Clinical Echocardiography

Michael Y. Henein
Editor

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Third Edition

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Michael Y. Henein
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Foreword

By definition, nerve transfer is a surgical technique in which a nearby healthy nerve is sacrificed to serve as a donor for an injured, more important recipient nerve. Historically, credit should be given to Harris and Low (1903), who first proposed this technique. Many others have contributed with new methods or modifications of the original approach. Names such as Tuttle (1913), Vulpian and Stoffel (1920), Foerster (1929), and Lurje (1948) should also be remembered as pioneers in the field of nerve transfers.

In more recent years, increasing knowledge in nerve anatomy, microsurgical techniques, and nerve regeneration—as well as the remarkable publications of Narakas, Gu, Oberlin, Leechavengvongs, Mackinnon, and Samardzic—has significantly advanced the acceptance and use of nerve transfer procedures in many types of nerve injuries.

Peripheral nerve transfers have been performed primarily in cases of brachial plexus injuries and, in recent years, have become the preferred method of treatment for many specialists—even without surgical exploration of the plexus. In many cases, the functional outcomes achieved with nerve transfers surpass those obtained through traditional nerve repair or tendon transfers.

The editors—Fernando Guedes, Christian Heinen, Lukas Rasulic, Alexander Shin, and Mariano Socolovsky—have brought together a distinguished group of authors from various specialties, all experts in peripheral nerve surgery from around the world, to create this important book: *Nerve Transfers for Brachial Plexus Reconstruction After Trauma*."

The editors, as well as all contributing authors, should be congratulated for publishing such an outstanding book. It will undoubtedly become an indispensable resource for all specialists interested in the surgical treatment of brachial plexus injuries.

It is an honor to have been invited to write this foreword.

Head – Peripheral Nerve Surgery Unit, Department of Neurosurgery
University of São Paulo Medical School
São Paulo, SP, Brazil

Mario G. Siqueira

Preface

Over the past seven decades, clinical cardiology has demonstrated that Doppler echocardiography is a cornerstone of optimal practice. While many technologies come and go, those that endure prove to be truly essential—and echocardiography is one such technology. In the 1950s, Edler, with great humility, could not have anticipated that his invention of the first echocardiograph would one day become an "imaging stethoscope" in cardiology clinics worldwide, especially in the West. Over the years, dedicated scientists and engineers have continually improved this technology: adding 2D imaging to M-mode, then spectral and myocardial Doppler, followed by myocardial deformation and perfusion evaluation. The cross-sectional limitations of earlier technologies have now been overcome through 3D and 4D echocardiography, enabling accurate volumetric and valve assessments.

In addition to its unique accessibility across all patient settings—clinics, hospital wards, intensive care units, emergency rooms, and operating theaters—Doppler echocardiography has recently experienced a significant increase in demand. Pediatric and fetal echocardiography are now well-established practices. Moreover, patients from respiratory, oncology, renal, stroke, and certain neurology specialties are increasingly referred for echocardiographic assessment. This wider application underscores the clinical necessity of understanding the interplay between various organ systems and provides more accurate explanations for symptoms and physical findings, while also guiding optimal management strategies.

This third edition of Clinical Echocardiography has been compiled with updated 17 previously published chapters in addition to 5 new chapters, in response to the increasing demand by clinicians and physiologists. The book offers a clinical approach to the anatomical and physiological assessment of various cardiovascular syndromes, using different Doppler echocardiographic modalities, as well as serving as a reference guide for optimal current management.

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