

***EARLY TREATMENT
OF
FACIAL INJURIES***

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Dedicated

to our wives

Helene Marie Zaydon

Bertha Philips Brown

Preface

This text has been prepared to serve as a practical, condensed guide for the early treatment of a patient who has incurred a facial injury. In view of the large and ever increasing number of facial injuries, a monograph such as this is considered timely. Furthermore, each of us, subjected to the ordinary risks of everyday life, is a potential candidate for trauma to the face. Most of the facial injuries we have treated have been caused by automobile accidents and industrial trauma. A significant number has resulted from athletic activities, farm injuries, home accidents, fist fights and firearms. With the possibility of mass casualties resulting from warfare once again, a general knowledge of treating facial injuries is advisable for all physicians.

No set program can govern the treatment of an injured individual. Our plan, however, has been to present concisely the fundamental principles of treatment which have a sound surgical basis. Emphasis is placed on the simplest and most direct methods which we have found to be of the greatest usefulness on our plastic surgery services. For brevity and clarity, extensive details and obsolete procedures have been omitted. Since this text is not meant to

be encyclopedic, not all of the current procedures are included.

This book is divided into six chapters: General Care of the Injured Patient; Soft Tissue Injuries; Nasal Fractures; Mandibular Injuries; Fractures of the Zygoma and Zygomatic Arch; Mid-Third Facial Injuries (Fracture of the Maxilla). The diagnosis, preparation of the patient, operative treatment and postoperative care which we have found to be most effective are discussed. Emphasis is placed on the possible associated problems and complications which may occur in specific types of trauma. By necessity, there is some overlapping of subject matter. Chapter One, on the General Care of the Injured Patient, and Chapter Two, on Soft Tissue Injuries, are pertinent to all of the chapters which follow. Drawings and photographs are utilized to clarify the principles discussed in this text and for emphasis of important therapeutic points. So that the reader may use this material most easily and effectively, a detailed table of contents is included at the beginning of each chapter.

The principles and procedures outlined herein will be a practical aid in teaching the surgery of trauma to

medical, dental and graduate students. House staff physicians, general practitioners, dentists and surgeons, entrusted with the responsibility of treating facial injuries, also will find this text of value. The sections on childhood injuries will be of special interest to the pediatrician. Regardless, whoever undertakes the treatment of a facial injury should be familiar with these basic principles of plastic surgery. Further, it is our sincere hope that all who are confronted with

the care of mutilating injuries of the face will take a renewed interest and participate more actively in accident prevention activities. If some progress is made in realizing these aims, then this book will have fulfilled our objective.

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Introduction

A prompt and thorough assessment of the injured patient should be carried out and an orderly plan of treatment readily formulated. Never hesitate to delay or alter the treatment in view of pertinent new findings. It is vitally important that life-threatening situations be quickly recognized and treated. Since trauma does not respect the boundaries of any specialty, it is the responsibility of the surgeon in charge to obtain consultation whenever necessary. He should not be diverted by the most apparent injury or focus the therapy solely within his own particular specialty. The invaluable services of any consultant who will contribute to the optimum care of a specific problem should be utilized freely. As always, the golden rule should prevail: the physician should treat the patient as he would want himself or his loved ones to be treated.

Treatment of a facial injury should be guided by the functions of the face and its components. Physiologically, the following conditions must be provided: a patent nasal airway for proper breathing, sinus aeration and maintaining the sense of smell; a solid, mobile mandible and functional contiguous soft tissues for normal chewing, talking and swallowing; a patent external auditory canal for normal hearing; functional eyelids and proper contiguous bone and muscle structures for eyeball coverage, support and mobility, thus protecting the vision. Furthermore, since "looking normal" is

one of the most important functions of the face, the features and properly functioning facial muscles must be restored. Too often, a facial injury which appears minor to the treating physician initially, ultimately may become serious by developing into a tremendous psychological problem for the patient. Therefore, facial trauma must be considered in a slightly different light than similar trauma occurring in most other parts of the body where function is the primary concern in a repair. In facial injuries, proper measures must be taken for the best possible esthetic repair. Regardless of who the patient may be or his position in life, there is a natural human desire to present as normal and pleasing a facial appearance as possible.

The initial repair of a facial injury, if well conceived and properly executed, often will yield a better final result than can be obtained by multiple procedures performed secondarily. Furthermore, prolonged hospitalization, disability and other added expenses can be avoided. With proper early care, there will be less tendency toward infection, bone fixation in malposition as well as soft tissue scarring and distortion. Inadequate primary treatment or the superimposition of added trauma may result in deformities which are difficult or impossible to correct, or at best, leave much to be desired. In most instances, a satisfactory primary repair will be the only correction that is required. Occa-