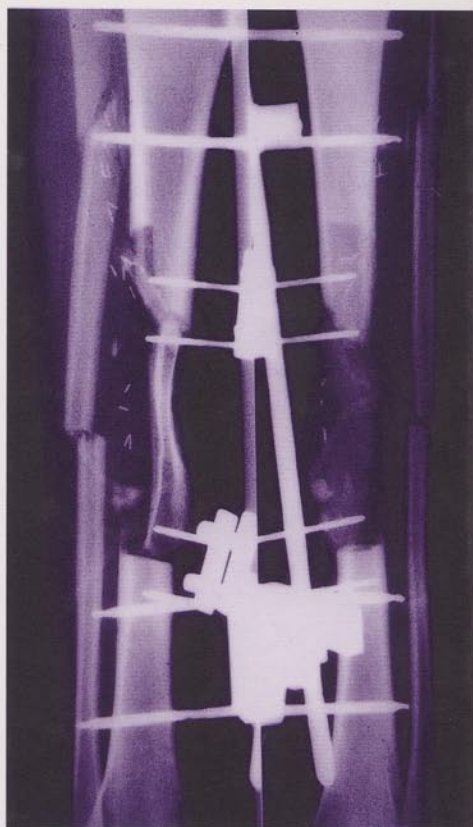


**F. Schuind
S. de Fontaine
J. Van Geertruyden
P. N. Soucacos**



Advances in
Upper and Lower
Extremity
Microvascular
Reconstructions

CONTENTS

Foreword	v
<i>Michael B. Wood</i>	
Upper and Lower Extremity Microvascular Reconstructions, Genval/Brussels, Belgium, March 1997	1
<i>Frédéric A. Schuind</i>	
I. AN INTRODUCTION TO MICROVASCULAR RECONSTRUCTIONS	
Organization of the Microsurgery Team	7
<i>Serge de Fontaine</i>	
The Use of Magnifying Loupes Instead of the Microscope in Microsurgery	12
<i>Philippe Gréant</i>	
Microvascular Mechanical Anastomoses in Upper Extremity Reconstruction. Mechanical Microvascular Anastomotic System	15
<i>Marco Lanzetta, Roberta Nolli, and Carlo Trevisan</i>	
Local Control Mechanism of the Bone Blood Flow	19
<i>Bruno-Christophe Coessens, Eric Vandeweyer, and Michael B. Wood</i>	
Management of Venous Congestion in Trauma and Reconstructive Microsurgery: The Significance of Medicinal Leeches	34
<i>Panayotis N. Soucacos, and Alexandros E. Beris</i>	
Principles of Treatment of Open Fractures	41
<i>Frédéric Schuind</i>	

Clinical and Isokinetic Shoulder Evaluation after Surgical Harvesting of the Latissimus Dorsi Muscle	51
<i>Pascal Rémy, Piet Putzeys, Valérie Theuwissen, Dominique Mouraux, Jean Van Geertruyden, Yves Andrianne, and Frédéric Schuind</i>	

Free-Flap Evolution after Hyperthermic Regional Chemotherapy in the Isolated Limb for Malignant Melanoma	57
<i>Denis Goldschmidt, Jean Van Geertruyden, and Serge de Fontaine</i>	

II. VASCULARIZED BONE TRANSFERS

Osteosynthesis by External Fixation in Microsurgical Reconstructions of the Limbs	63
<i>Frédéric Schuind, Serge de Fontaine, Jean Van Geertruyden, and Franz Burny</i>	

Vascularized Bone Transfers and Conventional Bone Grafts in Gustilo IIIB Open Tibial Fractures	67
<i>Olivier Isserentant, and Philippe Hoang</i>	

Vascularized Bone Graft for Infected Nonunion with Segmental Bone Defect	75
<i>Yoshiki Yamano, Yoshinori Kadoya, Noriaki Hidaka, Hiroaki Nakamura, and Hirotsugu Ohashi</i>	

Application of the Free Fibular Graft for the Management of Avascular Necrosis of the Femoral Head	82
<i>Panayotis N. Soucacos, Alexandros E. Beris, Konstantinos N. Malizos, and Anastasios B. Korombilias</i>	

Vascularized Epiphyseal Transfer in Upper Limb Skeletal Reconstruction in Children. Indications and Operative Technique	90
<i>Marco Innocenti, Massimo Ceruso, and Luca Delcroix</i>	

III. RECONSTRUCTION OF THE UPPER AND LOWER EXTREMITIES

- | | |
|--|-----|
| Microvascular Tissue Transplantation for Limb Salvage Surgery
<i>Steffen Handstein, Klaus Plogmeier, and Wolfgang Schneider</i> | 105 |
| Emergency Vascularized Composite Grafts for Traumatic Tissue Defects
<i>Yoshiki Yamano, Yoshinori Kadoya, Hiroaki Nakamura,
and Hirotugu Ohashi</i> | 112 |
| Lower Extremity Salvage with Free Tissue Transfer by Using an
Immediate Arteriovenous Loop in One Stage
<i>Murat Topalan</i> | 118 |
| The Use of Scapular and Parascapular Flap for Upper and Lower
Extremity Reconstruction
<i>Francesco Brunelli, and Caroline Leclercq</i> | 125 |
| The Free Medial Thigh Flap: A New Approach
<i>Nader Chahidi, Joseph Bakhach, Dominique Martin,
and Jacques Baudet</i> | 133 |
| Treatment of Septic Skin and Achilles Tendon Defects by Free Tissue
Transfer: Case Report and Review of Literature
<i>Jean-Valéry Berthe, Pascal Rémy, Daniel Toussaint,
and Bruno-Christophe Coessens</i> | 140 |
| Foot Reconstruction: Musculocutaneous or Muscle Flap?
<i>Saulius Vikšraitis, Tarvilas Norkus, Tautrimas Astrauskas,
Vyintas Kaikaris, Rytis Rimdeika, and Svetlana Averkina</i> | 148 |

IV. RECONSTRUCTION OF THE HAND

- | | |
|---|-----|
| Single-Stage Reconstruction of Hand Function Following Mutilating
Upper Extremity Injury: Simultaneous Soft Tissue Replacement and
Tendon Transfer
<i>Matthew M. Tomaino</i> | 161 |
|---|-----|

Microsurgical Reconstruction of Defects of the Forearm and Hand Using the Combined Scapular/Parascapular Free Flap <i>Michael Sauerbier, Detlev Erdmann, Michael Pelzer, Berthold Bickert, and Günter Germann</i>	172
Microsurgical Toe Transfer in Congenital Hand Malformations <i>Guy Foucher, and Jose Medina</i>	182
Toe-to-Hand Transfer for Thumb Reconstruction in Children with Congenital Abnormalities <i>Sergey I. Golyana, and Igor V. Shvedovchenko</i>	187
Microvascular Partial Toe Transfers for Distal Thumb Reconstruction <i>Patrick Loréa, Serge de Fontaine, Frédéric Schuind, and Guy Foucher</i>	195
Microsurgical Reconstruction of the Thumb using the Contralateral Mutilated Fifth Ray: A Case Report <i>Laurent Obert, Yves Tropet, Patrick Garbuio, and Philippe Vichard</i>	202
Reconstruction of Defects of Sensory Nerves in Hand Surgery using Vein Grafts <i>Albin Obiltschnig</i>	206
Reconstruction of Upper Extremity Peripheral Nerve Injuries with an ePTFE Conduit <i>Sanda Stanec, Zdenko Stanec, and Srećko Budi</i>	209
Contributors	217
Index	223