Current Concepts of External Fixation of Fractures

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With 227 Figures

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Preface

External fixation is now being used widely to maintain fractures, osteotomies, and arthrodeses in a desired position during consolidation.

Whereas external fixation has been readily accepted in European countries, its use has weathered a rather stormy course in North America, especially in the treatment of fractures. Only recently has external fixation found its rightful place on this continent as well.

Many different models are on the market today, and the practitioner is faced with a difficult decision in selecting a model. Should he buy a system where the fracture has to be reduced first, or should he work with a device permitting a reduction after insertion of the pins? To enable surgeons to study the different systems, to discuss their advantages and disadvantages, and to permit them to put their hands on these devices and inspect them personally, the Division of Orthopedic Surgery, University of Ottawa organized an applied basic science course in May 1981, External Fixation of Fractures. During this course, all major systems were presented to the participants. As happened during the course "Internal Fixation of Fractures" held two years ago, the rigidity of internal fixation was frequently and intensively debated. Whereas the rigidity of internal fixation cannot be altered during the course of healing, the rigidity of external fixation can be changed. In fact, with progression of union, rods of increasing elasticity can be used.

The indications for external fixation are now firmly established, the successful treatment of infected fractures and pseudarthroses meriting special attention.

In view of the active interest shown in this subject, we are not only publishing here all the studies presented in Ottawa last May, but also papers describing the operative techniques of the various systems.

I am most grateful to all the contributors whose cooperation has made an early publication of this book possible. I should also like to thank Dr. Heinz Götze, of the Springer-Verlag, for his support and assistance.

My sincerest thanks to Mrs. Elvira Stahl. Without her devotion and untiring work this book could not have been produced.

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