Overview

The symposium as an informal meeting for discussion has its obvious usefulness for the symposiast, but, as an excuse for multiple publication, quite another view may be taken of it. Also, if every symposiast were a Dr. Samuel Johnson, perhaps the intercalated discussions at a symposium might strike more fire and distil less mutual admiration. Symposia, like hard liquor, should be taken in reasonable measure, at appropriate intervals.

Sir F. M. R. Walshe [1888-1979]
Perspectives in Biology and Medicine
2:197, 1959

Times change and activities change. The ASTM Committee F-4 on Medical and Surgical Materials and Devices has long used design standards, but with the markedly increased use of internal fixation devices for fractures and the joint replacement implants all members agree performance standards have become necessary. Designs vary, and aside from copying nature, one need not be concerned about a design as long as the device can be inserted into the body easily and maintained there without creating unusual forces on surrounding anotomical structures or preventing muscles from performing normal function. The materials used for construction of the device should not cause unusual biological responses or preferably any biological response whatsoever. However, we are concerned that implants provide function as close to normal physiology as possible. Function has become everything; design, other than as it effects function, does not need to be standardized.

To write a standard for a device we need to find out from the user the application of the device and the problems associated with this application. We must have information from the general interest participants—the engineers and the biologists who are interested in materials, the strength of materials, design capabilities of material, and response of tissue to implant material. We also must have information from the manufacturers describing the problems and difficulties in manufacturing devices. We also need to know the cost of providing specific characteristics in the device. Putting this information together allows us to see the factors and functions which should be standardized. We must also learn how to test for these functions. Also, stimulating people from many disciplines to work together on one problem usually necessitates our specifying definitions and specific terms for use so all can speak the same language when talking to one another about a single problem.

This book consists of the papers presented at the ASTM Symposium on Femoral Intramedullary Rods: Clinical Performance and Related Laboratory Testing. The discussion of each paper was of value to the symposiast. The last afternoon of the symposium we did not present papers but attempted to begin writing standards for intramedullary rods, having all participants help in specifying definitions and in deciding what functions could be standardized. We have had subsequent meetings of F-4 Section on Intramedullary Rods. However, at the date of this printing we have not yet had consensus for standards on intramedullary rods or testing for functions of rods. But we are very far forward compared to our position when the symposium was held. Our discussions and presentations have struck much fire and opened new concerns and problems and controversy in clinical performance and related laboratory testing.

We feel this approach of holding a symposium on a topic and having the participants attempt before the end of the symposium to write standards was very successful. This book represents

the basis for the discussion, the controversy, and the standards (when written). We feel that we will try again to use the same format. Our next attempt will be a symposium on Spinal Devices. Like hard liquor our symposia will be presented in reasonable measure at appropriate intervals.

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