

---

# Index

## A

- Anorexia-cachexia syndrome
  - assessment and management
  - diagnosis, 166
  - dietary management, 168
  - feeding, 167
  - food presentation, 168
  - functional status, 169
  - nutrient supplements, 169
  - oral nutritional intake, 167
  - reversible contributors, 167
  - secondary causes, 167
  - impact of, 165, 166
  - malignancy, 165
  - pathophysiology, 165
  - systemic inflammatory response and cancer, 165, 166
- Artificial nutrition therapy, 169

## B

- Bacitracin, clotrimazole and gentamicin (BCoG), 114
- Bleeding
  - catastrophic, 163–164
  - endovascular therapies, 163, 164
  - haemorrhage, 163
  - management, 164–165
  - preparation, 164
- Burning mouth syndrome (BMS), 158, 159

## C

- Cancer-related fatigue
  - comprehensive evaluation, 173–174
  - educational strategies, 172–173
  - general measures, 173
  - history, 172

- management of, 173, 174
- personalised endurance, 173
- pharmacotherapy, 175
- physiological, psychological and situational factors, 173
- psycho-educational therapies, 173–174
- resistance exercise programmes, 173
- reversible contributors, 172
- yoga interventions, 174
- Clinical bedside swallowing evaluation, 9
- Confusion assessment method (CAM), 178, 180
- Conventional prosthesis, removable
  - composite tissue flaps, 62
  - denture-bearing tissues, 62, 66
  - historical prosthodontic models, 65, 67
  - loss of sensory and motor functions, 62
  - prosthodontic loading, 62

## D

- Delirium, cancer care
  - classification
    - delirious agitation, 178
    - hyperactive, 177
    - hypoactive, 178
    - mixed type, 178
  - clinical features, 176, 177
  - distressing symptoms, 176
  - multifactorial aetiology, 176, 177
  - occurrence, 176
  - patient approach
    - atypical antipsychotics, 180
    - dehydration and hyponatraemia, 181
    - haloperidol, 180
    - non-pharmacological measures, 179
    - pharmacological restraints, 179
    - refractory, 180

- Dental care
- during cancer treatment
    - Candida, 33
    - chlorhexidine gluconate, 33
    - fluoride rinses, gels/pastes, 33
    - mechanical treatment (brushing and flossing), 32–33
    - mucositis, 33
    - patient responsibility, 33–34
    - post-cancer management guidelines, 34
    - sodium bicarbonate solution, 33
    - trismus, 33
    - xerostomia, 33
  - chlorhexidine molecule, 31
  - communication and patient education, 20
  - DRF, 21
  - examination and assessment, 19–20
  - fluoride carriers, 31, 32
  - MRRF, 21
  - national institute of health consensus
    - development conference, 24–29
  - ortho-pantomograph, screening
    - radiograph, 20
  - PRF, 21
  - salivary gland hypofunction and xerostomia, 31
  - treatment plan, 21
  - undertreatment and associated morbidity, 29, 30
- Dental-related factors (DRF)
- dental caries, 21, 22
  - fractures and severe occlusal wear, 22
  - national institute of health consensus
    - development conference, 25, 27
  - pain, 21, 23
  - periapical radiolucency, 21, 23
  - periodontal disease, 21
  - root canal therapy, 21
  - supra-erupted teeth, 21, 23
  - teeth with large restorations, 21
  - unopposed teeth, 21, 23
- Dietary modifications, 13, 268, 274, 276. *See also* Nutritional evaluation and support
- Disease-centric vs. person-centric care, 181–182
- Distraction osteogenesis (DO), 78
- Dysgeusia, 12–13, 38–39, 158, 159, 161
- Dysphagia
- deglutition, 9
  - diagnosis, 159
  - dietary modification, 160
  - endoscopic gastrostomy dependence
    - rate, 160
    - incidence, 159
    - nutritional deficits, 159
    - severity, 159
    - swallowing phases, 4, 9
    - symptoms of, 9, 10
    - treatment strategies, 11
- E**
- Eastern Cooperative Oncology Group (ECOG) scores, 187
- Edmonton Symptom Assessment System (ESAS), 126, 127, 172
- End-of-life (EOL) care
- after death, 219
  - aggressive interventions and ICU care, 210–211, 216
  - anticipatory decisions, 215
  - care pathway, 212
  - death prediction, 215
  - deep sedation, symptom relief, 218
  - dying phase, 215–216
  - ethical and legal considerations, 211
  - hydration, 217–218
  - patient/family interactions, 214
  - physician/staff burnout, 217
  - practice, 212
  - psychosocial and communication needs, 216–217
  - shared decision-making, 213–214
  - symptom relief, 216
- Endosteal/endosseous implants, 47–48
- Enteral/parenteral nutrition
- comprehensive and in-depth nutrition
    - assessment, 274
  - cyclic feeding schedules, 274
  - evidence-based recommendations, 273
  - functional gastrointestinal tract, 273
  - PEG placement, 273
  - prophylactic vs. reactive insertion, 273
  - randomization, 272
- Esophageal strictures, 13
- European Organization for Research and Treatment of Cancer (EORTC) grading, 107
- F**
- Feeding methods
- algorithm, 276–277
  - enteral nutrition, 11
  - gastrostomy feeding tubes, 12
  - jejunostomy feeding, 12
  - nasogastric tubes, 11–12

Fiberoptic endoscopic evaluation of swallowing (FEES), 10–11

## H

Head and neck (H&N) cancer patients

dentist role

- active dental care, 44
- disease prevention regimen, 44
- initial pre-therapy screening, 42–44
- oral hygiene maintenance, 44
- patient's risk factors, 44
- pre-emptive dental treatment, 44
- rehabilitation pathway, oral deficit, 45, 46
- supportive dental care, 44
- thermoplastic fluoride trays, 45

issue-based stratification

- diagnosis and pathology, 288–289
- mandible buccal mucosa/fom/tongue lesion, 290
- prevention screening and surveillance, 290
- treatment, 289

resource-stratified guidelines

- chemotherapy services, 287
- concepts in, 286
- core resources, 285
- diagnostic and therapeutic guidelines, 285
- enhanced-level resources, 285
- evidence-based guidelines, 284
- high-level resources, 285–286
- low-cost effective palliative care, 285
- nonuniformity, treatment, 283–284
- pathology services, 288
- radiology and imaging services, 288
- radiotherapy services, 287
- surgery services, 286–287

surgical management

- costochondral rib grafts, 53
- digital planning, osseointegrated implants, 50, 51
- hemimaxillectomy defect, 50, 51
- implant planning, 52
- mandibular prosthesis, 53, 54
- mandibular reconstruction, 52–53
- maxillectomy defects, 50, 52
- obturators, 49, 66–71
- segmental mandibulectomy, 50, 53
- vascularised free tissue transfer, 50

treatments

- dental caries, 40
- mucositis, 38–39

opportunistic infections, 40–41

ORN, 36–38

psychological impact, 41

trismus, 39

xerostomia, 38

## I

Implantology, dental, 48–49, 76

placement timing, 79

for primary placement planning, 80

secondary placement planning, 80–81

Implant-retained fixed prosthesis

- careful assessment, 56
- composite tissue flaps, 62
- denture-bearing tissues, 62, 66
- fixed reconstructions, 58–60
- historical prosthodontic models, 65, 67
- implant angulation and positioning, 57
- loss of sensory and motor functions, 62
- prosthodontic loading, 62
- teeth replacement, 57

## K

Karnofsky performance index (KPI), 187

## L

Lips

- anatomical reconstruction, radial forearm flap, 2, 3
- defects, minor and larger, 2
- facial expression, 2
- motor reinnervation, 3
- oral competence, 2
- orbicularis oris muscle, motor disruption, 3
- reconstruction, 2
- sensory reinnervation, 3
- static procedures, 3
- vocal pronunciation, 2

## M

Malignant-related risk factors (MRRF)

- cancer therapy (cure vs. palliation), 23–24
- clinical staging and location, 23
- national institute of health consensus development conference, 25–26, 28
- non-dental risk factors, 23
- therapy types, 24
- treatment plan, 24

- Mandible**
- articulation, 5
  - casein phosphopeptide-amorphous calcium phosphate, 6
  - chemoradiation, head and neck, 6
  - deglutition, 5
  - dental hygiene, 5
  - dentition, 5
  - facial contour, 5
  - functional outcomes, 5
  - hyposalivation, 6
  - marginal mandibulectomy, 5
  - mastication, 5
  - osseointegrated dental implants, 6, 7
  - osseous free tissue transfer, 5, 6
  - osteoradionecrosis of, 5
  - respiration, 5
  - segmental mandibulectomy, 5
  - squamous cell carcinoma of, 5, 6
- Maxilla**
- anatomy of, after resection, 84
  - edentulous, 41
  - implants, 62
  - subperiosteal implants, 47
  - zygomatic implants, 92, 94
- Memorial delirium assessment scale (MDAS), 178**
- Model for pretherapy dental decision support (MDDS)**
- clinical conditions, MRRF, 26, 28
  - dental conditions, DRF, 26
  - effectiveness, 28
  - optimal decision, 27–28
  - strategic teeth, 29
- Modified barium swallow evaluation, 9–10, 159**
- Mucositis**
- amifostine, 8
  - anesthetic mouthwashes, 8
  - benzylamine mouthwash, 7
  - in bone marrow transplant patients, 116
  - chemoradiation protocols, 7
  - definition, 105
  - dental care, 8
  - development phases, 106, 107
  - enteral feeding, 7, 39
  - etiology, 106–107
  - grading system, 39
  - incidence, 105–106
  - intensity-modulated radiation therapy, 109
  - morbidity, 38–39
  - nutritional counselling, 39
  - nutritional intake, 7
  - oral hygiene, 7
  - palifermin, 8
  - palliation of, 8
  - prevention, 109
  - risk-benefit profile, 8
  - scoring systems, 107
  - severity, 105–106
  - supportive care
    - BCoG, 114
    - benzylamine, 111–112
    - chlorhexidine, 115
    - doxepin, 113
    - iseganan, 114
    - local analgesics, 109
    - low-level laser radiation, 112–113
    - misoprostol, 115
    - MuGard, 115–116
    - non-narcotic medications, 109
    - nutritional intake, 109
    - oral care protocols, 112
    - pilocarpine, 115
    - PTA, 114
    - sucralfate, 114–115
    - zinc supplementation, 113–114
  - toxicity, grading scales, 107–110
- Mucus composition**
- clinical consequences, 154
  - management, 154
  - OM, 154–158
- N**
- National Cancer Institute’s Common Toxicity Criteria (NCI CTC), 107**
- National Comprehensive Cancer Network (NCCN) treatment guidelines, 235–239**
- dental evaluation, 239
  - follow-up schedule, 236
  - health promotion and care coordination, 239
  - lung malignancies screening
    - LDCT surveillance, 239
    - modality, 238
    - patient categories, 238
  - PET/CT imaging, role of, 237
  - posttreatment imaging, 236–237
  - second primary malignancies, 237–238
  - smoking cessation, 239
  - speech/hearing evaluation, 239
  - swallow evaluation, 239
  - thyroid-stimulating hormone measurement, 239
- National institute of health consensus development conference**
- dental provider, guidelines, 25
  - MDDS, 26–29
  - patient’s tolerance of treatment, 24
  - pretreatment dental evaluation, 25

- quality of life, 24
  - weighing interpretation
    - DRF score, 25, 27
    - MRRF score, 25–26, 28
  - Numerical rating scale (NRS), 136
  - Nutritional evaluation and support
    - adequate nutrition intake, 268
    - enteral/parenteral support
      - comprehensive and in-depth nutrition assessment, 274
      - cyclic feeding schedules, 274
      - evidence-based recommendations, 273
      - functional gastrointestinal tract, 273
      - PEG placement, 273
      - prophylactic vs. reactive insertion, 273
      - randomization, 272
    - feeding method algorithm, 276–277
    - intensive dietary counseling, 271–272
    - multimodal therapy, 275–276
    - oncological therapy, 277
    - and oral cancer prevention, 267–268
    - PG-SGA, 269–271
    - prediction models, 276–277
    - prognostic indicators, 276–277
    - quality of life ratings, 278
    - surgical patient, 274–275
    - survivorship, 278
    - tobacco and alcohol abuse, 268
  - Nutrition therapy
    - artificial, 169
    - medications, cachexia, 170–171
    - parenteral, 169
    - refractory cancer cachexia, 170
- O**
- O**bturators
    - definitive, 69–71
    - dental/zygomatic implants, 67
    - fixed full-arch maxillary implant-retained prosthesis, 68
    - interim, 69
    - surgical, 69
  - Opportunistic infections, 40–41
  - Oral Assessment Guide (OAG), 126
  - Oral candidiasis
    - cheilitis form, 161
    - clinical presentation, 160–161
    - diagnosis, 161
    - dysgeusia of, 161
    - erythematous form, 160
    - management principles, 161–162
    - pseudomembranous form, 161
    - risk factors, 160, 161
    - treatment, 161–162
  - Oral Health Assessment Tool (OHAT), 126
  - Oral mucositis (OM)
    - assessment tools, 155
    - biological phases, 154, 155
    - clinical presentation, 156
    - erythema and soreness, 156
    - management
      - guidelines, 157–158
      - topical analgesic therapy, 157
    - optimal supportive care, 157
    - pan-tissue inflammation, 154
    - pathophysiology, 154
    - severity, 155
    - stomatotoxic therapy, 156
    - suboptimal treatment, 157
  - Oro-cutaneous fistula
    - aggressive tumour, 163
    - incidence, 162
    - palliative care, 162
  - Osteoradionecrosis (ORN), 65, 124, 134, 153, 234, 239
    - classification system, 36–37
    - early stages, 37
    - hyperbaric oxygen therapy, 37
    - implant survival, 38
    - of mandible, 5, 6
    - pathological fracture, 36
    - pre-and post-radiotherapy, 37
    - risk factors, 36
- P**
- P**ain
    - acute vs. chronic, 131
    - approach, patient, 135
    - assessment of
      - characteristics, 137
      - clinical evaluation, 135
    - chronic orofacial, 130
    - components of, 138
    - interventional management
      - indications, 149
      - intraventricular opioid infusion therapy, 148
      - neurolytic intervention, 149
      - peripheral nerve block, 147
      - regional analgesia, 147
      - trigger points, 147, 148
    - mechanisms
      - modulation, 131
      - perception, 131
      - transduction, 130
      - transmission, 131
    - mixed aetiology, 130
    - multimodal management, 147, 148

- Pain (*cont.*)  
 pathway, 130–131  
 score, 136  
 types of  
   aetiology-based classification, 132, 133  
   chemotherapy, 133  
   concomitant therapy, 133  
   features, 132  
   metastatic malignancy, 133  
   nasopharyngeal carcinoma, 133  
   orofacial pain, 133–135  
   pathophysiological classification, 132  
   radiotherapy, 133  
   regional malignancy, 132  
 using WHO analgesic ladder drugs, 139, 140
- Palate  
 cancer, 7, 8  
 hard, 8, 155  
 soft, 8, 64  
 surgical removal, 66
- Patient concerns inventory (PCI), 41, 250–263
- Patient-generated subjective global assessment (PG-SGA), 269–271, 278
- Patient rehabilitation  
 head and neck chemoradiation, 2  
 psychosocial and financial burden, 1  
 reconstructive method, 1–2  
 surgical technique, 1  
 xerostomia, 2
- Patient-related factors (PRF)  
 and financial factors, 21, 23  
 and patient motivation, 21, 23
- Polymyxin, tobramycin and amphotericin B (PTA), 114
- Prosthetic rehabilitation, H&N cancer patients  
 complications  
   bone volume for implant placement, 72, 73  
   failure of autogenous grafts, 74  
   implant failure, 74  
   microstomia/trismus, 72, 73  
   patient and family expectations, 71  
   peri-implant tissue health and hygiene maintenance, 72–74  
   suboptimal implant positioning and angulation, 71–72  
   unfavourable denture-bearing anatomy, 74, 75  
   xerostomia, 74  
 cone beam computerised tomography, 85–86  
 conservative restorative dentistry, 54–55  
 decision-making and treatment planning, 55  
 dental implantology development, 48–49  
 dentist role, 42–45  
 dentition, 54  
 diagnostic work-up  
   pre-implant screening OPTs, 83, 84  
   preoperative study casts, 82, 83  
 dual scan CBCT imaging, 87–89  
 history, modern dental implants, 45, 47–48  
 implant planning and treatment, 78–79  
 multidisciplinary cancer care, 55  
 obturators, 66–71  
 patient care pathway, 35–36  
 preventive dentistry, 54–55  
 principles, 54–55  
 on quality of life  
   adjunctive surgeries, restorative management, 76–79  
   DO, 78  
   flap tissue debulking, 77  
   peri-implant soft tissue profile, 78  
   physical consequence, 75  
   psychological well-being, 76  
   radiotherapy, 76  
   reconstructive surgery, 79  
   software-assisted planning, 76, 77  
   Weber-Ferguson approach, 76  
 surgical stents, 88, 90  
 treatment approaches  
   denture bearing anatomy, 56  
   fixed prosthesis (*see* Implant-retained fixed prosthesis)  
   functional dental arch, 56  
   removable prosthesis (*see* Removable implant-retained prosthesis)  
   two-dimensional screening radiograph(s), 84  
 zygomatic implants, 92–95
- Psychosocial health, 13–14
- R**
- Radiation Therapy Oncology Group (RTOG)  
 instrument, 107
- Rampant dental caries, 40
- Ramus frame implant, 47
- Refractory cancer cachexia  
 anticancer treatments, 171  
 medications, 170–171
- Rehabilitation, 1–2  
 prosthodontic (*see* Prosthodontic rehabilitation, H&N cancer patients)  
 swallowing, 9, 13
- Removable conventional prosthesis. *See* Conventional prosthesis, removable
- Removable implant-retained prosthesis  
 denture-bearing tissues, 59  
 mandibulectomy and reconstruction, 60, 61

retention systems, 62  
 upper and lower overdentures, 62, 64–65  
 vertical discrepancy, 62, 63

## S

- Speech evaluation, 13  
 Subperiosteal implants, 47  
 Supportive care, oral cancer patients  
 anorexia-cachexia syndrome, 165–169  
 BMS, 158, 159  
 cancer-related fatigue, 171–175  
 care plan, 223, 224  
 communication  
 in advanced disease, 198  
 barriers, 196, 197  
 clinical, 197, 199–200  
 general guidelines, 197, 198  
 hierarchy of interactions, 201  
 prevalence, 196  
 skills, 197, 198  
 delirium in, 175–181  
 emotional and social support  
 antidepressant medications, 191  
 anxiety medication, 191  
 biological consequences of, 190  
 clinical practice, 190  
 clinical psycho-oncology references, 193  
 coexisting depression, 190  
 comprehensive care, 193  
 depression medications, 191  
 distress thermometer, 192  
 empathetic communication, 192  
 medical treatment, 189  
 psycho-educational and psychotherapeutic inputs, 190  
 psychological morbidity, 190, 193  
 empowerment, education and prioritisation  
 continuity of care, 193  
 de-addictions, 195  
 discharge document, 195  
 family therapy sessions, 194  
 group education programmes, 194  
 individual psycho-educational programmes, 194  
 interdependent societal structure, 193  
 prescription explanation, 194  
 shared decision-making, 195  
 socio-economic support, 195  
 ethics, clinical decision-making  
 applications, 204–205  
 collusion, 206, 207  
 communication-related issue, 205  
 end-of-life phase, 208, 209  
 information sharing, 202–203  
 myths/misconceptions, family, 208, 209  
 vulnerability, 203–204  
 interdisciplinary team approach, 122–123  
 mucus composition alterations (*see* Oral mucositis (OM))  
 nutrition therapy, 169–171  
 pain in (*see* Pain)  
 and palliative care principles, 122, 222  
 preventive care protocols, 124–125  
 prognostication  
 actuarial estimate of survival, 185, 186  
 barriers, 184, 185  
 cancer illness trajectory, 186  
 cancer-specific median survival curve, 185  
 clinical prediction of survival, 184  
 comorbidity impact, 187  
 disease trajectory, acute vs. chronic, 184  
 foreseeing, 184–186  
 foretelling skills, 188–189  
 palliative prognostic score, 188, 189  
 predicted median survival, 183–184  
 premorbid/pre-intervention functional status, 187  
 symptoms, 188  
 quality of life assessment, 123–124  
 clinical trials, 246  
 culture and value systems, 244  
 decision-making, 247  
 health-related quality of life, 244  
 independence level, 244  
 low score, 249–250  
 outcomes, 247, 248  
 patient-perceived effects, 244  
 patient-reported outcomes, 249  
 personal beliefs, 244  
 person's physical health, 244  
 psychological state, 244  
 quantitative methodology, 244  
 self-reported questionnaires, patients, 244  
 semi-structured interview, 244  
 social relationships, 244  
 treatment, 247  
 types, 244–246  
 survival benefit, 222  
 symptoms  
 pain and dysphagia, 125  
 physical and emotional, 126  
 prevalence of, 126  
 proactive assessments, 126  
 relief approaches, 128–129  
 whole-person care, 222  
 xerostomia (*see* Xerostomia)

- Surveillance strategies, oral cancer  
 care programs, 240  
 clinical practice guidelines, 235  
 early surveillance programmes, 239–240  
 head and neck physical examination, 235  
 NCCN treatment guidelines, 235–239  
 patient care, 234  
 protocols, 234
- Swallowing  
 assessment of, 9  
 bolus propulsion, 9  
 chemoradiation, 9  
 clinical bedside evaluation, 9  
 difficulty in, 9, 10  
 FEES, 9  
 fiberoptic endoscopic evaluation, 10–11  
 fibrosis, 9  
 function, 9  
 hyolaryngeal elevation, 9  
 manual techniques, 11  
 modified barium study, 9–10  
 neuromuscular electrical stimulation,  
 radiation therapy, 9, 10  
 oromotor examination, 9  
 oropharyngeal bolus clearance, 9  
 patient's functional outcome, 9  
 pharyngeal phase of, 9  
 phases, 4, 9  
 prosthesis, 11  
 quality of life, 9  
 rehabilitation program, 9, 13  
 tongue exercises, 11  
 treatment strategies, 11
- T**
- Taste alterations  
 hypogeusia, 158  
 management, 159  
 physiology, 158–159  
 zinc deficiency, 159
- Tongue  
 articulation and gustation, 3  
 larger defects, 4  
 motor and sensory innervation, 4  
 swallowing phases, 3, 4  
 total glossectomy defect, 4, 5
- Transosteal implants, 47, 48  
 Trismus, 39
- exercise therapy, 12  
 intensity-modulated radiotherapy, 12  
 range of motion exercises, 12  
 stretching exercises, 12
- W**
- WHO analgesic ladder drugs  
 adjuvants, 146  
 non-opioid group of drugs, 140–141  
 nonsteroid anti-inflammatory drugs  
 disadvantages, 140  
 precautions, 140–141  
 risk factors, 140  
 principles of, 140  
 strong opioids, moderate to severe pain  
 fentanyl, 145–146  
 oral morphine, 141–145  
 physical dependence, 144  
 weak opioids, mild to moderate pain, 141
- X**
- Xerostomia, 38
- Xerostomia, 38  
 amifostine, 12  
 clinical impact, 151  
 factors, 151  
 gastro-omental flap, 12  
 pilocarpine, 12  
 prevention, 152  
 preventive and vigilant care, 152  
 radiation therapy, 152  
 saliva functions, 150, 151  
 sialogogic agents, 12  
 stimulation of saliva, 152  
 surgical salivary gland transfer, 12  
 swallowing dysfunction, 12  
 symptomatic, management, 152  
 treatment, 152  
 unstimulated salivary flow rate, 150
- Z**
- Zygomatic implants  
 deep circumflex iliac artery flaps, 93, 94  
 dental and oral health maintenance,  
 94–95  
 near-total maxillectomy defect, 93, 94  
 prosthetic rehabilitation, 92, 93