

FOREWORD

It is with considerable enthusiasm that I greet the publication of *Tissue Glues in Cosmetic Surgery*. The subject is timely and the editors, Renato Saltz, M.D. and Dean M. Toriumi, M.D. are distinguished surgeons, well versed in the subject of tissue adhesives. They have made numerous original contributions to the field through their clinical and experimental studies. Drs. Saltz and Toriumi have assembled a stellar group of world experts as contributors to this work with extensive experience using tissue adhesives for coaptation of tissue or for obtaining hemostasis. This is truly the definitive reference on tissue adhesives, and it offers a wealth of valuable information for the novice as well as the experienced surgeon.

Historically, as one looks back on the different methods used over time for the coaptation of tissues, particularly skin, we note that little has changed. Although needles and sutures have improved, sewing remains the mainstay for approximating skin. Suturing, however, by its nature, is a time-consuming and inefficient endeavor that may result in unsightly, often permanent, cross-hatchings. It is disappointing that at this stage, we have not developed a suturing machine that allows us to sew more expeditiously and in a more controlled fashion as is done for clothing. Although automatic staplers are an alternative to traditional suturing, useful for intestinal anastomoses and for setting up or fixing tissues in place prior to suturing, they are not the solution. It would be wise for surgeons at this stage to skip mechanical devices and to concentrate on tissue sealants or adhesives to coapt the different biologic tissues.

This book provides the comprehensive, clinical information that is needed by the surgeon interested in learning more about tissue glues. Both natural and synthetic glues are discussed. The natural sealants include among others, fibrin, denatured collagen, as well as albumin. Of the synthetics, cyanoacrylate glues are the most popular but their use is limited to approximating the epidermis.

Of the natural sealants, fibrin glue is the one that is used most extensively because of its ability to obtain hemostasis. Aesthetic surgery has benefited from the use of fibrin glue, particularly in the performance of endoscopic forehead

lifts as well as facelifts, because spraying fibrin glue causes adherence of the overlying tissue to the underlying bed, maintaining its position and avoiding the dead space that may fill up with hematoma or seroma. Fibrin glue has also been used to approximate skin grafts, and it provides a wonderful benefit to the patient in that there are no sutures to remove, no stitch abscesses, or permanent cross-hatches. Tissue sealants or adhesives are a most welcome addition to cosmetic surgery because of the multitude of advantages they offer.

This book systematically reviews the evolution of tissue sealants, the types currently available, the decision-making process for choosing tissue sealants, and the clinical applications in cosmetic surgery. Surgeons interested in incorporating these tools into their practices will gain understanding and insight from the authors' careful review of the subject. The book is filled with practical, clinical advice on using tissue glues in different clinical situations with detailed chapters on endoscopic browlift, facelift, burns, and breast and body contouring. Step-by-step descriptions of glue preparation, timing, and application are included with each chapter to provide readers with a thoroughly consistent and understandable approach to this topic. With the information provided herein, surgeons should be able to use these products successfully in a safe and efficacious manner.

For me, tissue sealants hold significant promise. I look forward to a future time when we can abandon the suture and needle for coapting tissues and instead make use of sealants to accomplish this task. In vascular surgery the objective will be hemostasis with a natural sealant such as fibrin. In nerve coaptation, perhaps the choice will be a sealant with an added nerve growth factor. Sealants with considerable and lasting tensile strength may be used to coapt a tendon, and noninflammatory sealants will be used to approximate the subcutaneous tissue and skin. Obviously this will be a great bonus and a major advance for surgery of every type. The patient, however, will be the biggest beneficiary, benefiting from reduced morbidity and relief from the trauma of suture or staple removal. Additionally, the patient will receive the aesthetic bonus of shorter, more acceptable scars.

This book fills a real need for information on this topic. It will be of particular interest to cosmetic surgeons who seek to offer their patients the best aesthetic outcomes with the least morbidity. It should also be read by surgeons of every specialty who will gain a worthwhile understanding of tissue adhesives, their applications and benefits, and how they can be incorporated into their practices.

LUIS O. VASCONEZ, M.D.

*Professor and Chief, Division of Plastic Surgery,
University of Alabama at Birmingham,
Birmingham, Alabama*