Quick reference guide to Orthodontic assessment and treatment need

Eruption Patterns

Eruption pattern of deciduous teeth								
Upper		AB	D	С	Е			
Lower	Α	В	D	С	Е			

Eruption patt	ern	of p	ern	nand	ent	teet	h				
Upper	6		1	2		4		5	3	7	8
Lower	6	1	2		3		4	5		7	8

Average Eruption Dates¹

Average eruption dates of deciduous teeth (in months)								
Tooth	A & B	С	D	E				
Eruption Date	6-9	16-18	12-14	20-30				

Average eruption dates of permanent teeth (in years)								
Tooth	1	2	3	4	5	6	7	8
Uppers	7-9	7-9	11-12	10-11	10-12	6-7	11-13	17-21
Lowers	6-8	6-8	9-10	10-12	11-12	6-7	11-13	17-21

References

- 1. Scott JH & Symons NBB, 1990, Introduction to Dental Anatomy 9th ed. Churchill Livingstone.
- Brook PH & Shaw WC (1989). The development of an index of orthodontic treatment priority. Eur J Orthod 11: 309-320.

Index of Orthodontic Treatment Need[©](DHC)²

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Grade 3 (Borderline need) For NHS treatment also need aesthetic >6

- 3a. Increased overjet 3.5mm ≤ 6mm with incompetent lips
- 3b. Reverse overjet 1mm ≤ 3.5mm
- 3c. Anterior or posterior crossbites with 1mm \leq 2mm discrepancy between retruded contact position and intercuspal position
- 3d. Contact point displacements 2mm ≤ 4mm
- 3e. Lateral or anterior open bite 2mm ≤ 4mm
- 3f. Deep overbite complete to gingival or palatal tissues but no trauma

Grade 4 (Need treatment)

- 4h. Less extensive hypodontia requiring pre-restorative orthodontics or orthodontic space closure to obviate the need for a prosthesis.
- 4a. Increased overjet 6mm ≤ 9mm
- 4b. Reverse overjet >3.5mm with no masticatory or speech difficulties
- 4m. Reverse overjet 1mm < 3.5mm with recorded masticatory and speech difficulties.
- 4c. Anterior or posterior crossbites with greater than 2mm discrepancy between retruded contact position and intercuspal position
- 4l. Posterior lingual crossbite with no functional occlusal contact in one or both buccal segments
- 4d. Severe contact point displacements >4mm
- 4e. Extreme lateral or anterior open bites >6mm
- 4f. Increased and complete overbite with gingival or palatal trauma
- 4t. Partially erupted teeth, tipped and impacted against adjacent teeth
- 4x. Presence of supernumerary teeth

Grade 5 (Need treatment)

- 5i. Impeded eruption of teeth (except for third molars) due to crowding, displacement, the presence of supernumerary teeth, retained deciduous teeth or any pathological cause
- 5h. Extensive hypodontia with restorative implications (>1 tooth missing in any quadrant) requiring pre-restorative orthodontics
- 5a. Increased overjet >9mm
- 5m. Reverse overjet >3.5mm with reported masticatory and speech difficulties
- 5p. Defects of cleft lip and palate and other craniofacial anomalies
- 5s. Submerged deciduous teeth

Quick reference guide to Orthodontic assessment and referral

Scott JK and Atack NE, 2015

Stage	Normal Development	Indications for referral				
Deciduous Dentition	 Normal eruption pattern (see overleaf) Spacing is normal (primate spaces) Encourage cessation of thumb/finger/dummy sucking before 5 years old 	 Severe skeletal discrepancies Severely delayed dental development Missing/supplemental teeth History of head and neck radiotherapy +/- chemotherapy Advice for balancing/compensating extractions 				
Mixed Dentition	 Normal eruption pattern (see overleaf) Contralateral teeth should erupt within 6/12 Midline (median) diastema normal Maxillary canines palpable at 10 years old 	 Severe skeletal patterns where early treatment may be appropriate e.g. developing class II/III Dental anomalies e.g. double teeth, dens-in-dente, talon cusps Developmentally missing permanent teeth Supernumerary teeth Teeth in unfavourable positions e.g. canines Impacted first permanent molars Infraoccluded teeth Crossbites Extraction advice where severe crowding evident or first molars have poor prognosis Advice following trauma to permanent teeth 				
Permanent Dentition	 Skeletal base acceptable All permanent teeth present Class I incisors Class I molar relationship Average overjet 2-4mm Average overbite (1/3rd – ½ lower inc coverage) Well aligned arches 	 Clear-cut IOTN eligible for NHS treatment? YES (IOTN 3/6 and above) NO (below IOTN 3/6) Refer to NHS Discuss private referral to Orthodontic provider Orthodontic provider Borderline cases (Grade 3 below 3/6) can be referred for NHS assessment as these cases can be difficult to evaluate Remember, every patient has the right to a second opinion Adults may qualify for NHS treatment e.g. if they require complex multidisciplinary care. Otherwise, please refer them to an orthodontic provider for private treatment 				

