

# Contents

<b>SECTION 1. Anatomic Landmarks</b>		<b>1</b>	
<b>LANDMARKS OF THE ORAL CAVITY</b>			
Lips, Labial and Buccal Mucosa, Parotid Papilla, Floor of the Mouth, Hard Palate, Soft Palate, Oropharynx and Tonsils		<b>2</b>	
<b>LANDMARKS OF THE TONGUE AND VARIANTS OF NORMAL</b>			
Normal Tongue Anatomy, Fissured Tongue (Plicated Tongue, Scrotal Tongue), Ankyloglossia, Lingual Varicosity (Phlebectasia)		<b>4</b>	
<b>LANDMARKS OF THE PERIODONTIUM</b>			
Periodontium, Alveolar Mucosa and Frenal Attachments, Mucogingival Junction, Attached Gingiva and Free Marginal Gingiva		<b>6</b>	
<b>OCCCLUSION AND MALOCCLUSION</b>			
Class I Occlusion, Class II Occlusion, Class III Occlusion		<b>8</b>	
<b>RADIOGRAPHIC LANDMARKS: MAXILLA</b>			
Anterior Midline Region, Anterior Lateral Region, Canine Region, Premolar Region, Molar Region, Tuberosity Region		<b>10</b>	
<b>RADIOGRAPHIC LANDMARKS: MANDIBLE</b>			
Incisor-Canine Region, Premolar and Molar Regions, Premolar Region, Buccal Aspect Molar Region, Lingual Aspect Molar Region, Internal Aspect Molar Region		<b>12</b>	
<b>TEMPOROMANDIBULAR JOINT</b>			
Normal Anatomy, Normal Opening, Deviation on Opening, Posterior Open Bite–Midline Deviation– Crossbite, Anterior Open Bite, Crossbite		<b>14</b>	
<b>SECTION 1 CASES</b>		<b>16</b>	
<b>SECTION 2. Diagnostic and Descriptive Terminology</b>		<b>17</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Macule, Patch, Erosion, Ulcer		<b>18</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Wheal, Scar, Fissure, Sinus		<b>20</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Papule, Plaque, Nodule, Tumor		<b>22</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Vesicle, Pustule, Bulla, Cyst		<b>24</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Normal, Hypotrophy and Atrophy, Hypertrophy, Hypoplasia		<b>26</b>	
<b>DIAGNOSTIC AND DESCRIPTIVE TERMINOLOGY</b>			
Hyperplasia, Metaplasia, Dysplasia, Carcinoma		<b>28</b>	
<b>SECTION 2 CASES</b>		<b>30</b>	
<b>SECTION 3. Oral Conditions Affecting Infants and Children</b>		<b>31</b>	
<b>ORAL CONDITIONS AFFECTING INFANTS AND CHILDREN</b>			
Commisural Lip Pits, Paramedian Lip Pits, Cleft Lip, Cleft Palate, Bifid uvula		<b>32</b>	
<b>ORAL CONDITIONS AFFECTING INFANTS AND CHILDREN</b>			
Congenital Epulis, Melanotic Neuroectodermal Tumor of Infancy, Dental Lamina Cysts, Natal Teeth, Eruption Cyst (Gingival Eruption Cyst, Eruption Hematoma), Congenital Lymphangioma, Thrush (Candidiasis, Moniliasis), Parulis (Gum Boil)		<b>34</b>	
<b>SECTION 3 CASES</b>		<b>36</b>	
<b>SECTION 4. Dental Anomalies</b>		<b>37</b>	
<b>ALTERATIONS IN TOOTH MORPHOLOGY</b>			
Microdontia, Macrodontia, Dens Invaginatus (Dens in Dente) Cusp of Carabelli, Dens Evaginatus (Leong's Tubercle), Protostylid, Talon Cusp		<b>38</b>	

**ALTERATIONS IN TOOTH MORPHOLOGY**

Introduction, Fusion, Gemination, Twinning,  
Concrescence, Palato-Gingival Groove 40

**ALTERATIONS IN TOOTH MORPHOLOGY**

Supernumerary Roots, Ectopic Enamel: Enamel  
Pearl, Ectopic Enamel: Cervical Enamel Extensions,  
Dilaceration, Bulbous Root, Hypercementosis,  
Taurodontism, Shovel-Shaped Incisor Syndrome 42

**ALTERATIONS IN TOOTH NUMBERS: HYPODONTIA**

Hypodontia, Acquired Hypodontia, Ankylosis,  
Ectodermal Dysplasia 44

**ALTERATIONS IN TOOTH NUMBERS: HYPERDONTIA**

Hyperdontia, Cleidocranial Dysplasia, Gardner  
Syndrome 46

**ALTERATIONS IN TOOTH STRUCTURE AND COLOR**

Enamel Hypoplasia, Enamel Hypoplasia:  
Environmental Types, Turner's Tooth, Fluorosis  
or Mottled Enamel, Amelogenesis Imperfecta 48

**ALTERATIONS IN TOOTH STRUCTURE AND COLOR**

Dentinogenesis Imperfecta (Hereditary Opalescent  
Dentin) and Dentin Dysplasia, Regional  
Odontodysplasia (Ghost Teeth) 50

**ALTERATIONS IN TOOTH COLOR**

Intrinsic Discoloration (Staining), Nonvital Teeth,  
Tetracycline Staining, Fluorosis, Extrinsic  
Staining 52

**TOOTH ERUPTION AND ALTERATION IN TOOTH POSITION**

Rotated Teeth, Axial Tilting, Ectopic Eruption,  
Orthodontic Tooth Movement, Transposition,  
Translocation, Distal Drift, Migration, Partial  
(Delayed) Eruption, Supraeruption (Extrusion) 54

**ACQUIRED DEFECTS OF TEETH: NONCARIOUS LOSS OF TOOTH STRUCTURE**

Attrition, Abrasion, Abfraction, Erosion 56

**ALTERATION IN ROOT STRUCTURE**

Resorption, False Resorption, External Resorption,  
Eruption-Related External Root Resorption,  
Inflammatory External Resorption 58

**ALTERATION IN ROOT STRUCTURE**

Orthodontic External Root Resorption, External  
Root Resorption in Reimplanted and Transplanted  
Teeth, External Coronal Resorption, Cervical  
Resorption, Multiple Cervical Resorption of  
Hyperparathyroidism, Coronal Internal  
Resorption, Inflammatory Internal Root  
Resorption, Replacement/Metaplastic  
Internal Root Resorption 60

**SECTION 4 CASES**

62

**SECTION 5. Dental Caries**

63

**DENTAL CARIES**

Class I Caries, Class II Caries, Class III Caries 64

**DENTAL CARIES**

Class IV Caries, Class V Caries, Class VI Caries,  
Root Caries, Recurrent Caries (Secondary  
Caries) 66

**DENTAL CARIES AND SEQUELAE**

Caries Progression, Pulp Polyp, Periapical  
Inflammation (Apical Periodontitis), Periapical  
Abscess 68

**SECTION 5 CASES**

70

**SECTION 6. Radiolucent and Radiopaque Lesions of the Jaws**

71

**RADIOLUCENT LESIONS OF THE JAWS: CYSTS**

Cysts of the Jaws, Nasopalatine Duct Cyst (Incisive  
Canal Cyst) Lateral Periodontal Cyst, Botryoid  
Lateral Periodontal Cyst, Dentigerous Cyst,  
Odontogenic Keratocyst (OKC), Nevroid Basal Cell  
Carcinoma Syndrome (Gorlin-Goltz Syndrome),  
Paradental Cyst (Buccal Bifurcation Cyst), Simple  
(Traumatic) Bone Cyst 72

**RADIOLUCENT LESIONS OF THE JAWS: TUMORS**

Unicystic (Mural) Ameloblastoma, Adenomatoid  
Odontogenic Tumor, Calcifying Epithelial  
Odontogenic (Pindborg) Tumor, Ameloblastic Fibro-  
Odontoma, Odontoameloblastoma (Ameloblastic  
Odontoma), Ameloblastoma, Myxoma, Central  
Giant Cell Granuloma 74

**RADIOPAQUE LESIONS OF THE JAWS: BONY LESIONS**

Exostosis, Mandibular Tori, Palatal Tori, Osteoma,  
Reactive Subpontine (Hyperostosis) Exostosis 76

**PERIAPICAL RADIOPACITIES**

Socket Sclerosis, Idiopathic Osteosclerosis  
(Enostosis), Condensing Osteitis 76

**RADIOPAQUE-RADIOLUCENT LESIONS OF THE JAWS**

Odontoma, Compound Odontoma, Complex  
Odontoma, Cemento-Osseous Dysplasias,  
Periapical Cemento-Osseous Dysplasia,  
(Periapical Cemental Dysplasia, Cementoma),  
Focal Cemento-Osseous Dysplasia, Florid Cemento-  
Osseous Dysplasia, Cementoblastoma,  
Ossifying Fibroma 78

**SECTION 6 CASES**

80

## SECTION 7. Disorders of Gingiva and Periodontium

81

### PERIODONTAL DISEASES: PLAQUE, CALCULUS, AND REGRESSIVE CHANGES

Plaque, Calculus, Gingival Recession, Dehiscence and Fenestration 82

### GINGIVITIS

Gingivitis, Gingivitis Caused by Mouth Breathing, Necrotizing Ulcerative Gingivitis, Actinomycotic Gingivitis, Focal Eruption Gingivitis, Prophy Paste (Foreign-body) Gingivitis 84

### PERIODONTITIS

Periodontitis, Mild Periodontitis, Moderate Periodontitis, Advanced Periodontitis, Periodontal Abscess 86

### RADIOGRAPHIC FEATURES OF PERIODONTAL DISEASE

Local Factors: Overhang, Local Factors: Open Contact and Poor Restoration Contour, Bone Loss: Localized, Bone Loss: Generalized, Bone (Infrabony), One-Wall Infrabony Defect, Two-Wall Infrabony Defect, Three-Wall Infrabony Defect and Moat Defect 88

### RADIOGRAPHIC ALTERATIONS OF PERIODONTAL LIGAMENT AND LAMINA DURA

Periodontal Ligament Space and Lamina Dura, Acute Apical Periodontitis, Periodontitis, Traumatic Occlusion and Orthodontic Tooth Movement, Scleroderma, Malignant Disease-Related Periodontal Defect, Ankylosis, Fibrous Dysplasia, Paget's Disease and Hyperparathyroidism 90

### LOCALIZED GINGIVAL LESIONS

Pyogenic Granuloma, Peripheral Giant Cell Granuloma, Peripheral Ossifying Fibroma, Irritation Fibroma, Peripheral Odontogenic Fibroma, Desmoplastic Fibroma 92

### LOCALIZED GINGIVAL LESIONS

Parulis (Gumboil), Pericoronitis (Opercuitis), Periodontal Abscess, Epulis Fissuratum, Gingival Carcinoma 94

### GENERALIZED GINGIVAL ENLARGEMENTS

Fibromatosis Gingivae, Drug-Induced Gingival Overgrowth, Primary Herpetic Gingivostomatitis 96

### ENDOCRINE-ASSOCIATED GINGIVAL ENLARGEMENTS

Hormonal Gingivitis (Pregnancy Gingivitis), Diabetic Gingivitis, Gingival Edema of Hypothyroidism 98

### SPONTANEOUS GINGIVAL BLEEDING

Leukemic Gingivitis, Agranulocytosis (Neutropenia), Cyclic Neutropenia, Thrombocytopathic and Thrombocytopenic Purpura 100

### SECTION 7 CASES

102

## SECTION 8. Abnormalities by Location

103

### CONDITIONS PECULIAR TO THE TONGUE

Scalloped Tongue (Crenated Tongue), Macroglossia, Hairy Tongue (Lingua Villosa, Coated Tongue), Hairy Leukoplakia 104

### CONDITIONS PECULIAR TO THE TONGUE

Geographic Tongue (Benign Migratory Glossitis, Erythema Migrans), Geographic Stomatitis (Acreta Erythema Migrans), Anemia, Fissured Tongue 106

### CONDITIONS PECULIAR TO THE TONGUE

Cyst of Blandin-Nuhn (Lingual Mucus-Retention Phenomenon), Median Rhomboid Glossitis, Granular Cell Tumor, Lingual Thyroid, Body Piercing (Oral Jewelry) 108

### CONDITIONS PECULIAR TO THE LIP

Actinic Cheilosis (Actinic Cheilitis), Candidal Cheilitis, Angular Cheilitis (Perlèche), Exfoliative Cheilitis 110

### NODULES OF THE LIP

Mucocele (Mucous Extravasation Phenomena), Accessory Salivary Gland Tumor, Nasolabial Cyst (Nasoalveolar Cyst), Implantation Cyst (Epithelial Inclusion Cyst), Mesenchymal Nodules and Tumors 112

### SWELLINGS OF THE LIP

Angioedema, Cheilitis Glandularis, Orofacial Granulomatosis (Cheilitis Granulomatosa), Trauma, Cellulitis 114

### SWELLINGS OF THE FLOOR OF THE MOUTH

Dermoid Cyst, Ranula (Mucocele of the Sublingual Gland), Salivary Duct Cyst, Salivary Calculi (Sialoliths), Mucocele (Mucus-Retention Phenomenon) 116

### SWELLINGS OF THE PALATE

Palatal Torus (Torus Palatinus), Lipoma, Nasopalatine Duct Cyst (Incisive Canal Cyst), Periapical Abscess, Periodontal Abscess, Lymphoid Hyperplasia, Lymphoma 118

**SWELLINGS OF THE PALATE: SALIVARY GLAND LESIONS**

Sialadenitis, Necrotizing Sialometaplasia, Benign Accessory Salivary Gland Neoplasm, Malignant Accessory Salivary Gland Neoplasm 120

**SWELLINGS OF THE FACE**

Odontogenic Infection, Buccal Space Infection, Masseteric (Masticator) Space Infection, Infraorbital Space Infection, Ludwig Angina 122

**SWELLINGS OF THE FACE**

Sialadenosis, Warthin Tumor (Papillary Cystadenoma Lymphomatosum), Sjögren Syndrome, Cushing Disease and Syndrome, Masseter Hypertrophy, Neurofibromatosis (von Recklinghausen Disease), Cystic (Lymphangioma), Hygroma, Ewing Sarcoma 124

**CONDITIONS PECULIAR TO THE FACE**

Angioedema, Emphysema, Postoperative Bleeding, Bell Palsy 126

**SECTION 8 CASES 128****SECTION 9. Intraoral Findings by Color Changes 129****WHITE LESIONS**

Fordyce Granules, Linea Alba, Leukoedema, Morsicatio Buccarum 130

**WHITE LESIONS**

White Sponge Nevus (Familial White Folded Dysplasia), Traumatic White Lesions, Leukoplakia 132

**TOBACCO-ASSOCIATED WHITE LESIONS**

Cigarette Keratosis, Nicotine Stomatitis (Smoker's Palate), Snuff Dipper's Patch (Tobacco Chewer's Lesion, Snuff Keratosis), Verrucous Carcinoma (of Ackerman) 134

**RED LESIONS**

Purpura (Petechiae, Ecchymoses, Hematoma), Varicosity (Varix), Thrombus, Hemangioma 136

**RED LESIONS**

Hereditary Hemorrhagic Telangiectasia (Osler-Weber-Rendu Syndrome), Sturge-Weber Angiomatosis (Sturge-Weber or Encephalotrigeminal Syndrome) 138

**RED AND RED-WHITE LESIONS**

Erythroplakia, Erythroleukoplakia and Speckled Erythroplakia, Squamous Cell Carcinoma 140

**RED AND RED-WHITE LESIONS**

Lichen Planus, Lichenoid Mucositis (Lichenoid Drug Reaction/Eruption) 142

**RED AND RED-WHITE LESIONS**

Lupus Erythematosus, Lichenoid and Lupuslike Drug Eruption 144

**RED AND RED-WHITE LESIONS**

Pseudomembranous Candidiasis (Thrush), Chronic Hyperplastic Candidiasis, Erythematous Candidiasis, Acute Atrophic Candidiasis (Antibiotic Sore Mouth), Angular Cheilitis, Chronic Atrophic Candidiasis (Denture Stomatitis) 146

**PIGMENTED LESIONS**

Melanoplakia (Physiologic Pigmentation), Tattoo, Ephelis (Freckle), Smoker's Melanosis (Tobacco-Associated Pigmentation) 148

**PIGMENTED LESIONS**

Oral Melanotic Macule (Focal Melanosis), Nevus, Melanoma 150

**PIGMENTED LESIONS**

Peutz-Jeghers Syndrome (Hereditary Intestinal Polyposis), Addison Disease (Adrenal Cortical Insufficiency), Heavy Metal Pigmentation 152

**SECTION 9 CASES 154****SECTION 10. Intraoral Findings by Surface Change 155****NODULES**

Retrocuspid Papilla, Oral Lymphoepithelial Cyst, Torus, Exostosis, and Osteoma 156

**NODULES**

Irritation Fibroma, Peripheral Odontogenic Fibroma, Giant Cell Fibroma, Lipoma, Fibrolipoma, Traumatic Neuroma, Neurofibroma 158

**PAPULONODULES**

Oral Squamous Papilloma (Papilloma), Verruca Vulgaris, Focal Epithelial Hyperplasia (Heck Disease), Condyloma Acuminatum (Venereal Wart), Lymphangioma 160

**VESICULOBULLOUS LESIONS**

Primary Herpetic Gingivostomatitis, Recurrent Herpes Simplex Infection, Herpangina 162

**VESICULOBULLOUS LESIONS**

Varicella (Chickenpox), Herpes Zoster (Shingles), Hand-Foot-and-Mouth Disease 164

**VESICULOBULLOUS LESIONS**

Allergic Reactions, Localized Anaphylaxis,  
Generalized Anaphylaxis, Allergic Stomatitis,  
Angioedema, Delayed Hypersensitivity, Contact  
Stomatitis, Plasma Cell Gingivitis 166

**VESICULOBULLOUS LESIONS**

Erythema Multiforme, Oral Erythema Multiforme,  
Erythema Multiforme, Stevens-Johnson Syndrome  
(Erythema Multiforme Major), Toxic Epidermal  
Necrolysis 168

**VESICULOBULLOUS LESIONS**

Pemphigus Vulgaris, Pemphigoid (Bullous and  
Cicatricial [Benign Mucous Membrane]) 170

**ULCERATIVE LESIONS**

Traumatic Ulcer, Recurrent Aphthous Stomatitis  
(Minor Aphthae, Aphthous Ulcer),  
Pseudoaphthous 172

**ULCERATIVE LESIONS**

Major Aphthous, Herpetiform Ulceration, Behçet  
Syndrome (Oculo-Oral-Genital Syndrome) 174

**ULCERATIVE LESIONS**

Granulomatous Ulcer, Squamous Cell Carcinoma,  
Chemotherapeutic Ulcer 176

**SECTION 10 CASES**

178

**SECTION 11. Oral Manifestations of Sexual  
Conditions and Systemic Drug Therapies**

179

**SEXUALLY RELATED AND SEXUALLY TRANSMISSIBLE CONDITIONS**

Traumatic Conditions, Sexually Transmitted  
Pharyngitis, Infectious Mononucleosis,  
Syphilis 180

**HIV INFECTION AND AIDS**

Acquired Immunodeficiency Syndrome (AIDS),  
Oral Bacterial Infections, Necrotizing Periodontal  
Diseases, Necrotizing Ulcerative Gingivitis,  
Necrotizing Ulcerative Periodontitis (NUP), Oral  
Fungal Infections, Linear Gingival Erythema,  
Pseudomembranous Candidiasis 182

**HIV INFECTION AND AIDS**

Oral Viral Infections, Varicella-Zoster Virus,  
Cytomegalovirus (CMV), Epstein-Barr Virus (EBV)  
and Hairy Leukoplakia, Human Papillomavirus

(HPV), Condyloma Acuminatum, Oral Malignancies:  
Non-Hodgkin Lymphoma and Squamous Cell  
Carcinoma 184

**ORAL EFFECTS OF DRUGS AND THERAPIES**

Meth Mouth, Graft-Versus-Host  
Disease, Bisphosphonate Osteonecrosis,  
Drug-Induced Hyperpigmentation 186

**SECTION 11 CASES**

188

**SECTION 12. Clinical Applications and Resources**

189

**RX ABBREVIATIONS**

190

**PRESCRIPTIONS AND THERAPEUTIC PROTOCOLS**

191

**ANTIBIOTIC PROPHYLAXIS**

192

**ANTIBIOTIC THERAPY**

193

**ANTIMICROBIAL TOPICAL AGENTS AND RINSES**

194

**ANTIFUNGAL THERAPY**

195

**ANTIVIRAL THERAPY**

196

**TOPICAL ORAL ANESTHETIC AGENTS**

198

**ANTI-ANXIETY AGENTS**

199

**FLUORIDE THERAPY**

200

**MUCOSAL ULCER MEDICATIONS**

201

**NUTRIENT DEFICIENCY THERAPY**

203

**SALIVA SUBSTITUTE**

204

**SEDATIVE/HYPNOTICS**

205

**TOBACCO CESSATION**

206

**GUIDE TO DIAGNOSIS AND MANAGEMENT OF  
COMMON ORAL LESIONS**

207

**GLOSSARY**

227

**INDEX**

241