Textbook of Oral and Maxillofacial Surgery

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1. Aseptic preparation of the patient along with surgical draping for Oral and Maxillofacial Surgeries.
2. Surgical demonstration for removal of impacted supernumerary tooth in maxillary right anterior region and lower left mandibular premolar teeth region with two impacted supernumerary teeth.
3. Surgical demonstration of Labial Maxillary Frenectomy procedure.
4. Surgical extraction of lower right impacted third molar in the edentulous area.
5. Surgical demonstration for exposure of upper right canine [for fixing the orthodontic bonding] and extraction of right deciduous canine.
6. Surgical procedure for the cyst enucleation in anterior region maxilla. Patient had recurrent swelling, pus discharge and periodontally compromised anterior teeth.
7. 3-D CT scan is helpful in planning the surgical treatment. Presenting a 3-D CT scan of the entire skull of a patient, who was involved in road traffic accident. The fracture of the left parasympysis and right subcondylar region is seen in all the rotations/in all the planes, which is not possible to visualize by routine X-ray pictures.
8. Shows 3-D CT scan of a patient with trauma. Here disarticulated mandibular 3-D CT scan shows the presence of right parasympysis and L ramus region fracture and bony fragment displacement.
9. Shows 3-D CT scan of the same patient, but here both maxilla and mandible are seen with skull disarticulation.
Textbook of Oral and Maxillofacial Surgery

Second Edition

Edited by
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Foreword by
Prof. Dr. S.G. Damle

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New Delhi • Ahmedabad • Bengaluru • Chennai • Hyderabad • Kochi • Kolkata • Lucknow • Mumbai • Nagpur
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and
To All My Esteemed Teachers
with
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It is my privilege to write a few words about the “Textbook of Oral and Maxillofacial Surgery.”

The “Textbook of Oral and Maxillofacial Surgery” is a well-orchestrated effort by the editor, Prof. Dr. (Mrs) N.A. Malik, Head of the Department of Oral and Maxillofacial Surgery, Nair Hospital Dental College (NHDC), Mumbai. She is an academician par excellence. This, coupled with her skills and expertise in the field of Oral and Maxillofacial Surgery, makes her an epitome for an ideal Oral and Maxillofacial Surgeon and an eminent teacher.

The hallmark of this book is an extensive, pointwise coverage of the vast subject of Oral and Maxillofacial Surgery in accordance with the syllabus of Dental Council of India and Universities all over India. I am confident that this lucid well-illustrated book with easy language and concise tables will make an interesting and informative reading for undergraduate students.

The book has been authored by dedicated, outstanding, experienced clinicians and eminent teachers from India and will provide guidelines to safe and sound operative techniques suitable for the Indian subcontinent. The information provided in the book is the latest, taking into account the advances in science and technology in dentistry.

The editor deserves a hearty congratulation for all the efforts and hard work she has undertaken. I am sure that this book will guide students into gaining an insight into the vast field of Oral and Maxillofacial Surgery.

Prof Dr SG Damle
Dean, NHDC Mumbai
Director, Medical Education and Public Health
Joint Municipal Commissioner of
Municipal Corporation of Greater Mumbai
Maharashtra, India
Preface to the Second Edition

My dear Students and Teachers

A very big ‘thank you’ to all of you. I am very truly overwhelmed by the response you all gave to the first edition and all its reprints. This has encouraged me to revise, reorganize and update the book and present it to you in the new form of second edition. Special emphasis is given on correct scientific information, flow charts, appropriate schematic diagrams, photomicrographs and clinical and intra/post-operative pictures, along with allied radiographs and CT/MRI Scan/Scintigraphy pictures.

All these illustrations will definitely help you all to have a clear understanding of the subject of Oral and Maxillofacial Surgery. The book contains my life’s work and I sincerely hope you like it in its current form.

Initially this book was written in accordance with the latest syllabus of all Indian Dental Universities prescribed for undergraduate students. But, after positive feedback from all students and teachers from all over the country, I feel that it is also certainly valuable for postgraduates, teachers and dental practitioners.

I wish to express my gratitude to all, who contributed towards the success of this book.

I am happy to be associated with Jaypee Brothers Medical Publishers (P) Ltd., who are publishing the customized medical books to meet the curriculum and affordability. The organization is committed to the cause of medicine and I fully endorse their values such as passion, trust and balance.

My dream of reaching the students from all over the country and overseas has come true because of the constant support and encouragement from my family—my husband Dr. Anil and my daughter Dr. Shambhvi and all my dear friends and well wishers. I wish to express my appreciation to Mr. Gopinath Sawant, a well known commercial photography teacher for his skillful preparation of diagrams and some of the photographs. I also want to thank Professor Dr. Anil D’cruz, Internationally famous oncosurgeon, consultant and Chief of Head and Neck Services, Tata Memorial Hospital, Parel, Mumbai and Prof. Dr. R. Pradhan, a renowned Senior Oral and Maxillofacial Surgeon and Principal, U.P. Dental College and Research Centre, Lucknow for their valuable inputs on Oral Cancer and Implants respectively.

Last, but not the least I want to convey my thanks to Dr Sunali Khanna, Lecturer, Dept. of Oral Medicine and Radiology, NHDC Mumbai for her contribution.

With warm regards

Professionally yours

Neelima Anil Malik
This textbook is the natural outcome of having worked at one of the prime dental teaching institutes in India, where there is abundance of variety of clinical materials and excellent infrastructure, with my teachers, colleagues and good friends over the past twenty-seven years in various capacities. This text also represents many years of combined clinical research and experience at our institute.

The field of Oral and Maxillofacial Surgery has witnessed significant changes over the last two decades. These changes have improved our knowledge and understanding of the diagnosis and management of oral and maxillofacial surgical problems. The basic aim of this textbook is to incorporate this updated information and provide concise description of various oral and maxillofacial surgical procedures and current concepts and contemporary information.

The unique feature of this book is that it incorporates all of those various subjects, which are usually found in separate textbooks. We have taken efforts to present every chapter with updated text and to provide clear illustrations, wherever required.

The information given and the chapters mentioned in this book are based on the curriculum prescribed for undergraduate programme for all universities in India.

We felt the need to incorporate the extensive section on anaesthesiology, as this aspect is not covered adequately in currently available standard textbooks in the subject. For the first time in the history, the anaesthesiology chapters are supplemented with colour illustrations.

It has been observed that the current trend of the undergraduate students is not to refer to many textbooks, may be because of either the time factor or the lack of availability of books etc. We, therefore, desired to accommodate maximum information in one single textbook. (Local anaesthesia is not included, as many good books are available).

The purpose of this book is to present as lucid and simple text as possible in the point format, without sacrificing the biological concepts.

Pains taking efforts are also made to create illustrations and to provide maximum clinical pictures in most of the chapters, which is an essential feature of the book.

The earlier publications by our predecessors and prominent workers in the field served as a valuable source of reference material for this book.

The book is basically intended for dental undergraduates, but would certainly be useful for postgraduates, general practitioners and teachers in the field.

I humbly request the teachers throughout the country to give suggestions, contributions for future additions.

As we begin with the first century of the new millennium, we hope that this textbook will provide the data and reference source to assist the clinician and others to face the oral and maxillofacial problems.

“Never must the physician say the disease is incurable. By that admission he denies God, our creator, he doubts Nature with her profuseness of hidden powers and mysteries.”

Paracelsus

I am very happy to present this textbook to the students all over the country, in the year, when I have been selected as “President Elect” of the Association of Oral and Maxillofacial Surgeons of India. I am grateful to all the members for giving me this opportunity to serve the fraternity.

Neelima Anil Malik
For the last many many years, I always dreamt of presenting a *Textbook of Oral and Maxillofacial Surgery* to the students all over the country.

First and foremost I have to thank *“The Supreme Power—God”* for giving me energy, inspiration, courage to complete this arduous task and to make my dream come true. Without *“His”* blessings nothing is possible.

I acknowledge my gratitude to Prof. Dr. S.G. Damle, Dean, Nair Hospital Dental College and Director, Medical Education and Public Health, Municipal Corporation of Greater Mumbai. I am indebted to him for providing the facilities and opportunities, that made it possible to conduct the various clinical research and patient care, over the years, from which the clinical material for this text has been obtained. His constant encouragement and appreciation of the good work has always given us a boost.

My acknowledgements are also due to my all undergraduate teachers, who made the subject of Oral and Maxillofacial Surgery so interesting, which inspired me to join the postgraduate studies in the subject.

I am indebted to my postgraduate teachers Prof. Dr. A.P. Chitre, Prof. Dr. K.H.C Kapadia and Prof. Dr. S.K. Dewan for their encouragement and guidance throughout my training programme.

I will be failing in my duty, if I do not mention late Dr. Mrs. Dhun Battiwala, who taught me my very first dental extraction. She and Dr. A.D’Costa supported me and helped me to continue my postgraduate studies along with the teaching job in the subject of oral and maxillofacial surgery, by exchanging their teaching posts with me. I am grateful to both of them.

A book of this magnitude was possible, only with co-operation of many individuals.

I would like to express my deep appreciation to all the contributors, whose untiring efforts have made this textbook possible.

My special thanks to the staff of the anaesthesiology Department of Topiwala Nair Medical College and Hospitals, (T.N.M.C) Mumbai, who have been always supportive for many many years and their contribution towards this book is also immense. Special credit goes to Prof. Dr. Mrs. Divekar—Ex professor and Head of the anaesthesiology at T.N.M.C., who developed the present ‘State of the art’ anaesthesiology department at our institute. And later on, more advances were carried forward by Prof. Dr. Mrs. Panchal—previous Professor and Head of the department of anaesthesiology at T.N.M.C and current Professor and Head of the department, Prof. Dr. Mrs. Kamdar. Their excellent techniques and constant support has always made our life easy and given us the opportunity for excellent patient care.

Prof. Dr. J.N. Khanna also deserves special mention, as I have had opportunity to work with him and to enrich my knowledge and skill and share the responsibility of the department of Oral and Maxillofacial Surgery at N.H.D.C., Mumbai for 14 long years.

I acknowledge the unconditional assistance given to me in my day-to-day work, by my Associate Professor Dr. M. Deshpande and Dr. P. Solanki, Senior Lecturer and I also thank my all other teaching and non-teaching staff members of the department.

My special thanks to all my present and past postgraduate students for the stimulation and encouragement I derived from their enthusiasm and interest in the field of Oral and Maxillofacial Surgery.

I am grateful and indebted to the following for their knowledge and assistance in specific areas:

Dr. Mrs. Vandana Laheri—Associate professor of anaesthesiology at T.N.M.C and my ever helping good friend, for complete colour diagrams and illustrations provided for the anaesthesiology chapters. She has also given me unconditional assistance for scanning, preparing other text diagrams, etc.

Dr. Ajit Pillai—Resident in anaesthesiology at T.N.M.C Line diagrams and some of the sketches illustrated in the book.
Mr. Pradeep Sahani—Commercial artist for some of the illustrations and photographs in the book.  
Mr. A. Sawant—For preparation of the initial computerized typescripts of the entire textbook.  
Thank you all for your kind support and understanding.

I would like to thank Dr. M.I. Parkar, our past student/resident and currently practicing oral and maxillofacial surgeon, and teacher at Yerala Medical Trust’s Dental College and Hospital at Navi Mumbai, for his immense contribution towards the completion of this book.

Finally my deep appreciation and love to my husband Dr. Anil Malik for his personal sacrifice and constant support in permitting me to undertake and accomplish such a difficult endeavour and to my beloved daughter Shambhvi for her motivation, inspiration and encouragement.

I am also grateful to Mr. Jitendar P. Vij, Chairman and Managing Director of Jaypee Brothers Medical Publishers (P) Ltd. Delhi, who personally encouraged me to write the textbook.

On the occasion of releasing this second edition, I wish to thank profusely Sh J.P. Vij, Chairman and Managing Director, Mr. Tarun Duneja, General Manager (Publishing) for publishing this book in excellent form. I thank the entire staff of Mumbai branch especially Mr. C.S. Gawde, Branch Manager and Mr Ramesh Krishnamachari, Author Coordinator for their cooperation and help.

I also wish to thank Mr. P.S. Ghuman, Sr. Production Manager and his team, Mr. Sunil Gupta, Production Manager, Mrs. Yashu Kapoor, Ms. Bano, Mr. Manoj Pahuja, Mr. Deepak and Ms. Anju for giving competent technical support which has helped me to bring out this edition with added colour and excellence.

Last but not the least, I would like to mention that I am indebted to individuals (including patients) too numerous to mention separately.
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