

---

# Contents

## Part 1 General Concepts in Assessment and Management of the Surgical Patient

<b>1 Patient Safety</b> . . . . .	3
Jeffrey D. Bennett	
<b>2 Preoperative Assessment and Evaluation for Maxillofacial Surgery</b> . . . . .	13
Thomas M. Halaszynski	
<b>3 Anesthesia Care in Maxillofacial Surgery</b> . . . . .	31
Annibal Faddoul, Youssef Tfaili, and Chakib M. Ayoub	
<b>4 Initial Management of the Trauma Patient in Maxillofacial Surgery</b> . . . . .	39
Timothy H. Pohlman, William Gossett, and Jan R. Kornilow	
<b>5 ICU Management of the Maxillofacial Surgery Patient</b> . . . . .	71
Julie McNeish and David S. Shapiro	
<b>6 Nutritional Care of the Maxillofacial Surgical Patient</b> . . . . .	81
Jennifer Hartwell	
<b>7 Fluids and Transfusion During Maxillofacial Surgery</b> . . . . .	93
Issa Rezek and Antoine M. Ferneini	
<b>8 Imaging for Maxillofacial Surgery</b> . . . . .	105
Kristine Mosier	
<b>9 Chest X-Ray Interpretation</b> . . . . .	119
Elie Tony Nader	
<b>10 Peri-Operative Infection Control in Maxillofacial Surgery</b> . . . . .	129
Julie Ann Smith	
<b>11 Peri-Operative Pain Management in Maxillofacial Surgery</b> . . . . .	145
Joseph E. Cillo Jr.	
<b>12 Chronic Medications and Maxillofacial Surgery</b> . . . . .	161
James Omlie and Andrew Herlich	

<b>13 Ethical Dimensions of Maxillofacial Surgery</b> . . . . .	183
Lawrence P. Garetto and Odette M. Aguirre	
<b>14 Medicolegal Aspects of Maxillofacial Surgery</b> . . . . .	197
Brendan Faulkner, Patrick J. Kennedy, Elisabeth M. Swanson, Sean M. Stokes, and James R. Hupp	
<b>Part 2 Medical Management of the Surgical Patient</b>	
<b>15 Cardiovascular Disease and Maxillofacial Surgery</b> . . . . .	213
Yulanka Castro-Dominguez and Andre Ghantous	
<b>16 Pulmonary Disease and Maxillofacial Surgery</b> . . . . .	223
Daniel McNally	
<b>17 Neurologic Disorders and Maxillofacial Surgery</b> . . . . .	243
Pooia Fattahi, Masoud Yeganegi, and Katherine Kedzierski	
<b>18 Renal Disorders and Maxillofacial Surgery</b> . . . . .	263
George Sunny Pazhayattil and Marc Ciampi	
<b>19 Gastroenterological and Hepatic Disorders and Maxillofacial Surgery</b> . . . . .	273
Sashidhar Sagi and Marwan Ghabril	
<b>20 Endocrine Disorders and Maxillofacial Surgery</b> . . . . .	289
Marconi Abreu and Hassan Khalid	
<b>21 Rheumatologic Disorders and Maxillofacial Surgery</b> . . . . .	303
Steven Hugenberg	
<b>22 Hematologic Disorders and Maxillofacial Surgery</b> . . . . .	317
Michele Obeid, Joelle El Amm, and Hady Ghanem	
<b>23 Oncologic Disorders and Maxillofacial Surgery</b> . . . . .	323
Victor A. Chang	
<b>24 Substance Abuse and Maxillofacial Surgery</b> . . . . .	335
Thomas Hickey, Michael Kwakye, and Pavan Tankha	
<b>25 Perioperative Management of the Tobacco User</b> . . . . .	345
Laura Romito	
<b>26 Chronic Pain Management and Maxillofacial Surgery</b> . . . . .	359
Avni Gupta, Pavan Tankha, and Mahmood Ahmad	
<b>27 Perioperative Management of the HIV Patient</b> . . . . .	373
Lydia Aoun Barakat and Jacques Emile Mokhbat	
<b>28 Psychiatric Disorders and Maxillofacial Surgery</b> . . . . .	385
Jayesh Kamath and Shakaib Khan	
<b>29 Perioperative Management of Pregnant &amp; Postpartum Patients</b> . . . . .	407
Sarah T. Araji, Georges Yared, Deena Elkafrawi, and Tony G. Zreik	

<b>30</b>	<b>Perioperative Management of Head and Neck Burns</b> . . . . .	421
	Roselle E. Crombie and Amit Sood	
 <b>Part 3 Perioperative, Pharmacological, and Supportive Management of the Surgical Patient</b>		
<b>31</b>	<b>Treatment Planning and Perioperative Management of the Dental Implant Patient</b> . . . . .	433
	Michael S. Block	
<b>32</b>	<b>Navigational Surgery and Computer Assisted Treatment Planning</b> . . . . .	455
	Akashdeep Villing and Jasjit Dillon	
<b>33</b>	<b>Perioperative Management of Temporomandibular Joint and Myofascial Pain</b> . . . . .	473
	Gary F. Bouloux	
<b>34</b>	<b>Facial Cosmetic Surgery</b> . . . . .	485
	LisaMarie Di Pasquale, Mohammad Banki, and Elie M. Ferneini	
<b>35</b>	<b>Peri-operative Management of the Orthognathic Surgery Patient</b> . . . . .	501
	Christian A. Moore and Bernard J. Costello	
<b>36</b>	<b>Craniofacial Surgery</b> . . . . .	515
	Jennifer E. Woerner and G.E. Ghali	
<b>37</b>	<b>Microvascular Flap Management During Maxillofacial Surgery</b> . . . . .	541
	Roderick Youngdo Kim and Brent Benson Ward	
 <b>Part 4 Complications in Managing the Surgical Patient</b>		
<b>38</b>	<b>Chest Pain as a Complication of Maxillofacial Surgery</b> . . . . .	557
	Virginia Workman and Andre Ghantous	
<b>39</b>	<b>Respiratory Distress as a Complication of Maxillofacial Surgery</b> . . . . .	567
	Carolyn McDonald and Rishal Ambaram	
<b>40</b>	<b>Hemodynamic Instability as a Complication of Maxillofacial Surgery</b> . . . . .	579
	Kyle J. Kramer	
<b>41</b>	<b>Acute Renal Failure as a Complication of Maxillofacial Surgery</b> . . . . .	595
	Marc Ciampi and George Sunny Pazhayattil	
<b>42</b>	<b>Altered Mental Status as a Complication of Maxillofacial Surgery</b> . . . . .	605
	Roger S. Badwal	

---

<b>43 Postoperative Cognitive Dysfunction as a Complication of Maxillofacial Surgery</b> .....	617
Jagdev S. Heir	
<b>44 Postoperative Delirium as a Complication of Maxillofacial Surgery</b> .....	625
Michael P. Johnson	
<b>45 Fever as a Complication of Maxillofacial Surgery</b> .....	635
H. Alexander Crisp and Martin B. Steed	
<b>46 Drug–Drug Interactions as a Complication of Maxillofacial Surgery</b> .....	643
James J. Omlie and Andrew Herlich	
<b>47 Postoperative Nausea and Vomiting as a Complication of Maxillofacial Surgery</b> .....	661
Deepak G. Krishnan	
<b>48 Aspiration as a Complication of Maxillofacial Surgery</b> .....	667
Frank Paletta, Tian Ran Zhu, and Douglas Johnson	
<b>49 Ophthalmologic Injuries as a Complication of Maxillofacial Surgery</b> .....	675
Jeremy D. Clark and Hui Bae Harold Lee	
<b>50 Vascular Injuries as a Complication of Maxillofacial Surgery</b> .....	691
Dmitry Peysakhov and Antoine Ferneini	
<b>51 Malignant Hyperthermia as a Complication of Maxillofacial Surgery</b> .....	709
Adriana D. Oprea	