

Table3: Dental maturation of cleft lip and palate & normal children

Age group	N (pair)	Cleft	Non –cleft	Mean dental age difference	95%CI		p-value
		Mean±SD (year)	Mean±SD (year)		lower	Upper	
All	82	9.77 ± 2.24	10.38 ± 2.83	0.62 ± 1.91	0.20	1.04	0.004*
5-6	12	7.00 ± 0.46	7.30 ± 0.53	0.30 ± 0.68	-0.13	0.73	0.18
7-9	37	8.76 ± 1.30	9.15 ± 1.96	0.40 ± 2.22	-0.34	1.14	0.24
10-14	33	11.90 ± 1.40	12.90 ± 2.02	0.98 ± 1.82	0.33	1.62	0.004*

**p<.05; Mean=Mean dental age; SD=standard deviation*

Chronological age and dental age relationship can possibly be varied among races. Since Demirjian's samples were collected only from French Canadian population, this could provide deviation of data if being used in other populations. In this study, therefore, chronological age have not been used to compare to dental age. In addition, J. Jayaraman et al.[13] demonstrated that French Canadian dataset overestimates the age of the subjects by more than six months, hence this dataset should be used cautiously when estimating dental age among different populations.

Furthermore, a study of chronological age in comparison with dental age in Thai population should be further investigated. In the case that chronological age compare to dental age of Thai population is not significantly different from French Canadian people, we can, therefore, make an assumption that in future studies we can use the same dataset as in French Canadian population.

In this study, mean dental age difference from cleft and non-cleft group at the age of 5-6 and 7-9 were not statistically significant. According to Ngan and Jang et al., it was recommended to start treatment by growth modification in CLP patients during early stages of the mixed dentition.[14, 15] Therefore, growth modification for CLP patients should be start at the same time as non-cleft group during the age of 5-6 and 7-9.

V. CONCLUSION

The dental age of Thai children with cleft lip and palate at 5–14 years of age have shown statistically significant different compared to non-cleft children. In the group of 5-6 and 7-9 years old, no difference could be detected. However, a statistically significant difference was found in a group of 10-14 years old.

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