

Contents

Foreword *ix*

Acknowledgement *xi*

About the Companion Website *xiii*

1	Introduction and the Prevalence of Tooth Wear	1
1.1	Introduction	1
1.2	Physiological Wear and Pathological Wear: The Concept of Severe Tooth Wear	2
1.3	The Prevalence of TW	4
1.4	An Overview of the Challenges Associated with TW	6
1.5	Conclusion	7
	References	9
2	The Aetiology and Presentation of Tooth Wear	11
2.1	Introduction	11
2.2	Intrinsic Mechanical Wear	12
2.3	Extrinsic Mechanical Wear	13
2.4	Non-carious Cervical Lesions	14
2.5	Chemical Wear	15
2.6	Cofactors	20
2.7	Conclusion	20
	References	23
	Further Reading	24
3	The Clinical Assessment and Diagnosis of the Wear Patient	25
3.1	Introduction	25
3.2	The Initial Assessment: The Presenting Complaint and the History of the Presenting Complaint	26
3.3	Medical History	27
3.4	Dental and Socio-behavioural History	29
3.5	Patient Examination	30
3.6	Special Tests	42
3.7	Summary	43
3.8	Conclusion	43
	References	48
	Further Reading	49

4	The Diagnosis of Tooth Wear, Including the Use of Common Clinical Indices	51
4.1	Introduction	51
4.2	The Use of Descriptive Means to Qualify and Quantify Tooth Wear	53
4.3	The Use of Clinical Indices for the Diagnosis of TW	57
4.4	Conclusion	61
	References	65
5	Clinical Occlusion in Relation to Tooth Wear	67
5.1	Introduction	67
5.2	The Concept of the Ideal Occlusion	67
5.3	The Fabrication of Appropriate Study Casts and Records to Enable Occlusal Analysis	70
5.4	How and When to Take the Conformative Approach to Restorative Rehabilitation	80
5.5	How and When to Adopt a Reorganised Approach	82
5.6	The Placement of Dental Restorations in Supra-occlusion: The Dahl Concept	85
5.7	Summary and Conclusions	88
	References	92
	Further Reading	94
6	Management of Tooth Wear: Monitoring and Prevention Strategies	95
6.1	Introduction	95
6.2	Counselling and Monitoring	95
6.3	Prevention	98
6.4	Preventive Measures in Case of Chemical Wear	98
6.5	Preventive Measures in Case of Mechanical Wear	99
	References	101
7	The Role of Occlusal Splints for Patients with Tooth Wear	103
7.1	Introduction	103
7.2	The Role of Stabilisation Splints for the Management of Tooth Wear	103
7.3	Clinical Protocol for the Fabrication of a Stabilisation Splint: The Conventional Approach	105
7.4	The Use of CAD/CAM for Fabrication of a Stabilisation Splint	107
7.5	The Use of Soft (Vacuum-formed) Occlusal Splints for the Management of TW	108
7.6	Summary and Conclusion	109
	References	113
	Further Reading	113
8	Treatment Planning and the Application of Diagnostic Techniques	115
8.1	Introduction	115
8.2	Developing a Logically Sequenced Treatment Plan for a Patient with Pathological Tooth Wear	116
8.3	Forming the Aesthetic Prescription for the TW Patient	121
8.4	The Preparation and Evaluation of the Diagnostic Wax-Up	124
8.5	Summary and Conclusions	125
	References	127

9	Concepts in the Restoration of the Worn Dentition	129
9.1	Introduction	129
9.2	The Additive/Adhesive Approach Versus the Conventional/Subtractive Approach for the Management of Worn Teeth	129
9.3	Concepts in Dental Adhesion	135
9.4	Some Pragmatic Considerations when Attempting to Apply Adhesive Techniques to the Management of TW	140
9.5	Summary and Conclusions	141
	References	142
	Further Reading	144
10	Dental Materials: An Overview of Material Selection for the Management of Tooth Wear	145
10.1	Introduction	145
10.2	The Use of Resin Composite to Treat TW	146
10.3	The Use of Cast Metal (Nickel/Chromium or Type III/IV) Gold Alloys	153
10.4	Adhesive Ceramic Restorations	154
10.5	Summary	156
	References	157
	Further Reading	160
11	The Principles and Clinical Management of Localised Anterior Tooth Wear	161
11.1	Introduction	161
11.2	Inter-occlusal space availability	162
11.3	Restoration of Localised Anterior TW	163
11.4	Summary and Conclusions	179
	References	180
12	The Principles and Clinical Management of Localised Posterior Tooth Wear	183
12.1	Introduction	183
12.2	The Canine–Riser Restoration	184
12.3	Techniques for the Restoration of Localised Posterior Wear Using Adhesively Retained Restorations	184
12.4	Restoration of Localised Posterior Wear Using Conventionally Retained Restorations	190
12.5	Management of the Occlusal Scheme When Using Indirect Restorations to Treat Localised Posterior TW (Other than in the Supra-Occlusal Location)	191
12.6	Summary and Conclusions	193
	References	194
13	The Principles and Clinical Management of Generalised Tooth Wear	197
13.1	Introduction	197
13.2	The Prosthodontic Approach to the Restorative Rehabilitation of Generalised Tooth Wear	199
13.3	Conclusions	203
	References	205

14	The Prognosis of the Restored Worn Dentition: Contingency Planning, the Importance of Maintenance, and Recall	207
14.1	Introduction	207
14.2	Survival of Direct and Indirect Restorations	208
14.3	Repair and Replacement	209
14.4	Repair Techniques	210
14.5	Conclusions	214
	References	216
	Index	219