# INNOVATIVE APPROACH FOR INTRAOCULAR PRESSURE MEASUREMENT

# TRANSPALPEBRAL TRANSSCLERAL DIATON TONOMETRY

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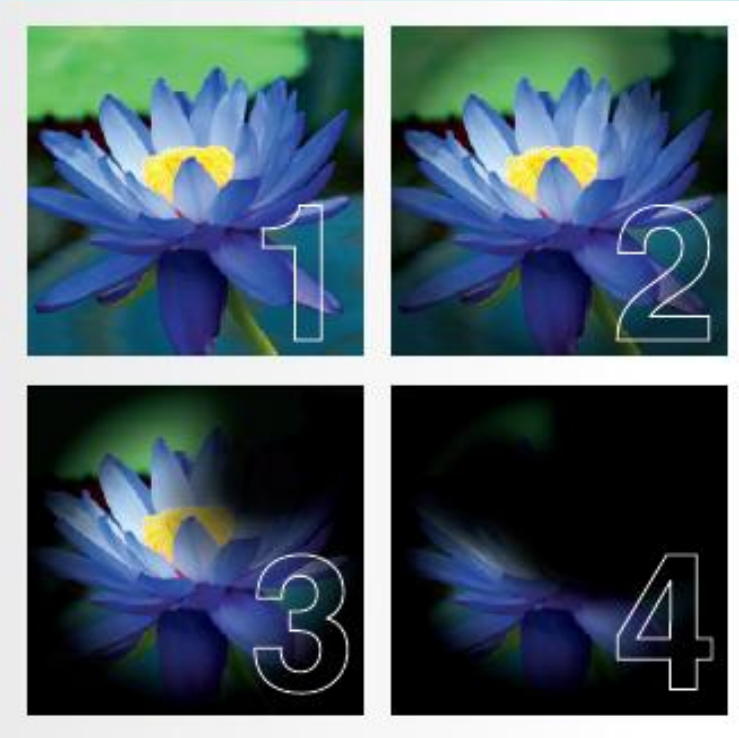
# Innovative approach to Intraocular Pressure Measurement Transpalpebral Scleral Tonometry




**Non-corneal transpalpebral diaton tonometer –** unique device for intraocular pressure (IOP) measuring.

The device is manufactured by JSCo “Ryazan State Instrument-making Enterprise “ (JSCo “RSIE”, Russia) - one of the major companies in Russia running within the sphere of instrument engineering and helps to detect a dangerous disease ***glaucoma*** on its early stage.

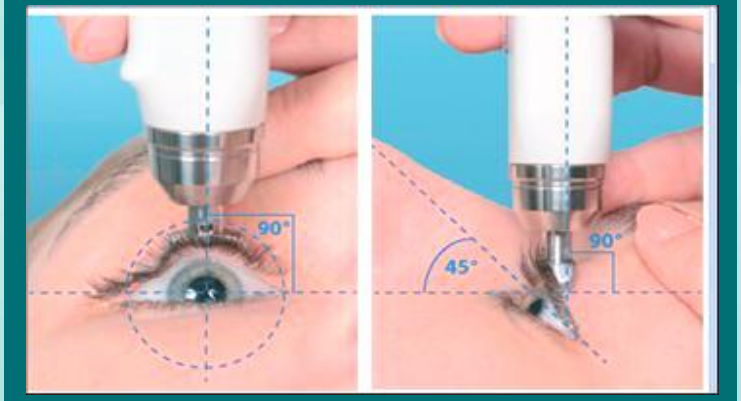
**Glaucoma** - an insidious eye disease that’s creeping up quietly and doing its destructive work the final stage of which is – irreversible blindness.

**IOP rise** is one of the major factors indicating the presence of glaucoma

# History of IOP tonometry methods

Palpatory method

Applanation tonometry

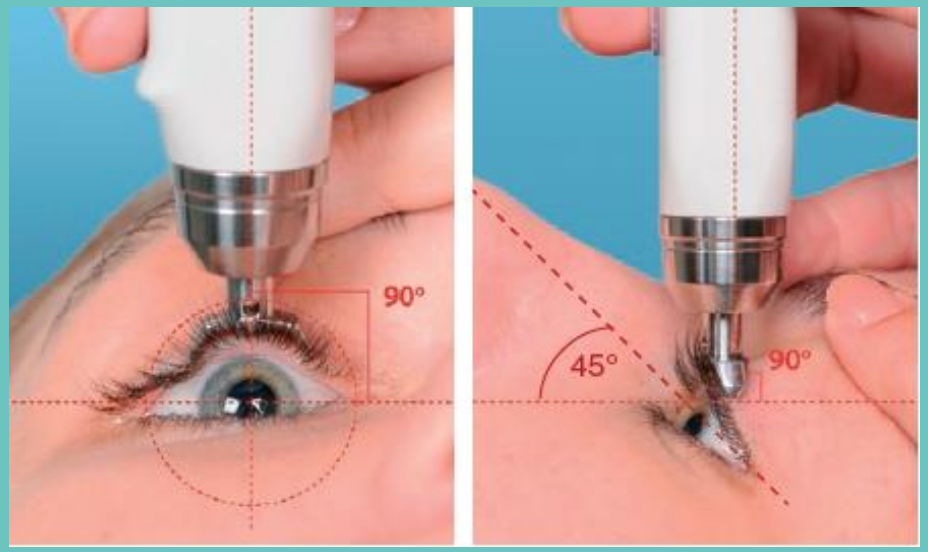



Transpalpebral scleral tonometry

# diaton tonometer: description & application

**diaton tonometer** is a pen-like helpful glaucoma-screening tool realizing a new approach to IOP measuring – transpalpebral tonometry:

- measuring through the eyelid
- measuring in the sclera zone




**SPHERES of diaton tonometer use**

- **Ophthalmology (including children's)**
- **Optometry**
- **General medical practice**
- **Neurology**

*Manufacturing process is certified in full compliance with standards ISO 9001 & ISO 13485.*

# Indisputable advantages for medical specialists & their patients

## INDICATIONS of USE:

- preventative screening examinations of patients
- IOP measuring at the ophthalmologic examination
- IOP tonometry in complicated cases

  when contact corneal tonometry methods cannot be used

## ADVANTAGES FOR DOCTORS

**NO**

- ✓ contact to the cornea
- ✓ risk of infection
- ✓ anesthesia drops
- ✓ adjustment to pachymetry
- ✓ need to take out contacts
- ✓ sterilization
- ✓ consumables
- ✓ discomfort to the patient

# ADVANTAGES of diaton tonometer FOR PATIENTS

**CAN**

- ✓ measure IOP even in the presence of viral infections, allergic reactions, dry eye syndrome
- ✓ serve as non-invasive day monitoring tool while selecting the adequate hypotensive medical treatment
- ✓ measure IOP on patients after corneal surgeries
- ✓ measure IOP with contact lenses on
- ✓ measure IOP on immobilized patients

**Simplicity, quickness and efficiency for doctors and optometrists.**
**Comfort and safety for patients.**

# Reviews & clinical studies


**It works. It gives you a reasonable estimation of the pressure without having to anesthetize the cornea through a transpalpebral approach."**

**Mark A. Latina, MD, Massachusetts Eye and Ear Infirmary MEEI, Boston, MA, USA**

diaton tonometer has been through a lot of clinical investigations and is appreciated by doctors of the leading foreign hospitals.

The device is widely used and marketed more than to 20 countries:

- USA,
- Germany,
- Italy,
- Spain,
- Portugal,
- South Africa etc.

FDA CE PCT ISO 9001

# Steps of IOP measurement

IOP measuring can be done with the patient being in the sitting or lying position with the head placed strictly horizontal. The eye glance of the patient is about 45°.

1

Make the patient ready for IOP measurement. Stretch the upper lid of the eye with your index finger of the free hand (without pressing the eyeball). The edge of the lid must be a little bit higher the limbus.


Tonometer must be vertical to the lid. Place the tip tonometer right over the tarsal plate very close to the eyelashes. Put the rest of your palm on the patient's forehead for support and stability.

2

3

Gently lower the tonometer down until hear a short beep-signal. Measure IOP several times until hear one or two long beep-signals, after that briefly push the Operation button. The average IOP value appears on the display.


**Only correct tonometer use will let you value IOP with the highest accuracy.**

# Contacts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**Thank you for attention!**