

INDEX

A

abrasion 254
accessory pulpal canals 54
acellular dermal matrix (ADM) 229, 230, 232, 234, 243, 245
Actisite 96, 98, 99
acute dental infection 321
adalimumab 73
adapted horizontal technique 377
adjunctive systemic antibiotics 104–106
 advantages 104
 periodontal infections, treatment of 109
adjustable stopper and bone ejector (ASBE) trephine 309, 351, 352, 354
ADM *see* acellular dermal matrix (ADM)
advanced glycation end products (AGEs) 63
adverse pregnancy outcomes 69
aggressive periodontitis 30–33, 43
alloderm 228–233
allografts
 extraction socket, placement in 205
 intrabony defects treatment by 164–167
 for mucogingival therapy 228–233
alloplast 171, 195
alloplastic materials 187
 hydroxyapatite (HA) 185
 intrabony defects treatment by 181–183
alveolar bone loss 41
alveolar ridge preservation 315–322
alveoloplasty 266
amoxicillin 36, 103, 107, 112, 244, 294, 300, 325, 331
angular bone loss 77, 78
ankyloglossia 239
apical foramen communication 255
Arestin 96, 98–100, 294
Atridox 94, 96, 98, 99
autogenous free gingival graft 282

autografts 171, 194
 limitations 171, 195
azithromycin 29

B

bacterial biofilms 96
bacterial effect 255
bacterial plaque 160
Bass intrasulcular technique of toothbrushing 14, 147, 249, 250, 377
 β -Tricalcium phosphate (β -TCP) 185
bioactive glasses (bio-glasses) 185
Biolase (Er,Cr:YSGG) 118
biologic width 134, 135, 137, 186
 definition of 130
 invasion of 265–266
biomarkers 41, 69, 71, 72
Bio-Oss® collagen bone graft 290, 295, 325
bisphosphonates 194
bitewing radiographs 80, 81, 229
bleeding on probing (BOP) 102
blunt-ended Glick instrument 351
bone-added osteotome sinus floor elevation technique 304
bone allograft 195
bone graft 279, 282, 290, 291, 310, 317, 335, 370
 alloplasts for 185
 for ARP 320, 321
 materials 304
 for ridge augmentation 196
bone loss 142
bone morphogenetic protein (BMP)-2 179, 304
bone remodeling 319
bone resorption progresses 319
Bruno's technique 212
bruxism 76, 149, 255
buccal flap 230, 231, 325

buccal furcation groove 55
 buccal radicular groove 54
 buccal temporary anchorage device 278
 bundle bone 319

C

calcium hydroxide 294
 calcium sulfate 185
 cancellous bone chips (DynaBlast) 305
 canine exposure 271, 272
 carbon dioxide laser surgery 240
 cardiac pacemakers 90
 cardiovascular disease 68–69, 71
 cavitation 90
 Cavitron 50, 53, 116
 cemento-enamel junction (CEJ) 28, 38, 52
 centric occlusion 260
 cephalometric radiograph 278
 ceramo-metal crowns 331
 cervical enamel projection (CEP) 49, 50, 52, 53, 161
 cervical vertebral maturation (CVM) 371
 chemical irritation 254
 chisel 325, 333
 chlorhexidine 96, 148, 209, 237
 chlorhexidine oral rinses 294
 chronic periodontal disease 154
 chronic periodontitis 38–44, 46, 105, 112
 civatte bodies 21
 clinical attachment level (CAL) 38
 clinical attachment loss (CAL) 16
 closed eruption technique 272, 274
 cobra elevators 314
 Cobra instrument 352, 353
 collagenic membrane 300, 301
 colloid bodies 21
 computed tomography 80, 340
 cone-beam computed tomography (CBCT) 77–78, 80–82, 273, 274
 connective tissue grafts 206–212
 crown margins 211
 implant collar 211
 inadequate attached gingiva with recession 211
 indications for 210
 keratinized/attached gingiva 207, 210, 220
 lingual recession 211
 postoperative follow-up 210
 postoperative instructions 209
 prescriptions 209
 probing pocket depth/recession measurements 207
 progressive recession 211
 root coverage and ridge augmentation 212
 root preparation 208–209
 root wear/erosion/cervical abrasion 211
 SCTG, treatment with 211
 suturing 209

techniques of 211–213
 teeth with gingival recession 210
 teeth without gingival recession 210
 Zucchelli technique 208
 connective tissue growth factor 28
 conventional crestal approaches 311
 conventional implant placement 338–342
 intraoperative surgical-related complications 344
 postoperative surgical-related complications 344
 conventional periodontal therapy 118
 coronally positioned flap 203
 corticosteroid 18
 craniofacial growth 370
 crestal approach 304
 crestal sinus lifts 313
 crestal window technique 311, 313, 314, 356
 with conventional two-stage approach 354
 internal sinus lift 307–312
 critical probing depth 91
 crown lengthening 130–132, 134, 186, 265
 contraindication 135
 final cast post and core 132
 full-thickness flap 131
 gingivectomy 131
 indication 135
 orthodontic extrusion 137
 osteotomy 131
 osteoplasty 131
 permanent FPD 132
 submarginal incisions 131
 surgical crown lengthening 136–137
 temporary FPD 132
 cyclosporine 25, 27

D

decalcified freeze-dried bone allograft (DFDBA) 171
 demineralized freeze-dried bone allograft (DFDBA) 171, 279, 320
 dental biofilm-induced gingivitis 87, 88, 316
 dental implant replacement
 extraction of tooth 176
 flapless extraction and grafting 176
 growth factor-enhanced therapy 176
 dental implants 295
 conventional implant placement 338–342
 immediate implant placement 345–347
 implant rehabilitation for missing adjacent teeth in maxillary esthetic zone 357–362
 implant single crowns and porcelain veneers in esthetic zone 365–368
 sinus lift and immediate implant placement 350–354
 dental plaque 7
 dental plaque-induced gingivitis 12–14, 126
 dental rehabilitation 265

dental tape 377, 380
 dentinal tubules 255
 dentogingival junction 134
 Depakote 23
 desquamative gingivitis (DG) 18, 20
 characterization of 20
 symptoms of 20
 developmental depressions 55
 developments in diagnostics 73–78
 dexamethasone elixir 20
 DG *see* desquamative gingivitis (DG)
 diabetes 63, 68, 71, 194
 digital subtraction 80
 Dilantin 23
 distal furcation 259
 distal wedge procedure 140, 143
 disuse atrophy 77
 double papilla flap 203
 doxycycline 209
 drug-influenced gingival enlargement 27
 clinical characteristics of 27
 definition of 27
 treatment of 29
 dysesthesia 144

E

early-onset periodontitis *see* molar/incisor pattern
 periodontitis
 edentulous alveolar ridge 10
 electrosurgery 240
 Elyzol 96, 99, 100
 enamel matrix derivative (EMD) 36
 enamel pearls 52, 53, 161
 endodontically treated teeth 266–267
 endodontic–periodontal lesions 82–83
 endodontics 149, 248–257, 294, 295
 epithelio-connective tissue palatal pedicle graft 223
 equine hydroxyapatite and collagen (eHAC) 179
 erosive/erythematous lichen planus 21
 Er:YAG laser 123
 erythema 2, 21
 esthetic crown lengthening 135, 266
 esthetic plastic periodontal therapy 10
 examination and diagnosis 2–5
 aggressive periodontitis 30–33
 chronic periodontitis 38–44
 dental plaque-induced gingivitis 12–14
 developments in diagnostics 73–78
 gingival enlargement 23–25
 local anatomic factors, to periodontal disease 48–50
 non-plaque-induced gingivitis 14, 17–22
 oral–systemic links 57–64
 periodontal charting 4
 external bevel gingivectomy 122, 123, 125, 126

F

familial aggregation 46
 FDBA *see* freeze-dried bone allograft (FDBA)
 feldspathic porcelain 371
 ferrule, lack of 266
 fiberotomy 239, 241
 fibroblast growth factor (FGF)-2 179
 fixed partial denture (FPD) 130, 132, 340
 flap osseous surgery 138–144
 flap sloughing 197
 fluocinonide gel 20
 Fones (scrubbing) technique 380
 free gingival graft 214–218, 220, 221, 226–228
 advantages of 222
 connective tissue as 224, 225
 contraindications 222
 disadvantages of 222
 root coverage with 225
 free gingival margin (FGM) 38
 freeze-dried bone allograft (FDBA) 167, 176, 191, 300,
 310, 332, 353
 fremitus 261
 frenectomy 235–237
 frenum 239
 full-and partial-thickness rotated palatal flaps 204
 full-thickness buccal flap 50, 157
 full-thickness flap 131, 140, 325, 331
 full-thickness lingual flaps 50
 full-thickness mucoperiosteal flap 148
 functional crown lengthening 134–135
 furcation entrances, size of 53
 furcation invasion 160
 classification systems of 55–56
 definition of 55
 Glickman classification for 55
 Hamp classification for 55
 Tarnow and Fletcher classification for 56
 furcations 55
 definition of 152
 in lateral canal 255
 occlusal trauma 161
 predisposing anatomic factors 161
 primary factors for 160
 treatment of 156–158, 162–163

G

GBR *see* guided bone regeneration (GBR)
 generalized gingival edema 2
 generalized gingival erythema 17
 generalized severe chronic periodontitis 116
 generalized subgingival calculus 284
 gingival bleeding 27
 gingival enlargement 23–25, 135
 biologic origins for 28

gingival enlargement (*cont'd*)
 drug-influenced gingival enlargement 27, 29
 phenytoin-associated 24
 probing depth 27–28
 gingival inflammation 27
 gingival recession 38, 101, 200, 220, 243, 244, 347
 Miller Classification System of 201
 submarginal metal strips in 221
 teeth with 210
 teeth without 210
 gingivectomy 24, 120–123, 131, 142
 case study 120–123
 contraindications to 125
 crown lengthening 131
 definition of 125
 indications for 125
 gingivitis 258
 clinical signs of 16
 gingivoplasty 24, 122, 126
 indications for 125
 Glickman's furcation classification 8, 55, 152, 156, 160
 Gracey curettes 90, 115
 growth factors, intrabony defects treatment
 by 174–177
 GTR *see* guided tissue regeneration (GTR)
 guided bone regeneration (GBR) 150, 188–191, 193, 325,
 333, 366
 bone materials for 194–195
 complications of 196
 contraindications for 194
 management of complications 196–197
 nonresorbable membranes 194
 preoperative consultation 190
 procedure 190–191
 resorbable membranes 194
 guided tissue regeneration (GTR) 36, 149, 162, 167,
 169
 bone materials 171–172
 complications in 173
 management of complication 173
 nonresorbable membranes in 170
 perioperative 172
 postoperative 172
 preoperative 172
 procedure 166–167
 resorbable membranes in 170
 gum diseases 2

H

Hamp classification, for furcation invasion 55, 152
 hand and automated instrumentation
 cardiac pacemakers 90
 case study 86–88
 Gracey curettes 90

hand vs. powered mechanical instruments 87,
 88, 91
 magnetorestrictive ultrasonic scalers 90
 piezoelectric ultrasonic scalers 90
 sickle scalers 90
 sonic scalers 90
 hand instruments 116
 Hanks balanced salt solution (HBSS) 293
 healthy architecture, definition of 140
 hemisection 152
 hemostasis 237, 325
 hereditary gingival fibromatosis (HGF) 27
 horizontal furcation classification 160
 horizontal ridge augmentation 196
 hydrated freeze-dried bone allograft (FDBA)
 particles 317
 hydroxyapatite 320
 hyperkeratosis 261

I

ibuprofen 122, 244, 300, 325, 331
 immediate anterior implants 349
 immediate implant placement 345–347
 implant rehabilitation for missing adjacent teeth in
 maxillary esthetic zone 357–362
 implant single crowns and porcelain veneers in esthetic
 zone 365–368
 implant site preparation
 alveolar ridge preservation 315–322
 internal sinus lift, crestal window
 technique 307–312
 ridge expansion techniques 330–333
 ridge split techniques 323–329
 sinus grafting, lateral 298–301
 incisor mandibular plane angle (IMPA) 280
 infection 144, 173, 197
 infectious pathway 70
 inflammatory external root resorption (IRR) 294, 295
 inflammatory pathway 70
 inflammatory reaction 173, 197
 infrabony osseous defect 143
 interarch space, lack of 266
 interdisciplinary treatment, periodontics
 endodontics 248–257
 occlusion–periodontology 284–286
 orthodontics 268–272, 276–281
 pediatric dentistry 289–291
 prosthodontics 260–263
 intermediate bifurcation ridges 54
 internal bevel approach 29
 internal bevel gingivectomy 126
 internal sinus lift, crestal window technique 307–314
 intrabony defects treatment
 by allografts 164–167

by alloplastic materials 181–183
 by growth factors 174–177
 intrabony pocket formation 288
 intraoral digital impressions 364
 intraoral radiographs 81
 inverse bevel distal wedge technique 126

K

Kennedy classification 267
 keratinized gingiva 8, 15, 49, 135, 143, 210, 215, 282

L

LANAP (Nd:YAG) 118
 Langer's technique 212
 Lares (Er:YAG) 118
 laser-assisted surgery 127
 laser gingivectomy 123
 lasers in periodontology
 benefits of 118
 case study 114–117
 Er:YAG laser 115, 116
 laser (light amplification by stimulated emission of radiation) therapy 96, 239–240
 lateral cephalogram 270
 lateral cephalometric radiographs 371
 laterally positioned flap 203
 lateral window approach 304
 lichen planus (LP) 18, 21–22
 characteristic histopathology of 21
 classifications of 21
 clinical manifestations of 21
 etiology of 21
 lidocaine 130
 local anatomic factors, to periodontal disease 48–50
 local drug delivery 92–94
 Actisite 98, 99
 Arestin 98–99, 99–100
 Atridox 98, 99
 case study 92–94
 Elyzol 99, 100
 tetracycline derivatives 96
 tetracyclines 96
 localized aggressive periodontitis *see* molar/incisor pattern periodontitis
 localized mild vertical bone loss 92
 localized prepubertal/juvenile periodontitis *see* molar/incisor pattern periodontitis
 localized tooth-related factor 186
 luxated tooth 293

M

magnetorestrictive ultrasonic scalers 90
 mandibular left sextant 115, 117
 mandibular lingual frenectomy 239

using carbon dioxide laser surgery 240
 mandibular molars 55
 marginal gingiva 210
 maxillary labial frenectomy 237
 maxillary lateral incisors 370
 maxillary molars 55
 maxillary sinus 304
 mechanical debridement 97
 MegaGen EZ Plus implants 310
 membrane exposure 173, 196–197
 mesalamine 73
 mesial and distal root concavities 53
 metronidazole (MTZ) 29, 36, 96, 103, 106, 107, 112
 Michel's medium 18
 mild gingival inflammation 201
 mild marginal erythema 30
 mild sinusitis 299
 Miller classification system 201, 225
 minimally invasive coronally advanced flap techniques 242–245
 minimum inhibitory concentration (MIC) 106
 mobile teeth 144
 modified Bass technique 380
 modified Stillman's technique 14
 molar/incisor pattern grade C periodontitis 35, 37
 molar/incisor pattern periodontitis
 definition of 35
 microbiomes of 36
 prevalence of 35–36
 treatment of 36
 monolithic zirconia screw-retained single crowns 360
 motrin 209
 mucogingival anatomy 8
 mucogingival defects 58, 174
 definition of 220
 treatment of 220
 mucogingival surgical therapy 220
 mucogingival therapy
 allografts (alloderm) for mucogingival therapy 228–233
 connective tissue grafts 206–212
 free gingival grafts 214–218
 frenectomy 235–237
 minimally invasive coronally advanced flap techniques 242–245
 pedicle flaps 200–201
 vestibuloplasty 235–237
 mucous membrane pemphigoid 20
 mushroom elevator 309, 310, 252

N

Nabers probe 7, 148
 necrotizing gingivitis, systemic antibiotics for 106
 nerve paresthesia 144

nickel allergic contact stomatitis 123
 nickel titanium wires 270
 nifedipine 27
 non-plaque-induced gingivitis 14, 17–22
 nonresorbable membranes 170
 for guided bone regeneration 194
 guided tissue regeneration 170
 nonsurgical periodontal therapy
 hand and automated instrumentation 86–88
 lasers in periodontology 114–117
 local drug delivery 92–94
 systemic antibiotics 101–109
 nontraumatic brushing technique 230

O

obesity 70, 72
 occlusal orthosis 261
 occlusal trauma 10, 161, 287–288
 definition of 172
 first-degree 172
 second-degree 172
 occlusion–periodontology 284–286
 odontoplasty 131
 open membrane technique 356
 open wound 108
 oral health-related quality of life (OHRQoL) 109
 oral–systemic links 57–64
 orthodontic extrusion 137
 orthodontic intrusion 266
 orthodontics 161, 268–272, 276–281, 278–279
 orthodontic treatment 272, 277, 282
 orthodontic treatment-induced gingival
 enlargement 123
 orthodontic walls 279
 osseous recontouring 143
 osseous resective surgery 144
 ostectomy 131, 143
 osteoplasty 143
 osteotome sinus floor elevation technique. 304
 osteotomy 311, 346

P

pain 101
 palatal flap 354
 palato-gingival grooves 54
 panoramic radiograph 80, 81, 269, 270, 278, 344
 papillary finger flap 310
 papillary rotation flap 311
 partial edentulism 358
 pediatric dentistry 289–291
 pedicle flaps 200–201, 205, 212
 contraindications for 204
 incision 203
 indications for 204

rotation of 204
 sutured to recipient site 204
 penicillin 294
 periapical periodontitis 259
 periapical radiographs 79, 83, 229
 Peridex 122, 300
 peri-implantitis 10, 348
 PerioChip 96
 periodontal chart, components of 15
 periodontal diseases
 dental plaque 7
 environmental factor 6–7
 mucogingival deformity 8
 pathogenesis of 6, 7
 pathologic migration 8
 susceptible host 6
 periodontal lesions 256
 periodontal ligament (PDL) 261, 287
 periodontal phenotype 43
 periodontal plastic surgery 212, 220
 periodontal regeneration 381
 periodontics
 endodontics 248–257
 orthodontics 268–272, 276–281
 pediatric dentistry 289–291
 prosthodontics 260–263
 periodontitis 28, 44, 46, 92–94, 97, 258, 376
 adverse pregnancy outcomes 69
 cardiovascular disease and 68–69
 classification of 9
 with deep pockets 258
 definition of 41, 67
 diabetes and 63, 68
 diagnosis of 43
 molar/incisor pattern 35
 obesity 70, 72
 rheumatoid arthritis (RA) 69–72
 systemic antibiotics for 105–107
 treatment and prevention of 376
 periodontitis stage III, localized, grade C 42–43
 periodontology 279
 phenytoin 27
 phenytoin-induced gingival enlargement 23, 24, 125
 photodynamic light therapy 96
 piezoelectric ultrasonic scalers 90
 piezosurgery 336
 piezotome 300
 plaque control instruction (PCI) 376, 381
 plaque control techniques 60, 145, 249, 375, 379
 plaque-induced gingivitis with gingival enlarge-
 ment 120, 122
 plaque-induced mild localized gingivitis with mucogingi-
 val conditions 366
 plaque removal 374–378

platelet-derived growth factor (PDGF) 180
 polymers 185
 porcelain fracture 311, 349
 porcelain-fused-to-metal (PFM) crown 312, 340
 porcelain veneers in esthetic zone 365–368
 pregnancy 71
 preprosthetic hard tissue and soft tissue crown
 lengthening 128–132
 preventive periodontal therapy 374–378
 primary endodontic lesion 259
 primary periodontal lesion 256
 primary pulpal lesions 256
 probing depth 27, 28
 progressive periodontal disease 220
 prosthodontics 260–263
 proximal contact relation 52
 pseudo-pocket 28
 pulpal infection 256
 pulpal inflammation 254
 pulpal necrosis 259
 pulpal–periodontal lesion 256
 pulpitis 256
 pulp necrosis 294

R

radiography 81
 recombinant human bone morphogenetic protein 2
 (rhBMP-2) 172
 recombinant human platelet-derived growth factor BB
 (rhPDGF-BB) 158, 172, 176, 179, 180, 195
 red complex 96
 regeneration, definition of 169
 regenerative therapy
 allografts, intrabony defects treatment by 164–167
 alloplastic materials, intrabony defects treatment
 by 181–183
 furcations, treatment of 156–158
 growth factors, intrabony defects treatment
 by 174–177
 guided bone regeneration 188–191
 replacement external root resorption (RRR) 294
 rescue therapy 100
 resective periodontal therapy
 flap osseous surgery 138–144
 gingivectomy 120–123
 preprosthetic hard tissue and soft tissue crown
 lengthening 128–132
 root resection 145–150
 residual root sensitivity 144
 resorbable membranes 170
 for guided bone regeneration 194
 guided tissue regeneration 170
 restorative considerations 54–55
 reticular lichen planus 21

rheumatoid arthritis (RA) 69–72
 ridge expansion techniques 330–337
 ridge expansion with osteotomes 336
 ridge split technique 323–329, 333–336
 root amputation 150, 152
 root canal therapy 256, 286, 290
 root concavity 52, 161
 root divergence 53
 root fracture 294
 root fusion 53
 root proximity 52
 root resection 145–150, 152, 162
 contraindications for 152
 indications for 152
 maxillary and mandibular molars 153
 root trunk length 54
 rotated palatal pedicle graft 204

S

scaling and root planing (SRP) 36, 40, 91, 103, 147,
 148, 170
 Schneiderian membrane 299–301, 303, 313, 352
 SCTG *see* subepithelial connective tissue graft (SCTG)
 Seibert classification 193, 335
 semilunar coronally positioned flap 354
 sequential osteotome expansion 332
 short clinical crown 266
 sickle scalers 90, 115
 sinus elevation procedure 300–301, 305, 309–311,
 351–353
 crestal approach 304
 lateral window approach 304
 management of complications 306
 operative complications 305
 postoperative complications 306
 sinus grafting, lateral 298–301
 sinus pneumatization 303
 small torn sinus membrane 356
 sonic scalers 90
 split-thickness flap 230
 stage III grade B periodontitis 49, 286
 stage III grade C periodontitis 32
 Standard Tesselation Language (STL) file 358
 stationary bristle tip technique 377
 Stillman/Charter (sweeping) technique 380
 Straumann dental implants 367
 subcrestal placement 349
 subepithelial connective tissue graft (SCTG) 208, 211, 212,
 220, 221
 subgingival biofilm 108
 subgingival calculus 38, 102, 115, 382
 subgingival plaque 379
 subgingival scaling and root planing (SRP) 94, 97, 98
 sublingual edema 197

submarginal incisions 131
 subpapillary continuous sling suturing method 230, 231
 subpapillary suturing technique 244
 supportive periodontal therapy (SPT) 37
 supracrestal fiberotomy 239
 supragingival calculus 38, 102
 surgical crown lengthening 136–137
 systemic antibiotics 33, 170, 196, 293–294
 benefits of 113
 case study 101–109
 evidence for 105
 for necrotizing gingivitis 106
 prophylactic use of 108
 risks in 104
 timing of antibiotic administration 107–108

T

tamsulosin 73
 Tarnow and Fletcher classification, for furcation
 invasion 56
 temporomandibular joint disorder (TMD) 261
 tetracycline 36, 96, 157, 293–294
 tetracycline derivatives 96
 thermal injury 254
 thin biotype 201, 210, 239, 280
 Tooth Slooth® 254
 transalveolar technique 313
 trauma, due to surgery 274

trephine 309, 354
 tunneling procedure 230, 279, 283
 type I gingivitis 229

U

ulcerated lichen planus 21
 ultrasonic-powered mechanical instrument 115
 ultrasonic scalers 90
 universal curettes 90

V

veneer preparations 367, 368
 vertical dimension of occlusion (VDO) 265, 266
 vertical furcation classification 160
 vertical root fracture 81–82, 161
 vestibular incision subperiosteal tunnel access (VISTA)
 approach 243, 244, 246
 vestibuloplasty 235–237, 239, 240
 vicodin 209

W

wound healing 127, 179, 180

X

xenograft 171, 195

Z

Zucchelli technique 208
 Zyprexa 23

