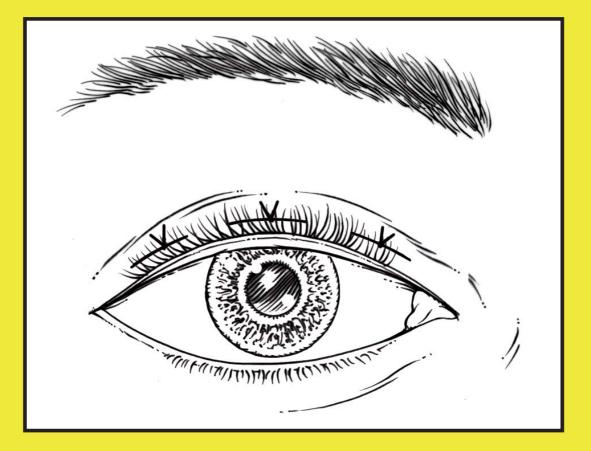
# **Trichiasis surgery for trachoma** Second Edition

Shannath Merbs, MD, PhD, Serge Resnikoff, MD, PhD, Amir Bedri Kello, MD, MSc, Silvio Mariotti, MD, Gregory Greene, MSPH, Sheila K West, PhD







The **Fred Hollows** Foundation



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#### **Overview**

The second edition of this manual combines and updates material contained in three previous manuals on bilamellar tarsal rotation procedure, Trabut procedure, and the final assessment of candidate trichiasis surgeons.

This manual is designed to provide specific information for trachomatous trichiasis (TT) trainers who are training others to undertake surgery for entropion trachomatous trichiasis (TT). Other approaches are not addressed. The manual is divided into two parts. The first part covers specifics designed for training TT surgeon candidates, and serves as a resource document. The trainer can elect to have trainees read the material directly, use this manual as a guide for creating a training presentation, or use it in other ways to assist in the training. The manual contains both knowledge that should be imparted during training and a description of the skills that need to be developed and assessed during practice and surgery sessions. The second part is designed <u>only</u> for the trainers of the surgeon trainees and covers selection and final assessment of the trainees.

#### **Section One**

#### 1. INTRODUCTION

OBJECTIVES FOR SECTION ONE: In this section, the manual will provide specific details on training potential TT surgeons to undertake bilamellar tarsal rotation and/or Trabut surgery for trichiasis.

#### 1.1 **Objectives**

- (a) To learn to identify patients who require surgery for trichiasis
- (b) To be able to perform successful bilamellar tarsal rotation and/or Trabut operations to correct trichiasis
- (c) To be able to assess results and manage complications of the bilamellar tarsal and/or Trabut procedures

### 2. THE ANATOMY OF THE EYE AND THE EYELID

## OBJECTIVE: TO BE ABLE TO CORRECTLY NAME THE PARTS OF THE EYE AND THE EYELID

#### 2.1 **The eye (Fig. 1a)**

(a) The CORNEA is the clear window in the front of the eye.

(b) The CONJUNCTIVA is a thin transparent layer covering the eye and the inner parts of the eyelid.

(c) The PUNCTUM is a hole at the nasal end on the inside of each eyelid (upper and lower), through which tears drain to the nose.

#### 2.2 The eyelid (Fig. 1b)

The EYELASHES come from roots 2 mm deep. They emerge just above the EYELID MARGIN, and normally point away from the cornea. In normal upper eyelids, the eyelid margin is visible beneath the lashes at the edge of the eyelid. In TT eyes, the eyelid margin is often not visible as it, and the base of the eyelashes, are tucked behind the eyelid (Fig. 1c & 1d).

- (a) The SKIN covers the outer surface of the eyelid.
- (b) The orbicularis MUSCLE lies under the skin.

(c) The TARSAL PLATE is a thick, fibrous layer, which lies under the muscle and keeps the eyelid stiff. It is 1 cm high in the upper eyelid.

(d) The CONJUNCTIVA is a shiny transparent layer, which covers the inner surface of the eyelid and goes onto the globe. It is easily seen on the everted upper eyelid. Normally vessels are seen in the conjunctiva. This may be partially or totally replaced by scarring, white stellate scars, or fibrous bands in cases of severe scarring.

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