Dental Occlusion (Detailed)

Subject 10 — Bachelor of Dental Surgery

Reference and Resource List — Chapters 1 to 17

Supporting the MCQ, SBA, SAQ and flashcard question bank

BM Education FZE

Disclaimer

Questions in this bank were generated with the assistance of artificial intelligence and reviewed against the references listed. They are provided for educational revision only, are not a substitute for prescribed textbooks, clinical guidelines or supervised clinical training, and no warranty is given as to their accuracy or completeness.

References are presented in Vancouver style. Part 1 lists the core sources that apply across the whole subject; Part 2 lists, for each chapter, the relevant sections of those core texts together with sources specific to that chapter. Numbers in square brackets in Part 2 refer to the core list in Part 1.

PART 1 — CORE REFERENCES (ALL CHAPTERS)

1.1 Principal texts on occlusion

1. Okeson JP. Clinical Management of Temporomandibular Disorders and Occlusion. 9th ed. St Louis: Elsevier; 2026.
2. Okeson JP. Management of Temporomandibular Disorders and Occlusion. 8th ed. St Louis: Elsevier; 2020.
3. Wassell RW, Naru A, Steele JG, Nohl F. Applied Occlusion. 2nd ed. London: Quintessence Publishing; 2015. (Quintessentials of Dental Practice, vol. 29).
4. Davies S. A Guide to Good Occlusal Practice. 2nd ed. Cham: Springer; 2022. (BDJ Clinician's Guides).
5. Klineberg I, Eckert SE, editors. Functional Occlusion in Restorative Dentistry and Prosthodontics. Edinburgh: Mosby Elsevier; 2016.
6. Dawson PE. Functional Occlusion: From TMJ to Smile Design. St Louis: Mosby Elsevier; 2007.
7. Ash MM, Ramfjord SP. Occlusion. 4th ed. Philadelphia: WB Saunders; 1995.

1.2 Dental anatomy, occlusal morphology and supporting basic science

8. Nelson SJ. Wheeler's Dental Anatomy, Physiology and Occlusion. 11th ed. St Louis: Elsevier; 2020.
9. Berkovitz BKB, Holland GR, Moxham BJ. Oral Anatomy, Histology and Embryology. 5th ed. Edinburgh: Elsevier; 2017.
10. Nanci A. Ten Cate's Oral Histology: Development, Structure, and Function. 10th ed. St Louis: Elsevier; 2024.
11. Standring S, editor. Gray's Anatomy: The Anatomical Basis of Clinical Practice. 42nd ed. Amsterdam: Elsevier; 2020.

1.3 Fixed and removable prosthodontics

12. Rosenstiel SF, Land MF, Walter R. Contemporary Fixed Prosthodontics. 6th ed. St Louis: Elsevier; 2022.
13. Shillingburg HT, Sather DA, Wilson EL, Cain JR, Mitchell DL, Blanco LJ, et al. Fundamentals of Fixed Prosthodontics. 4th ed. Chicago: Quintessence; 2012.
14. Zarb GA, Hobkirk JA, Eckert SE, Jacob RF, editors. Prosthodontic Treatment for Edentulous Patients: Complete Dentures and Implant-Supported Prostheses. 13th ed. St Louis: Mosby Elsevier; 2013.
15. Basker RM, Davenport JC, Thomason JM. Prosthetic Treatment of the Edentulous Patient. 5th ed. Chichester: Wiley-Blackwell; 2011.
16. Lang LA, García LT, Mahrous A. McCracken's Removable Partial Prosthodontics. 14th ed. St Louis: Elsevier; 2026.
17. Carr AB, Brown DT. McCracken's Removable Partial Prosthodontics. 13th ed. St Louis: Elsevier Mosby; 2016.

1.4 Operative and restorative dentistry

18. Banerjee A, Watson TF. Pickard's Guide to Minimally Invasive Operative Dentistry. 10th ed. Oxford: Oxford University Press; 2015.
19. Ricketts D, Bartlett D, editors. Advanced Operative Dentistry: A Practical Approach. Edinburgh: Churchill Livingstone Elsevier; 2011.

1.5 Periodontal and orthodontic interface

20. Newman MG, Takei HH, Klokkevold PR, Carranza FA, editors. Newman and Carranza's Clinical Periodontology and Implantology. 14th ed. Philadelphia: Elsevier; 2023.
21. Berglundh T, Giannobile WV, Lang NP, Sanz M, editors. Lindhe's Clinical Periodontology and Implant Dentistry. 7th ed. Hoboken (NJ): Wiley Blackwell; 2021.
22. Proffit WR, Fields HW, Larson BE, Sarver DM. Contemporary Orthodontics. 6th ed. Philadelphia: Elsevier; 2019.
23. Mitchell L. An Introduction to Orthodontics. 5th ed. Oxford: Oxford University Press; 2019.

1.6 Temporomandibular disorders, orofacial pain and parafunction

24. Klasser GD, Romero-Reyes M, editors. Orofacial Pain: Guidelines for Assessment, Diagnosis, and Management. 7th ed. Chicago: Quintessence; 2023.
25. Schiffman E, Ohrbach R, Truelove E, Look J, Anderson G, Goulet JP, et al. Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for clinical and research applications. J Oral Facial Pain Headache. 2014;28(1):6-27.
26. International Classification of Orofacial Pain, 1st edition (ICOP). Cephalalgia. 2020;40(2):129-221.

27. Beecroft E, Palmer J, Penlington C, Avery L, Aggarwal V, Chase M, et al. Management of painful temporomandibular disorder in adults. London: NHS England Getting It Right First Time and Royal College of Surgeons' Faculty of Dental Surgery; 2024. Available from: https://www.rcseng.ac.uk/dental-faculties/fds/publications-guidelines/clinical-guidelines/

28. Lobbezoo F, Ahlberg J, Raphael KG, Wetselaar P, Glaros AG, Kato T, et al. International consensus on the assessment of bruxism: report of a work in progress. J Oral Rehabil. 2018;45(11):837-44.

29. Verhoeff MC, Lobbezoo F, Ahlberg J, Bender S, Bracci A, Colonna A, et al. Updating the bruxism definitions: report of an international consensus meeting. J Oral Rehabil. 2025;52(9):1335-42.

1.7 Terminology, professional standards and curriculum

30. The Academy of Prosthodontics. The Glossary of Prosthodontic Terms: tenth edition. J Prosthet Dent. 2023;130(4 Suppl 1):e1-e126.

31. General Dental Council. The Safe Practitioner: a framework of behaviours and outcomes for dental professional education. London: GDC; 2023. Available from: https://www.gdc-uk.org

32. Field JC, Cowpe JG, Walmsley AD. The graduating European dentist: a new undergraduate curriculum framework. Eur J Dent Educ. 2017;21(Suppl 1):2-10.

33. Dental Council of India. Bachelor of Dental Surgery (BDS) Course Regulations, 2007 (as amended). New Delhi: DCI.

34. Scottish Dental Clinical Effectiveness Programme. Clinical guidance in dentistry. Dundee: SDCEP. Available from: https://www.sdcep.org.uk

Key journals for currency

Journal of Oral Rehabilitation · Journal of Prosthetic Dentistry · Journal of Prosthodontics · International Journal of Prosthodontics · British Dental Journal · Journal of Dentistry · Journal of Oral & Facial Pain and Headache · Journal of Clinical Periodontology · Journal of Periodontology · Dental Update · International Dental Journal · Journal of Dental Research

PART 2 — CHAPTER-SPECIFIC REFERENCES

Chapter 1 — Foundations and Terminology

Definition and scope of occlusion · Occlusion across the dental disciplines · Static and dynamic contact relationships · Maximum intercuspation, centric occlusion, centric relation and the retruded contact position · Occlusal stability, interferences and occlusal schemes

Core texts: [1] Chs. 4 and 6 · [3] introductory chapters on occlusal terms and concepts · [4] “What is occlusion?” · [7] · [30] definitions of occlusion, articulation, centric relation and intercuspal position

Additional

- Davies S, Gray RMJ. What is occlusion? Br Dent J. 2001;191(5):235-45.
- Davies SJ. Occlusion in restorative dentistry: conformative, re-organised or unorganised? Dent Update. 2004;31(6):334-45.
- Smith BGN. Occlusion: 1. General considerations. Dent Update. 1991;18(4):141-5.
- Türp JC, Greene CS, Strub JR. Dental occlusion: a critical reflection on past, present and future concepts. J Oral Rehabil. 2008;35(6):446-53.
- Koyano K, Tsukiyama Y, Kuwatsuru R. Rehabilitation of occlusion — science or art? J Oral Rehabil. 2012;39(7):513-21.
- Mehta SB, Banerji S. The application of occlusion in clinical practice part 1: essential concepts in clinical occlusion. Dent Update. 2018;45(11):1003-15.
- Davies SJ. Malocclusion — a term in need of dropping or redefinition? Br Dent J. 2007;202(9):519-20.

Chapter 2 — Tooth Morphology and Occlusal Anatomy (Applied)

2.1 Functional vs non-functional cusps (supporting cusps) · 2.2 Cusp inclines: inner vs outer inclines and their contact roles · 2.3 Fossae, marginal ridges, grooves and triangular ridges · 2.4 Occlusal embrasures and spillways · 2.5 Curve of Spee · 2.6 Curve of Wilson · 2.7 Curve of Monson · 2.8 Occlusal contacts by tooth type

Core texts: [8] Chs. 5–12 (permanent dentition) and Ch. 16 (Occlusion) · [1] Chs. 4 and 7 · [9] chapters on tooth morphology and the dentitions · [7] · [3]

Additional

- Monson GS. Occlusion as applied to crown and bridgework. J Am Dent Assoc. 1920;7:399-410.
- Marklund S, Wänman A. A century of controversy regarding the benefit or detriment of occlusal contacts on the mediotrusive side. J Oral Rehabil. 2000;27(7):553-62.
- Thornton LJ. Anterior guidance: group function/canine guidance. A literature review. J Prosthet Dent. 1990;64(4):479-82.
- Davies SJ, Gray RMJ, Smith PW. Good occlusal practice in simple restorative dentistry. Br Dent J. 2001;191(7):365-81.
- Yamashita S, Hatch JP, Rugh JD. Does chewing performance depend upon a specific masticatory pattern? J Oral Rehabil. 1999;26(7):547-53.
- Sippy VR, Hegde C, Shetty G. A study to evaluate the influence of condylar and incisal guidance in canine guided and group function occlusal schemes. J Indian Prosthodont Soc. 2021;21(3):256-61.

Chapter 3 — Determinants of Occlusion

3.1 Posterior determinants: condylar guidance · 3.2 Anterior determinants: incisal guidance · 3.3 Neuromuscular control and proprioception · 3.4 Tooth guidance vs joint guidance interplay · 3.5 Influence of posture and parafunction on occlusion

Core texts: [1] Chs. 5 and 7 · [5] Chs. 1, 5 and 7 · [6] Ch. 4 · [3] · [7]

Additional

- Sippy VR, Hegde C, Shetty G. A study to evaluate the influence of condylar and incisal guidance in canine guided and group function occlusal schemes. J Indian Prosthodont Soc. 2021;21(3):256-61.
- Posselt U. Studies in the mobility of the human mandible. Acta Odontol Scand. 1952;10(Suppl 10):1-160.
- Guichet NF. Applied gnathology: why and how. Dent Clin North Am. 1969;13(3):687-700.
- Pokorny PH, Wiens JP, Litvak H. Occlusion for fixed prosthodontics: a historical perspective of the gnathological influence. J Prosthet Dent. 2008;99(4):299-313.
- Türp JC, Schindler H. The dental occlusion as a suspected cause for TMDs: epidemiological and etiological considerations. J Oral Rehabil. 2012;39(7):502-12.

- Hall RE. Movements of the mandible. J Am Dent Assoc. 1920;7:677-83.

Chapter 4 — Mandibular Movements and Border Movements

4.1 Basic mandibular movements: opening/closing, protrusion, retrusion, lateral excursions · 4.2 Hinge axis concept · 4.3 Border movements and Posselt's envelope of motion · 4.4 Bennett movement · 4.5 Working side vs non-working side condyle movement · 4.6 Immediate vs progressive side shift

Core texts: [1] Chs. 2 and 5 · [5] Chs. 5 and 6 · [8] Ch. 15 (The temporomandibular joints, teeth, and muscles and their functions) · [11] sections on the temporomandibular joint and muscles of mastication · [6] Chs. 5 and 6

Additional

- Posselt U. Studies in the mobility of the human mandible. Acta Odontol Scand. 1952;10(Suppl 10):1-160.
- Hall RE. Movements of the mandible. J Am Dent Assoc. 1920;7:677-83.
- Long JH. Location of the terminal hinge axis by intra-oral means. J Prosthet Dent. 1970;23(1):11-24.
- Becker CM, Kaiser DA. Evolution of occlusion and occlusal instruments. J Prosthodont. 1993;2(1):33-43.
- Ingervall B, Helkimo M, Carlsson GE. Recording of the retruded position of the mandible with application of varying external pressure to the lower jaw in man. Arch Oral Biol. 1971;16(10):1165-72.
- Yamashita S, Hatch JP, Rugh JD. Does chewing performance depend upon a specific masticatory pattern? J Oral Rehabil. 1999;26(7):547-53.

Chapter 5 — Contacts in Static Occlusion

5.1 Ideal occlusal contact goals: stable, simultaneous posterior contacts · 5.2 Cusp-fossa vs cusp-embrasure contact concepts · 5.3 Supporting cusp contacts and centric stops · 5.4 Occlusal contact marking: articulating paper and shimstock · 5.5 Premature contacts and deflective slides · 5.6 Occlusal wear facets and what they indicate

Core texts: [1] Ch. 6 (Dental criteria for a stable functional occlusion) · [3] · [4] “Examination and recording of the occlusion” · [8] Ch. 16 · [7]

Additional

- Davies SJ, Gray RMJ. The examination and recording of the occlusion: why and how. Br Dent J. 2001;191(6):291-302.
- Baba K, Tsukiyama Y, Clark GT. Reliability, validity, and utility of various occlusal measurement methods and techniques. J Prosthet Dent. 2000;83(1):83-9.
- Wise MD. Occlusion and restorative dentistry for the general practitioner. Part 2 — examination of the occlusion and fabrication of study casts. Br Dent J. 1982;152(5):160-5.
- Capp NJ, Clayton JA. A technique for evaluation of centric relation tooth contacts. Part I — during normal temporomandibular joint function. J Prosthet Dent. 1985;54(4):569-75.
- Celenza FV. The centric position: replacement and character. J Prosthet Dent. 1973;30(4):591-8.
- Mehta SB, Banerji S. The application of occlusion in clinical practice part 1: essential concepts in clinical occlusion. Dent Update. 2018;45(11):1003-15.

Chapter 6 — Dynamic Occlusion and Occlusal Guidance

6.1 Working side contacts: canine guidance vs group function · 6.2 Protrusive guidance: incisal guidance and posterior disclusion · 6.3 Non-working side interferences · 6.4 Protrusive interferences · 6.5 Occlusal schemes and mutually protected occlusion · 6.6 Balanced occlusion awareness

Core texts: [1] Chs. 6 and 7 · [5] Chs. 7 and 8 · [6] Chs. 15 and 17 · [3] · [4]

Additional

- Thornton LJ. Anterior guidance: group function/canine guidance. A literature review. J Prosthet Dent. 1990;64(4):479-82.
- Marklund S, Wänman A. A century of controversy regarding the benefit or detriment of occlusal contacts on the mediotrusive side. J Oral Rehabil. 2000;27(7):553-62.
- Domingos NO, Bernardino Júnior R, Gaspar PTC, Lizardo FB, Amorim CF, Silva DCO. Electromyographic activity of the masseter muscle in individuals with group function and canine guidance. J Dent Res Dent Clin Dent Prospects. 2021;15(4):232-8.
- Xie Q, Li X, Xu X. The difficult relationship between occlusal interferences and temporomandibular disorder — insights from animal and human experimental studies. J Oral Rehabil. 2013;40(4):279-95.

- Davies SJ, Gray RMJ, Whitehead SA. Good occlusal practice in advanced restorative dentistry. Br Dent J. 2001;191(8):421-34.
- Sippy VR, Hegde C, Shetty G. A study to evaluate the influence of condylar and incisal guidance in canine guided and group function occlusal schemes. J Indian Prosthodont Soc. 2021;21(3):256-61.

Chapter 7 — Anterior Guidance and Anterior Teeth Relationships

7.1 Overjet and overbite: definitions and clinical significance · 7.2 Incisal guidance: determinants and effects on posterior contacts · 7.3 Deep bite and open bite · 7.4 Anterior and posterior crossbite · 7.5 Role of anterior teeth in speech and aesthetics

Core texts: [1] Chs. 4 and 6 · [6] Chs. 16 and 17 · [23] chapters on the classification of malocclusion and incisor relationships · [22] chapters on the development of dental occlusion and malocclusion · [3]

Additional

- Davies SJ, Gray RMJ, Sandler PJ, O'Brien KD. Orthodontics and occlusion. Br Dent J. 2001;191(10):539-49.
- Davies SJ. Malocclusion — a term in need of dropping or redefinition? Br Dent J. 2007;202(9):519-20.
- Thornton LJ. Anterior guidance: group function/canine guidance. A literature review. J Prosthet Dent. 1990;64(4):479-82.
- Rinchuse DJ, Kandasamy S. Myths of orthodontic gnathology. Am J Orthod Dentofacial Orthop. 2009;136(3):322-30.
- Poyser NJ, Porter RWJ, Briggs PFA, Chana HS, Kelleher MGD. The Dahl concept: past, present and future. Br Dent J. 2005;198(11):669-76.
- Maglad A, Wassell RW, Barclay SC, Walls AWG. Risk management in clinical practice. Part 3. Crowns and bridges. Br Dent J. 2010;209(3):115-22.

Chapter 8 — Occlusal Vertical Dimension and Interocclusal Space

8.1 Vertical dimension at rest vs vertical dimension of occlusion · 8.2 Freeway space and the interocclusal rest space · 8.3 Loss of occlusal vertical dimension: causes and consequences · 8.4 Increasing occlusal vertical dimension: adaptation and caution · 8.5 Clinical assessment of vertical dimension

Core texts: [1] Ch. 20 (Considerations for the management of the dental occlusion) · [6] Ch. 13 (Vertical dimension) · [14] chapters on recording jaw relations for edentulous patients · [15] chapters on registration and vertical dimension · [30] definitions of vertical dimension of occlusion and rest position

Additional

- Abduo J, Lyons K. Clinical considerations for increasing occlusal vertical dimension: a review. Aust Dent J. 2012;57(1):2-10.
- Abduo J. Safety of increasing vertical dimension of occlusion: a systematic review. Quintessence Int. 2012;43(5):369-80.
- Poyser NJ, Porter RWJ, Briggs PFA, Chana HS, Kelleher MGD. The Dahl concept: past, present and future. Br Dent J. 2005;198(11):669-76.
- Turner KA, Missirlian DM. Restoration of the extremely worn dentition. J Prosthet Dent. 1984;52(4):467-74.
- Mehta SB, Banerji S, Millar BJ, Suarez-Feito JM. Current concepts on the management of tooth wear: part 1. Assessment, treatment planning and strategies for the prevention and the passive management of tooth wear. Br Dent J. 2012;212(1):17-27.
- Fenlon MR, Sherriff M, Walter JD. Association between the accuracy of intermaxillary relations and complete denture usage. J Prosthet Dent. 1999;81(5):520-5.

Chapter 9 — Intercuspal Position, Centric Relation, and CR Records

9.1 Centric relation as a repeatable reference position · 9.2 Relationship of centric relation to maximum intercuspation: coincidence vs slide · 9.3 When centric relation records are needed · 9.4 Methods of recording centric relation · 9.5 Errors in jaw relation records and their consequences

Core texts: [1] Chs. 5 and 6 · [6] Chs. 7–11 (centric relation, adapted centric posture, determining, load testing and recording centric relation) · [5] Ch. 9 (Articulators, transfer records and study casts) · [7] · [30] definitions of centric relation, centric occlusion and retruded contact position

Additional

- Keshvad A, Winstanley RB. An appraisal of the literature on centric relation. Part I. J Oral Rehabil. 2000;27(10):823-33.

- Keshvad A, Winstanley RB. An appraisal of the literature on centric relation. Part II. J Oral Rehabil. 2000;27(12):1013-23.
- Keshvad A, Winstanley RB. An appraisal of the literature on centric relation. Part III. J Oral Rehabil. 2001;28(1):55-63.
- Wilson PHR, Banerjee A. Recording the retruded contact position: a review of clinical techniques. Br Dent J. 2004;196(7):395-402.
- Jasinevicius TR, Yellowitz JA, Vaughan GG, Brooks ES, Baughan LW, Cline N, et al. Centric relation definitions taught in 7 dental schools: results of faculty and student surveys. J Prosthodont. 2000;9(2):87-94.
- Lucia VO. Centric relation, theory and practice. J Prosthet Dent. 1960;10(5):849-56.
- Long JH. Locating centric relation with a leaf gauge. J Prosthet Dent. 1973;29(6):608-10.
- Rinchuse DJ, Kandasamy S. Centric relation: a historical and contemporary orthodontic perspective. J Am Dent Assoc. 2006;137(4):494-501.

Chapter 10 — Occlusal Trauma and Periodontal Considerations

10.1 Primary vs secondary occlusal trauma · 10.2 Clinical signs: fremitus, mobility, widened periodontal ligament space, wear facets · 10.3 Differentiating occlusal trauma from periodontitis · 10.4 Management principles: removing interferences, splinting awareness, periodontal therapy

Core texts: [20] chapters on the periodontal response to external forces and occlusal evaluation and therapy · [21] chapters on trauma from occlusion and periodontal tissue response · [1] Ch. 8 · [5] Chs. 2 and 15 (Occlusion and periodontal health) · [3]

Additional

- Fan J, Caton JG. Occlusal trauma and excessive occlusal forces: narrative review, case definitions, and diagnostic considerations. J Periodontol. 2018;89(Suppl 1):S214-22.
- Jepsen S, Caton JG, Albandar JM, Bissada NF, Bouchard P, Cortellini P, et al. Periodontal manifestations of systemic diseases and developmental and acquired conditions: consensus report of workgroup 3 of the 2017 World Workshop. J Clin Periodontol. 2018;45(Suppl 20):S219-29.
- Hallmon WW. Occlusal trauma: effect and impact on the periodontium. Ann Periodontol. 1999;4(1):102-8.
- Ramfjord SP, Ash MM. Significance of occlusion in the etiology and treatment of early, moderate and advanced periodontitis. J Periodontol. 1981;52(9):511-17.
- Davies SJ, Gray RMJ, Linden GJ, James JA. Occlusal considerations in periodontics. Br Dent J. 2001;191(11):597-604.
- Gher ME. Non-surgical pocket therapy: dental occlusion. Ann Periodontol. 1996;1(1):567-80.

Chapter 11 — Parafunction and Tooth Wear

11.1 Bruxism: sleep vs awake bruxism · 11.2 Attrition, abrasion and erosion: definitions and differentiation · 11.3 Tooth wear indices · 11.4 Clinical consequences: sensitivity, cracks, reduced crown height, aesthetic concerns · 11.5 Management principles: habit advice, splint awareness, restorative planning

Core texts: [1] Chs. 8 and 17 (Occlusal appliance therapy) · [5] Chs. 14 and 20 · [18] chapters on tooth surface loss and its management · [19] chapters on the management of the worn dentition · [4] “Management of tooth surface loss” and “Bruxism”

Additional

- Lobbezoo F, Ahlberg J, Raphael KG, Wetselaar P, Glaros AG, Kato T, et al. International consensus on the assessment of bruxism: report of a work in progress. J Oral Rehabil. 2018;45(11):837-44.
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- Smith BGN, Knight JK. An index for measuring the wear of teeth. Br Dent J. 1984;156(12):435-8.
- Bartlett D, Ganss C, Lussi A. Basic Erosive Wear Examination (BEWE): a new scoring system for scientific and clinical needs. Clin Oral Investig. 2008;12(Suppl 1):S65-8.
- Aránguiz V, Lara JS, Marró ML, O'Toole S, Ramírez V, Bartlett D. Recommendations and guidelines for dentists using the Basic Erosive Wear Examination index (BEWE). Br Dent J. 2020;228(3):153-7.
- Wetselaar P, Wetselaar-Glas MJM, Katzer LD, Ahlers MO. Diagnosing tooth wear, a new taxonomy based on the revised version of the Tooth Wear Evaluation System (TWES 2.0). J Oral Rehabil. 2020;47(6):703-12.
- Loomans B, Opdam N, Attin T, Bartlett D, Edelhoff D, Frankenberger R, et al. Severe tooth wear: European consensus statement on management guidelines. J Adhes Dent. 2017;19(2):111-19.
- Jagger R, King E. Occlusal splints for bruxing and TMD — a balanced approach? Dent Update. 2018;45(10):912-18.

Chapter 12 — Occlusion in Restorative Dentistry (Operative Perspective)

12.1 Reproducing occlusal anatomy in restorations · 12.2 Occlusal adjustment after restorations: detecting and correcting high points · 12.3 Functional cusp bevel · 12.4 Occlusal considerations in Class II restorations · 12.5 Post-operative sensitivity and occlusal high points · 12.6 Occlusion and fracture risk: cusp coverage

Core texts: [18] chapters on cavity design, plastic restorations and occlusal management · [19] chapters on the restoration of posterior teeth and cuspal coverage · [1] Ch. 20 · [3] · [4] "Good occlusal practice in simple restorative dentistry"

Additional

- Davies SJ, Gray RMJ, Smith PW. Good occlusal practice in simple restorative dentistry. Br Dent J. 2001;191(7):365-81.
- Mehta SB, Banerji S. The application of occlusion in clinical practice part 1: essential concepts in clinical occlusion. Dent Update. 2018;45(11):1003-15.
- Baba K, Tsukiyama Y, Clark GT. Reliability, validity, and utility of various occlusal measurement methods and techniques. J Prosthet Dent. 2000;83(1):83-9.
- Maglad A, Wassell RW, Barclay SC, Walls AWG. Risk management in clinical practice. Part 3. Crowns and bridges. Br Dent J. 2010;209(3):115-22.
- Davies SJ. Occlusion in restorative dentistry: conformative, re-organised or unorganised? Dent Update. 2004;31(6):334-45.
- Poyser NJ, Porter RWJ, Briggs PFA, Chana HS, Kelleher MGD. The Dahl concept: past, present and future. Br Dent J. 2005;198(11):669-76.

Chapter 13 — Occlusion in Fixed Prosthodontics (Intro)

13.1 Occlusal reduction and clearance · 13.2 Verification of the occlusion and interocclusal records · 13.3 Occlusal schemes for fixed restorations · 13.4 Articulator selection · 13.5 Occlusal morphology of the restoration · 13.6 Interferences, occlusal adjustment and complications

Core texts: [12] chapters on occlusion, articulators, interocclusal records and tooth preparation · [13] chapters on occlusion, articulators and preparation for cast restorations · [5] Ch. 17 (Occlusion and fixed prosthodontics) · [1] Ch. 20 · [3]

Additional

- Davies SJ, Gray RMJ, Whitehead SA. Good occlusal practice in advanced restorative dentistry. Br Dent J. 2001;191(8):421-34.
- Maglad A, Wassell RW, Barclay SC, Walls AWG. Risk management in clinical practice. Part 3. Crowns and bridges. Br Dent J. 2010;209(3):115-22.
- Pokorny PH, Wiens JP, Litvak H. Occlusion for fixed prosthodontics: a historical perspective of the gnathological influence. J Prosthet Dent. 2008;99(4):299-313.
- Thornton LJ. Anterior guidance: group function/canine guidance. A literature review. J Prosthet Dent. 1990;64(4):479-82.
- Warren K, Capp N. A review of principles and techniques for making interocclusal records for mounting working casts. Int J Prosthodont. 1990;3(4):341-8.
- Mehta SB, Banerji S. The application of occlusion in clinical practice part 2: the taking of occlusal records. Dent Update. 2019;46(1):30.

Chapter 14 — Occlusion in Removable Prosthodontics (Complete Dentures/RPD)

14.1 Balanced occlusion for complete dentures · 14.2 Lingualised occlusion · 14.3 Denture stability and occlusal plane errors · 14.4 RPD occlusion: harmonising artificial teeth with the natural dentition · 14.5 Remount procedures for denture occlusal refinement

Core texts: [14] chapters on the occlusion of complete dentures and jaw relation records · [15] chapters on registration, try-in and occlusal correction · [16] chapters on occlusal relationships and establishing occlusion for removable partial dentures · [17] · [5] Ch. 18 (Occlusion and removable prosthodontics)

Additional

- Davies SJ, Gray RMJ, McCord JF. Good occlusal practice in removable prosthodontics. Br Dent J. 2001;191(9):491-502.
- McCord JF, Grant AA. Registration: stage II — intermaxillary relations. Br Dent J. 2000;188(11):601-6.
- Fenlon MR, Sherriff M, Walter JD. Association between the accuracy of intermaxillary relations and complete denture usage. J Prosthet Dent. 1999;81(5):520-5.

- Shanahan TE. Physiologic jaw relations and occlusion of complete dentures. J Prosthet Dent. 1955;5(3):319-22.
- Warren K, Capp N. A review of principles and techniques for making interocclusal records for mounting working casts. Int J Prosthodont. 1990;3(4):341-8.
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Chapter 15 — Temporomandibular Disorders (Occlusal Link — Intro)

15.1 TMD overview: muscle pain vs joint disorders · 15.2 Occlusion and TMD: association vs causation · 15.3 Clinical screening: deviation, clicking, tenderness, limited opening · 15.4 Initial management: reassurance, self-care, splint awareness · 15.5 Referral thresholds: red flags, persistent limitation, trauma history

Core texts: [1] Chs. 8–19 · [24] · [25] · [26] · [27] · [5] Chs. 6, 13, 14 and 20

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Chapter 16 — Articulators, Facebows, and Occlusal Records (Applied Intro)

16.1 Purpose of articulators: mounting casts to simulate jaw movements · 16.2 Mean value vs semi-adjustable articulators · 16.3 Facebow transfer: concept and indications · 16.4 Occlusal records: bite registrations, interocclusal records and errors · 16.5 Mounting procedures

Core texts: [5] Ch. 9 (Articulators, transfer records and study casts) · [12] chapters on articulators and interocclusal records · [13] chapters on articulators and facebow transfer · [14] chapters on jaw relation records and articulation · [1] Ch. 5

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Chapter 17 — Occlusal Analysis and Adjustment (Clinical Basics)

17.1 Occlusal examination sequence: MI contacts, excursions, interferences · 17.2 Tools: articulating paper, shimstock, occlusal indicator wax · 17.3 Selective grinding principles and the BULL rule · 17.4 Indications and contraindications for occlusal equilibration · 17.5 Post-adjustment verification and patient comfort checks

Core texts: [1] Ch. 20 · [5] Ch. 21 (Occlusal adjustment in occlusion management) · [3] · [4] “Examination and recording of the occlusion” · [6] chapters on occlusal equilibration and the options for occlusal correction

Additional

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