# CONTENTS


**1. Growth and Development (Head and Neck Region) ..... 1**

- Definition of Growth and Development *1*
- Differentiating between Growth and Development *2*
- Sex Difference in the Skull *2*
- Development of Face *3*
- Development of Tongue *5*
- Development of Mandible *8*
- Development of Maxilla *12*
- Development of Temporomandibular Joint *14*
- Development of Salivary Gland *15*
- Development of Thyroid Gland *15*

**2. Surgical Anatomy of Head and Neck Region ..... 17**

- Introduction *18*
- Surgical Anatomy of Scalp *18*
- Surgical Anatomy of Skin of Face *19*
- Surgical Anatomy of Temporomandibular Joint *20*
- Surgical Anatomy of Cavernous Sinus *25*
- Surgical Anatomy of Maxillary Sinus *28*
- Surgical Anatomy of Parotid Gland *29*
- Surgical Anatomy of Submandibular Gland *34*
- Surgical Anatomy of Orbit *36*
- Surgical Anatomy of Tongue *45*
- Surgical Anatomy of Trachea *50*
- Surgical Anatomy of Larynx *53*
- Surgical Anatomy of Pharynx *55*
- Surgical Anatomy of Nose *58*
- Surgical Anatomy of Ear *62*
- Surgical Anatomy of Hard Palate *66*
- Surgical Anatomy of Soft Palate *67*
- Surgical Anatomy of Floor of Mouth *68*
- Surgical Anatomy of Mandibular Third Molar *70*
- Surgical Anatomy of Middle Third of Facial Skeleton *72*

- Applied Surgical Anatomy of Mandible *77*
- Surgical Anatomy of Thyroid Gland *80*
- Surgical Anatomy of Parathyroid Gland *84*
- Deep Structures in the Neck *86*

**3. Musculature (Head and Neck Region) ..... 87**
- Muscles *87*
- Facial Muscles or Muscles of Facial Expression *88*
- Muscles of Mastication *93*
- Muscles of Tongue *101*
- Muscles of Orbit *104*
- Muscles of Soft Palate *108*
- Muscles of Pharynx *110*
- Muscles of Larynx *113*
- Muscles of Ear *115*
- Muscles of Neck *116*
- Muscles of Back of the Neck *118*

**4. Classification (Diseases/Disorders/Conditions/ Materials and Methods) ..... 120**
- Suture Materials *121*
- Sterilization *122*
- Medically Compromised Condition *123*
- Hemorrhage *125*
- Hemophilia *126*
- Syncope *126*
- Shock *126*
- Local Anesthetic Agents *127*
- Classification of LA Complications *128*
- General Anesthetic Agents *129*
- GA Complications *130*
- Dental Elevators *132*
- Impacted Mandibular Third Molar *133*
- Impacted Maxillary Third Molar *135*
- Impacted Maxillary Canine *136*
- Trismus *139*
- Fascial spaces *140*
- Osteomyelitis *141*

- Cyst of Jaw and Oral Cavity *145*
- Tumors of Jaw and Oral Cavity *152*
- Salivary Glands *155*
- Salivary Gland Diseases or Disorders *157*
- Salivary Gland Tumors *158*
- Diseases of Maxillary Sinus *159*
- Precancerous Lesion *159*
- Oral Submucous Fibrosis *159*
- Preprosthetic Surgical Procedure *161*
- Vestibuloplasty *163*
- Alveoloplasty *163*
- Fibro-osseous Lesions *164*
- Giant Cell Lesion *165*
- Temporomandibular Joint Disorders *165*
- Temporomandibular Joint Ankylosis (Hypomobility) *169*
- Temporomandibular Joint Hypermobility *170*
- Orofacial Pain *170*
- Nerve—Injuries *172*
- Facial Paralysis *172*
- Fracture of Mandible *173*
- Middle Third Facial Skeleton *185*
- Zygomatic Complex Fracture *189*
- Orbital Fracture *191*
- Nasoethmoidal Orbital Fracture *191*
- Tracheostomy *192*
- TNM Staging *193*
- Neck Dissection *194*
- Cleft Palate and Cleft Lip *195*
- Dental Implant *196*
- Classification of Jaw Deformities *197*

**5. Management (Different Lesions/Diseases Conditions/Disorders)..... 200**

- Shock *201*
- Syncope *204*
- Dental Treatment in Hemophilic Patient (Surgical) *205*
- Bleeding in Exodontia *207*

- Postextraction Trismus *208*
- Dry Socket *208*
- Postextraction Edema *209*
- Postoperative Paresthesia (Numbness) *210*
- Facial Paralysis due to Local Anesthesia *210*
- Toxicity due to Overdose of Local Anesthesia *211*
- Allergic Reaction due to Local Anesthesia *211*
- Cellulitis *213*
- Acute Alveolar Abscess *214*
- Pericoronitis *215*
- Osteomyelitis *216*
- Osteoradionecrosis *219*
- Ludwig's Angina *220*
- Cavernous Sinus Thrombosis *223*
- Acute and Chronic Maxillary Sinusitis *223*
- Removal of Root/Tooth/Foreign Bodies from Maxillary Sinus *225*
- Management of Oroantral Fistula *225*
- Trigeminal Neuralgia *228*
- Facial Paralysis *231*
- Bell's Palsy *232*
- Cyst of Jaw and Oral Cavity *233*
- Tumors of Jaw and Oral Cavity *234*
- Temporomandibular Joint Surgery *237*
- Temporomandibular Joint Ankylosis (Hypomobility) *238*
- Temporomandibular Joint Hypermobility Subluxation *240*
- Temporomandibular Joint Dislocation (Luxation) *240*
- Myofacial Pain Dysfunction Syndrome *242*
- Salivary Gland Disease *243*
- Sialadenitis *243*
- Sialadenosis or Sialoses *244*
- Sialorrhea or Ptyalism *245*
- Salivary Gland Tumor/Pleomorphic Adenoma of Parotid Gland *245*
- Salivary Fistula/Parotid Fistula *246*
- Frey's Syndrome *246*

- Xerostomia *247*
- Primary Assessment and Management of a Patient with Maxillofacial Injuries *247*
- Mandible Fracture *257*
- Principles of Treatment of Condylar Fracture *261*
- Management of Fractures of Edentulous Jaw *263*
- Management of Mandibular Fracture in Children *263*
- Maxilla Fracture *266*
- Zygomatic Complex Fracture *268*
- Nasal Fracture *272*
- Naso-ethmoidal-orbital Fracture *272*
- Preprosthetic Surgery *274*
- Precancerous Lesions *276*
- Oral Cancer *277*
- Cleft Lip and Palate *280*
- Cardiopulmonary Resuscitation *283*
- Postoperative Care of Tracheostomy Patient *288*
- Epileptic Attack (Convulsion) during Dental Procedure *289*
- General Care of Surgical Patient *290*
- Specific Management Problems *293*

**6. Syndromes in Oral and Maxillofacial Region ..... 299**

- Albright's Syndrome *301*
- Aglossia-adactylia Syndrome *301*
- Anderson Syndrome or Familial Osteodysplasia *302*
- Angio-osteohypertrophy Syndrome *302*
- Apert's Syndrome/Acrocephalosyndactyly *302*
- Ascher's Syndrome *303*
- Blepharo–naso–facial Syndrome *303*
- Burning Mouth Syndrome *303*
- Carpenter's Syndrome *304*
- Costen's Syndrome *304*
- Cerebro-costo-mandibular Syndrome *304*
- Cracked Tooth Syndrome *305*
- Crouzon's Syndrome or Craniofacial Dysostosis *305*
- Cushing's Syndrome *305*

- Craniomandibular Syndrome or Temporomandibular Joint Dysfunction Syndrome *306*
- Cerebellar Syndrome *306*
- Central Cord Syndrome *307*
- Down's Syndrome or Trisomy of 21 or Mongolism *307*
- Eagle's Syndrome *308*
- Ehlers–Danlos Syndrome or Rubber Man *308*
- Edwards' Syndrome (Trisomy 18 Syndrome) *308*
- Elashy Water's Syndrome or Brachioskeletogenital Syndrome *309*
- Fanconi's Syndrome *309*
- First Arch Syndrome *309*
- Frey's Syndrome or Auriculotemporal Syndrome *309*
- Fetal Alcohol Syndrome *310*
- Fifth Seventh Cranial Nerve Syndrome or Tic Convulsive *310*
- Gardner's Syndrome *310*
- Goltz-Gorlin Syndrome or Focal Dermal Hypoplasia *311*
- Goldenhar's Syndrome *311*
- Grinspan's Syndrome *312*
- Gorham's Syndrome or Massive Osteolysis or Phantom Bone *312*
- Heerfordt's Syndrome *312*
- Hecht-Beals-Wilson syndrome *312*
- Horton's Syndrome or Sphenopalatine Neuralgia/Alarm Clock Headache *313*
- Hajdu–Cheney Syndrome *313*
- Jaw Winking Syndrome or Marcus–Gunn Phenomenon *313*
- Jaw Cyst/Basal Cell Nevus/Bifid Rib Syndrome/Gorlin-Goltz Syndrome *314*
- Larsen's Syndrome *314*
- Long Face Syndrome (Vertical Maxillary Excess) *315*
- Marfan's Syndrome *315*
- Moebius Syndrome/Congenital Facial Dysplasia *316*
- Myofacial Pain Dysfunction Syndrome *316*

- Melkersson-Rosenthal Syndrome *317*
- Median Cleft Face Syndrome or Frontonasal Dysplasia *317*
- Mohr's Syndrome *317*
- McCune-Albright's Syndrome *318*
- Nagar's Syndrome or Acrofacial Dysostosis *318*
- Orofacial Digital Syndrome *318*
- Oromandibular Limb Hypogenesis Syndrome *319*
- Oto-palato-digital Syndrome *319*
- Orbital Syndrome *320*
- Postextraction Syndrome (Osteomyelitis Syndrome or Dry Socket) *320*
- Plummer-Vinson Syndrome *320*
- Pfeiffer's Syndrome *321*
- Raeder's Syndrome or Paratrigeminal Syndrome *321*
- Ramsay Hunt's Syndrome *321*
- Sjögren's Syndrome *322*
- Superior Orbital Fissure Syndrome *322*
- Styloid Process Syndrome *322*
- Syngnathia–Popliteal Pterygium Syndrome *323*
- Scheuthauer–Marie–Sainton Syndrome/Cleidocranial Dysplasia *323*
- Tricho-dento-osseous Syndrome *323*
- Trotter's Syndrome *324*
- Temporomandibular Joint Dysfunction Syndrome *324*
- Treacher Collins Syndrome/Mandibulofacial Dysostosis *324*
- Van der Woude's Syndrome *325*
- Whistling Face Syndrome/Cranio-carpalotarsal Syndrome *325*
- XXXXY Syndrome *326*
- Zygomatic Syndrome *326*

**7. Diagnostic Clinical Signs in Maxillofacial Region ... 327**

- Ball in Hand Configuration *328*
- Beaten Silver Appearance of Skull *329*
- Bull's Eye Ring or Tram Line Pattern *329*

- Bucket Handle Appearance *329*
- Battle's Sign *329*
- Bell's Phenomenon or Bell's Sign *329*
- Bird Face Appearance *330*
- Birn Hypothesis or Dry Socket/Postextraction Syndrome *330*
- Brudzinski's Sign *330*
- Champy's Principle *331*
- Crow's Foot Skin Creases *331*
- Cherry Blossom Appearance *331*
- Circle of Willis *331*
- Coleman's Sign *332*
- Commando Operation *332*
- Cracked Pot Sound *332*
- Crocodile Tear/Crocodile Tear Syndrome *332*
- Carotid Siphon *332*
- Dish-shaped Face/Dish Pan Face *333*
- Difficulty Index *333*
- Dog Ear Wound Closure *334*
- Danger Area of the Face *334*
- Epstein's Pearls *334*
- Elephant Foot Deformity *335*
- Frozen or Mask-like Face *335*
- Facelift Surgery (Rhytidectomy) *335*
- Golden Hour *336*
- Goose Foot (Parotid Plexus or Pes Anserinus) *336*
- Greenstick Fracture *336*
- Guerin Sign *336*
- Glasgow Coma Scale *336*
- Hilton's Law *337*
- Hooding of the Eyes *337*
- Jug Handle View *338*
- Kiesselbach's Plexus or Little's Area *338*
- Langer's Lines *338*
- Levine Sign *338*
- Lincoln Highway of Neck *338*

- Millard's Rule of 10 *339*
- Modiolus *339*
- Open Sky Incision *339*
- Pinto Ligament *339*
- Pruned Tree Appearance or String of Sausages *340*
- Peau d' Orange Skin *340*
- Pott's Puffy Tumor *340*
- Panda Facies or Moon Facies *340*
- Parade Ground Fracture *340*
- Raccoon Eyes or Raccoon Sign *341*
- Slob Rule (Clark's Tube Shift Technique) *341*
- Tongue Tie *341*
- Tinel's Sign *342*
- Thomas Principle *342*
- Vossius Ring *342*
- Whiplash Injury *342*
- Water's View *343*
- War Lines *343*
- Witch's Chin *343*
- White Strawberry Tongue and Red Strawberry Tongue *344*
- Wry Neck *344*
- Wrinkle Line or Natural Line *344*
- Wolff's Law *345*

**8. Typical Radiographic Picture in Different Conditions ..... 346**

**9. Test in Oral and Maxillofacial Surgery ..... 350**

- Bowie–Dick Test *351*
- Brown's Test *351*
- Chick–Martin Test *351*
- Conduction Test (Diagnostic Test for Facial Paralysis) *352*
- Forced Duction Test *352*
- Frey's Hair Test *352*
- Handkerchief Test *352*
- Hess Test *353*
- Nose Blowing Test *353*

- Paget's Test *353*
- Riedel–Walker Test *354*
- Schirmer's Test *354*
- Starch Iodine Test *354*
- Tobey–Ayer Test *355*
- Tourniquet Test *355*
- TST Test *355*
- Valsalva Test *355*

**10. Red Lesions of the Oral Cavity ..... 356**
**11. White Lesions of the Oral Cavity ..... 357**
**12. Yellow Lesions of the Oral Cavity ..... 359**
**13. Blue/Black/Brown/Purple Lesions ..... 360**
**14. Ulcerative Lesions of the Oral Cavity ..... 361**
**15. Pericoronal Radiolucencies ..... 362**
**16. Solitary Cyst-like Radiolucencies ..... 363**
**17. Multilocular Radiolucencies ..... 365**
*Index ..... 367*