found the prevalence to be 3.9 %.

In our study peg lateral was found more in females than males. The male female ratio was found to be 1:4. Our study agreed with the finding of Amines al[5] who found the female male ratio to be 3:0. In another study Alvinsan & Portin[3] found that there was no significant difference between males & females but the frequency was slightly higher in females.

Baralet al [5] in their study found that among the patients with peg laterals 25% were males & 75% were females. Difference was statistically significant. Hua et al[2] in their study has found that women are 1.35 times more likely than men to have peg laterals [2].

In our study out of 19 peg laterals 10 were unilateral (52.63%) & 9 were bilateral (47.37 %). Out of 10 unilateral cases 3 were on right side & 7 were on left side.

Aminet al [5] in their study showed that 67% of the patients were having peg lateral on both sides & 30 % on left side only.

Uchenonye[7] reported 75 % of peg laterals on right side in field finding & equal unilateral & bilateral finding of 33.3 % in clinic sample.

Hua et al [2] in their study found that although unilateral and bilateral peg laterals seem equally common, some left-side predisposition exists among those with unilateral peg-laterals.

Conclusion

Following conclusions were drawn from the present study: 1. Prevalence of peg lateral was found to be 4.1%. 2. The male female ratio was found to be 1:4. 3. Out of 19 peg laterals 10 were unilateral (52.63%) & 9 were bilateral (47.37 %). Out of 10 unilateral cases 3 were on right side & 7 were on left side.

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