FOR THE ACCURATE MEASUREMENT OF INTRAOCULAR PRESSURE

TONOMAT

APPLANATION TONOMETER
developed and perfected after six years of clinical testing by
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Research, Inc.

FIVE SIMPLE STEPS WILL PRODUCE AN ACCURATE PERMANENT RECORD

1. Attach new end plate
2. Apply Aplacote—spread evenly
3. Apllanate cornea
4. Make transfer to moistened paper
5. Read transfer with special magnifier

THE PREFERRED METHOD OF APPLANATION TONOMETRY

TROUBLE-FREE ... Virtually indestructible — never requires recalibration.
EASY TO USE ... Simplest procedure of all types of applanation and indentation tonometers —
may be used with or without topical anaesthetic.
COMPACT ... Portable — used without a slit lamp.
ACCURATE ... Clinical evaluation has proven the Tonomat principle of applanation most accu-
rate for routine practice and for diagnosis of borderline case.
SAFE ... Non-traumatic with ordinary use.
STERILE ... Precision moulded, sterile disposable end plates.
PERMANENT RECORD ... Furnishes graphic record for future reference.
CERTIFIED ... Each Tonomat is tested and certified by the Institute for Glaucoma Research,
Inc., New York, N.Y.
ECONOMICAL ... Kit includes two Tonometers, measuring magnifier, 50 certified end plates and
accessories £45 0 0
TONOPAK KIT Aplacote, transfer papers, 50 certified end plates £3 5 0
Measuring the Intraocular Pressure with the TONOMAT

The patient is placed in a supine position and is directed to gaze at a fixation target situated directly overhead, one meter above his fixing eye. The surface of the end plate is coated very sparingly**, by means of a cotton-tipped applicator, with a viscous suspension of mild silver protein, N.F. (Aplacote). The Aplacote is rubbed into the end plate until its surface is dry. The instrument is poised 2 mm. above the cornea for about two seconds, and is then lowered onto the center of the cornea for only a fraction of a second and the tonometer is immediately lifted vertically.

A strip of record-transfer paper designed for use with the Tonomat is moistened with tap water and any excess water is removed by blotting. The imprint is transferred from the disposable end plate to the moistened paper, using firm pressure. The transferred imprint provides a permanent record of the measurement.

The intraocular pressure is determined by the diameter of the planatated area, as measured on the transferred imprint. For this purpose, an 8-power measuring magnifier equipped with a specially designed reticle is used. This permits measuring the intraocular pressure in millimeters of mercury without the need of a conversion table. The imprint is brought into contact with the reticle and is moved until the area of planation fits perfectly between two pairs of mutually convergent, curved lines, so that both lines are tangent to the planation circle (white area) of the imprint.

On those occasional instances when the transferred imprint is of an oval, rather than the usual round shape, then the shorter diameter of the oval is measured.

** see attached REMINDER from the Institute for Glaucoma Research, Inc.
REMINDER: It is important that you apply the Aplacote sparingly on the endplate. Touch the endplate with the tip of the bottle of Aplacote so as to deposit a tiny droplet of stain. Then, using a dry cotton applicator, spread the Aplacote over the endplate using firm pressure in a circular motion until the endplate is dry and is tinged with the yellowish-brown stain. When the appplanation is accomplished, a white circular area will appear on the endplate. There may also be some small dark brown spots in the center of the white area. These are ignored as they are the result of the breaking of the capillary action of the tear film. You are only concerned with the white appplanation area.

While the stain may appear to be too light on the endplate, the transferred imprint will become much darker due to the chemical reaction between the paper and the stain. This is why it is important to use the special paper provided in the Tonomat Kit. The measurements are then read according to the instructions in the case.