

Plastic Surgery Emergencies

Principles and Techniques

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Second Edition



 Thieme

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It is with great pleasure that I dedicate the newest edition of our text to our senior author, Dr. Samuel Stal. Sam died several years ago after a lengthy illness. He would have been most pleased to see that this work has stood the test of time. Sam was a surgeon who dedicated his life to the treatment of children. He was passionate about teaching and passing on all that he had learned through the years. He was a mentor to all of us who worked with him on this book and he was instrumental in seeing the first edition through to publication. I know that I can speak for all of my coauthors, and thank Sam for being the person that he was—an excellent teacher, but first and foremost, a kindhearted and caring man.

—Larry H. Hollier, MD



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Foreword from the First Edition

“The man who graduates today and stops learning tomorrow is uneducated the day after.”

—*Newton D. Baker Jr.*

When I was asked to write a foreword for this book *Plastic Surgery Emergencies*, I must confess, my first thought was, “Is another book truly necessary?” But after reading it, I am both honored and flattered by the request. The browser might first question if this relatively small book fulfills a need, and second ask if it fulfills the need well. The answer to both questions is a resounding “Yes.”

With the body of medical knowledge doubling every 5 years or so, the information that must either have been learned or be readily available and understandable to both the young as well as the experienced plastic surgeon continues to increase exponentially. This book distills present knowledge into an easily readable guide to almost any emergency a plastic surgeon might face who is on call in the emergency room, or responding to a late-night/early-morning call from the hospital relating to a postoperative patient.

The authors, who are general plastic surgeons and specialists from the Division of Plastic Surgery here at the Baylor College of Medicine, have culled information from their own surgical experiences, as well as a wide variety of outside sources. They have condensed this knowledge into a small, handy volume, which could easily be read either at one’s leisure or immediately prior to assuming the care of a patient. It would be difficult to find an injury or complication from a plastic surgery operation whose emergency treatment is not covered in this book. The authors have detailed the specifics in terms of differential diagnosis and the corrective steps necessary to fulfill the responsibilities of a plastic surgeon answer-

ring emergency room call. There are many references to the general principles of treatments—those learned in residency training and in the early years of practice that have stood the test of time. The ability of the surgeon to present an organized treatment plan and then carry it out expeditiously will instill confidence in the patient and the health care personnel involved in the treatment of these patients. The format of the book is conducive to allowing readers to add both personal and technical notes, which will serve them well in the treatment of future patients with similar injuries.

I would be remiss if I didn’t call special attention to the lead author, Dr. Jamal M. Bullocks, whose ability and youthful enthusiasm has amalgamated the thoughts and experience of the other authors into a volume that will find great value for all plastic surgeons as well as general surgeons and emergency room physicians.

To those older plastic surgeons who may believe that they have already learned the answers to most of the problems presenting to the plastic surgeon on call, I respectfully suggest that although the problems that presented a decade or two ago may be the same, the answers (i.e., treatment) today may be different. It is to that difference that we are indebted to the authors of this book for their effort and time in providing us with concise and practical answers.

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Preface

The goal in creating *Plastic Surgery Emergencies* is to provide a quick reference guide for health care providers to rapidly assess, triage, and treat patients with problems that are commonly referred to the plastic surgeon. The first version targeted acute care scenarios commonly seen in the emergency department of acutely injured facial and hand trauma patients, as well as patients sustaining a variety of soft-tissue injuries from varying mechanisms of trauma, including burns. This new edition provides the reader with additional content, including added chapters, photos, and sections which will expand the book's audience to outpatient and hospital-based physicians caring for chronically ill patients with wounds. The information presented will prove significantly beneficial to plastic surgeons, otolaryngologists, dermatologists, pediatricians, family practice, and

hospitalist and emergency room physicians for treating and triaging patients in the acute and chronic disease setting. Ultimately, the aim is to demystify simple problems that present to these providers and elucidate scenarios that require a higher level of care or follow-up with a plastic surgeon. Our intended audience additionally extends to residents and students training in these fields who experience these encounters as consultations and during on-call activity.

The outline format was preserved with truncated introductory vernacular to confer direct mechanisms for instructions on how to work up, categorize, and initiate the first level of treatment. We hope that this focused and simplified presentation with instructive illustrations, charts, and diagrams will provide a single-source reference in a convenient pocket-sized format.

Acknowledgments

Plastic Surgery Emergencies is a collection of the collaborative knowledge and experience of all the affiliated and full-time faculty of the Division of Plastic Surgery in the Michael E. DeBakey Department of Surgery at Baylor College of Medicine. The authors would also like to express their gratitude to the residents, staff, and institutions of the Texas Medical Center for their support in the completion of this work.

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List of Abbreviations

3D	three-dimensional
ABCs	airway, breathing, and circulation
ABGs	arterial blood gases
ACON	acute compressive optic neuropathy
ACS	abdominal compartment syndrome
AFib	atrial fibrillation
AP	anteroposterior
APB	abductor pollicis brevis
APD	afferent pupillary defect
APL	abductor pollicis longus
APTT	activated PTT
ASA	aspirin
BP	blood pressure
BSA	body surface area
BSAB	body surface area burned
CBC	complete blood count
Chem-7	a basic metabolic panel
CK	creatin kinase
CMC	carpometacarpal
CML	carpometacarpal ligament
CN	cranial nerve
COPD	chronic obstructive pulmonary disease
CRP	C-reactive protein
CSF	cerebrospinal fluid
C-spine	cervical spine
CT	computed tomography
CVP	central venous pressure
CXR	chest X-ray
D5 1/2NS	5%dextrose in 0.45%normal saline
DIC	disseminated intravascular coagulation
DIEAP	deep inferior epigastric artery perforator flap
DIP	distal interphalangeal
DISI	dorsal intercalated segment instability
DJD	degenerative joint disease
DRU	distal radioulnar
DVT	deep venous thrombosis
EBL	estimated blood loss
ECRB	extensor carpi radialis brevis
ECRL	extensor carpi radialis longus
ECU	extensor carpi ulnaris
EDC	extensor digitorum communis
EDM	extensor digiti minimi
EIP	extensor indicis proprius
EMG	electromyogram
EMLA	eutectic mixture of local anesthetics
ENoG	electroneuronography
ENT	ear, nose, and throat
EPB	extensor pollicis brevis
EPL	extensor pollicis longus
ER	emergency room
ESR	erythrocyte sedimentation rate (or sed rate)
FCR	flexor carpi radialis
FCU	flexor carpi ulnaris
FDA	Food and Drug Administration
FDM	flexor digiti minimi
FDP	flexor digitorum profundus
FDS	flexor digitorum superficialis
FFP	fresh frozen plasma
FPB	flexor pollicis brevis
FPL	flexor pollicis longus