Preface

The first and main goal of this book is to teach otologists who are in training cartilage tympanoplasty methods, using step-by-step demonstration of the surgery.

This is the first book on cartilage tympanoplasty and represents the very first collection of all known cartilage tympanoplasty methods. I hope, therefore, that experienced otosurgeons may also profit from this book.

In recent years cartilage tympanoplasties have been used more and more often in otosurgical practice and several new methods have been published, allowing me in this book to classify 23 original cartilage tympanoplasty methods. In the individual chapters each method is thoroughly defined, illustrated, and described, which is the second goal of this book.

The third goal is to analyze the anatomical and functional results of surgery, to illustrate functional differences between the various methods, and to promote clinical and basic research in cartilage tympanoplasty.

I have used cartilage for reconstruction of the ear canal wall and obliteration of the attic, antrum, and mastoid cavity since the early 1960s. Inspired by Heermann, who also was a frequent teacher on the Bochum tympanoplasty courses, I started sporadically with cartilage palisades in the 1990s. In Volume 1 of the Manual of Middle Ear Surgery (1993) I included a chapter on cartilage tympanoplasty, with illustration of the annular graft method, posterior cartilage–perichondrium composite island graft method, micro sliced cartilage methods, and the cartilage palisade techniques of Heermann. In Volume 2 (1995) the methods of reconstruction of the ear canal wall with cartilage and the methods of obliteration of the mastoid cavity were described and illustrated. During 1995–2000 I reconstructed the eardrum in half of the children with cholesteatoma at the Gentofte Hospital with cartilage palisades and in the other half with fascia. Three years and again ten years after surgery, the anatomical and functional results were significantly better in the palisade group than in the fascia group. These results convinced me that cartilage tympanoplasty is a good method, especially for difficult cases. From 1995 to my retirement from the Gentofte Hospital in 2001 and during the following 3 years of surgery outside my hospital, I used most often the cartilage methods. In 2004 I started to write this book.

Writing such book from the age of 73 to 77 years, at home, without a secretary and with my two-finger typing, is not easy and demands enormous discipline and a strong will to finish it. At the start I did not dream that the book would end with 28 chapters, but several new methods have been published and included, resulting in 23 original methods.

With only one exception, all the illustrations were made especially for this book in the same manner as in my previous books: I sketched each illustration in pencil on parchment paper, then the artist, Regitze Steinbruch, copied it and redrew it in ink on another parchment. Regitze also made the figures for Volumes 1 and 2 and partly for Volume of 4 of Manual of Middle Ear Surgery in the same way.

I would like to thank Dr. SV Fernandes, from Newcastle, Australia, the author of the "Triple C" Technique (Chapter 26), for great help in reading and correcting the text of most of the chapters, and Dr. MW Yung for correcting the text of Chapter 14.

The staff of the Gentofte Hospital Library were very helpful in finding the literature I needed.

I also wish to thank many friends and authors for discussion about and help with explanation of their cartilage methods: M Bernal-Sprekelsen, AE Ferekidis, SV Fernandes, F Hitari, J Heermann, K-B Hüttenbrink, K Jahnke, J. Klacansky, H Martin, C Milewski, B Morra, and D Portmann.

Finally I would like to thank my beloved wife Nives for her help and patience during the retirement and the cartilage tympanoplasty years. I was never able to answer her constant question: Do you really need this book?

Mirko Tos

aus: Tos, Cartilage Tympanoplasty (ISBN 9783131450913) © 2009 Georg Thieme Verlag KG

Foreword

While cartilage has been used to a limited extent in otosurgical procedures for many years, its utility in major reconstruction of the tympanic membrane has become increasingly recognized. While routine acceptance of cartilage tympanoplasty has been hampered by anticipated worsening of hearing results with the use of a thick graft, many studies comparing cartilage to more traditional grafting materials have shown no difference in hearing post-operatively. Likewise, the rigidity and stability of cartilage, especially in the hostile middle ear environment often found in the surgical ear, have made it invaluable in cases of cholesteatoma, atelectasis, and recurrent perforations.

The techniques involved in cartilage tympanoplasty do present a few nuances that must be appreciated, such as graft harvest, cartilage shaping, and placement. Likewise, the creation of an opaque ear drum must be anticipated in the post-operative period. Intubation of the tympanic membrane, if deemed necessary, can be difficult. As a result of this, several techniques have evolved with modifications in graft thickness, placement, and degree of drum reconstruction based on the clinical situation or surgeon's preference. Some represent minor variations of existing techniques while others are quite novel and intuitive.

Mirko Tos has written a remarkable book, the only comprehensive text to my knowledge, on cartilage tympanoplasty. Since reading his manuals of middle ear surgery over 15 years ago, I have appreciated Professor Tos' ability to classify, organize, and explain middle ear surgery in a clear but detailed way. This book continues in that tradition and clearly reflects his 40 years of experience in otosurgery. The book is well illustrated and is unique in the fact that the initial drawings were produced by Professor Tos. As a result, they are straightforward and easy to follow from a surgeon's perspective.

There is no question that this book will not only be valuable to the otologist in training, but also to more advanced surgeons. As a surgeon experienced and published in cartilage tympanoplasty, I was astounded by Mirko Tos' ability to provide such a comprehensive treatise of techniques, from so many different surgeons, and explain them in a way that only an experienced ear surgeon could. I read this book from cover to cover and learned a great deal. The entire community of otologic surgeons will benefit from this contribution.

John Dornhoffer M.D., F.A.C.S
Professor of Otolaryngology
Director of Otology and Neurotology
Samuel McGill Chair in Otolaryngology Research
University of Arkansas for Medical Sciences
Little Rock, Arkansas, USA

aus: Tos, Cartilage Tympanoplasty (ISBN 9783131450913) © 2009 Georg Thieme Verlag KG