SCLERAL SURGERY:
SELECTED INDICATIONS AND TECHNIQUES

by

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ABSTRACT

Fifteen case histories illustrate a wide variety of indications and techniques for scleral surgery. No significant technical difficulties occurred during any of these procedures. Few post-operative complications ensued, and none caused serious consequences.

In an attempt to arrest possibly progressive staphylomas, grafts can be performed on prophylactic bases. Such prophylactic surgical therapy may be useful in carefully selected circumstances, especially when trauma is likely to recur, or when elevated intraocular pressure is likely to develop.

INTRODUCTION

Weakened, diseased, or absent sclera requires appropriate reinforcement or replacement. The availability of cadaver sclera and other varieties of donor

From the Wilmer Ophthalmologic Institute and the University of Illinois Eye and Ear Infirmary. Supported in part by N. I. H. Training Grant Number 5 TO1 EY 000 25 11 (Wilmer) and EY 24-13 (Illinois).

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tissue allows frequent and immediate recourse to these substances for grafting purposes.

While the repair of scleral staphylomas has been a traditional usage of such donor tissues, the indications for scleral surgery have recently been broadened. In order to illustrate the diversity of indications and techniques currently available, this paper will report our personal experiences with patients undergoing different types of scleral surgery.

CASE REPORTS

The following summaries are abbreviated histories of patients for whom we have performed different types of scleral surgery.

Case #1

I.R., a 28-year-old Negro female, sustained a corneoscleral laceration in the left eye from a flying piece of metal. The laceration was 8 mm in length, and ran horizontally from the pupil toward 9 o'clock. Vision was reduced to light perception.

Operation: The corneal wound was closed with eight interrupted 7-0 black silk sutures. The scleral portion of the laceration, which extended 1 mm into the

Fig. 1

(Ryan & Goldberg). Case 1. The area of rupture is illustrated. The overlying scleral graft is anchored by 10 mattress sutures. Note the lateral rectus, detached for exposure.