

A Summary of “Orthodontic Intervention in the Early Mixed Dentition: A Prospective, Controlled Study on the Effects of the Eruption Guidance Appliance”.

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(A study of the Nite-Guide® technique from 5 to 8½ years of age)

Sample size: Treatment Sample = 167 (85 males, 82 females).

Control sample = 104 (52 males, 52 females)

No statistical differences between groups at 5.1 years of age. No fees to patients

Appliances worn only passively while sleeping. 69% Wore appliances to completion

Appointments: every 3 months at 5 to 10 min. each; every 6 months during retention.

Results: (all results at 8.4 yrs. significant $P < .001$).

		5.1 yrs	8.4 yrs
Maxillary crowding incidence	treatment	11%	2%
	control	9%	32%
Mandibular Crowding incidence	treatment	48%	1%
	control	44%	47%
Open-Bite incidence	treatment	51%	1%
	control	30%	36%
Overbite	treatment	3.2mm	2.1mm
	control	3.3mm	4.1mm
Overjet	treatment	3.1mm	1.9mm
	control	2.9mm	4.1mm
Class II Canine Relation	treatment	1.6mm	0.2mm
	control	1.4mm	1.4mm
Class II Terminal Plane Relation	treatment	0.7mm	-1.3mm
	control	0.5mm	0.4mm
Need for Treatment based on overbite & openbite	treatment		2%
	control		74%
Need for Treatment mandibular crowding	treatment		1%
	control		47%
Need for Treatment maxillary crowding	treatment		2%
	control		32%
Need for Treatment overjet ≥ 5 mm	treatment		0%
	control		30%
Need for Treatment Overbite ≥ 5 mm	treatment		1%
	control		38%
Need for Treatment of Class II	treatment		10%
	control		52%

Of Interest: Crowding, open bite, overbite, and overjet increased 5.1 to 8.4 yrs in control sample and decreased in the treatment group. ($P < .001$ at 8.4 yrs.)

Conclusions: The Nite-Guide® technique is an effective treatment modality for CL II tendency, overjet, overbite, open bite, crowding, anterior and posterior crossbite. Little treatment need was required at middle mixed dentition stage when compared to the control group. 13% had mild deviations at end of procedure – none needed further treatment.