

ICARE® ONE USER CASE - GLAUCOMA PATIENT

With the pocket tonometer on Tour: IOP simple self check

The portable Icare® ONE tonometer allows glaucoma patients a comfortable IOP self check at home. The prominent opera tenor Fernando del Valle also uses the practical and easy to use device.

It is easy to overlook the eye problems of the internationally acclaimed tenor Fernando del Valle from New Orleans: He has been diagnosed with glaucoma and macular oedema. His IOP is elevated and problematic. However Del Valle is able to manage his day in spite of his glaucoma with the help of the compact, portable and practical Icare® ONE self check tonometer.

The so called rebound technology employs a miniscule probe which contacts the cornea for a split second and measures the IOP via a magnetic field impulse. The measurement is so gentle and rapid that it is faster than a blink reflex. The device is very easy to use even for a novice and can be used without any problems. It is comparable in terms of ease of use to a blood sugar measuring device for diabetes patients. The home measurements are seen as an expansion of the control checks carried out by the eye doctor.

Fernando del Valle was also able to use the tonometer without any problems after a short training. As it fits into even the smallest of handbags, the tenor can also carry out his self-checks at any time, anywhere while on tour. He does this 3 times daily (in the morning at midday to noon) in order to optimize his therapy and just before he goes to bed. He can also if necessary measure during the night. The IOP of the opera singer fluctuates quite dramatically and often the highest values are reached during the night.

A sterile packed single use probe is inserted into the tonometer before each measurement. To measure, the user, like del Valle, holds the tonometer centrally in front of his eye, ideally at a distance of



4-8mm from the cornea. The measurement is started by pressing the measure button. The result is displayed as a range (e.g. 18-20 mm HG), this design feature avoids unnecessary concern where small changes in pressure are detected.

“Prevention is best, control is second best”, the Tenor explains, as a diabetic sufferer he has increased risks from glaucoma. He was first diagnosed as having elevated IOP when he got an eye exam following intense head aches and light sensitivity. The pathology was already well advanced. He advises everyone over 40 to get regular IOP checks, as elevated IOP is often noticed when it is too late - this is often with fatal consequences. The elevated IOP leads to optic nerve death, which in turn results in field loss and eventual blindness.

The tenor’s IOP has normalized now following several operations and the appropriate therapy. The regular IOP measurements help him and his eye doctor to optimize his treatment. This gives the singer a sense of security and provides a control for the fluctuating pressure. Medication can be prescribed according to his needs. Should the IOP go above 40 mm HG, then the tenor needs to put “emergency drops” into his eyes.

The measurement results from Icare® ONE can be transmitted to the doctor’s office using a special software. Eventual error measurements are easy to identify. What is convincing for the doctor is that the results of the Icare® ONE tonometer correlate to the Goldmann Applanation tonometer [1].

Del Valle lives a more relaxed life these days thanks to his Icare® ONE and in spite of the silent threat of blindness. “Before, when I suspected an increase in IOP I had to go to the emergency room. Today I can make a precise control at the push of the button.”

1) Graefes Arch Clin Exp Ophthalmol. 2011 Aug 14. A new rebound tonometer for home monitoring of intraocular pressure. Rosenreter A, Jablonski KS, Mellein AC, Gaki S, Hueber A, Dietlein TS.



ICARE® ONE USER CASE - GLAUCOMA PATIENT

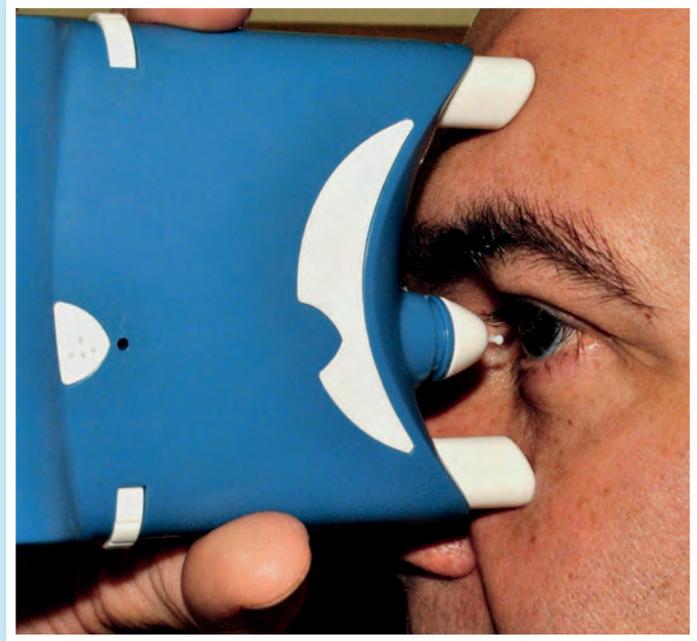
Peace of mind from knowing the IOP

Trevor Nightingale had what can only be described as a 'happy accident' when he sat on his glasses and broke them. Understandably, he was annoyed with himself at the time because he had to go to the optician to get some new ones and that would entail some inconvenience and expense.

However, his accident turned out to be a piece of great good fortune because his optician had just taken delivery of a new eye pressure machine, which he was keen to start using with patients, and when he examined Trevor he found that unexpectedly at the age of 31, Trevor had the first stages of glaucoma. Trevor had not noticed anything amiss. He thought that there might be a halo effect around lights but he had not experienced any pain or discomfort so he had happily ignored these symptoms.

Trevor was referred to the local hospital, James Cook University Hospital in Middlesbrough, where he was found to have open eye glaucoma. Trevor was naturally rather shocked but he was actually really fortunate. Because his condition was diagnosed early he has lost a little vision in the left eye and next to nothing in the right eye. His condition is controlled with drops, firstly with Timolol and then after six or seven years he changed to Xalacom. He puts the drops in once a night and has no side effects. Trevor's eye pressure is now acceptable at about 17mm of mercury in each eye and he has a check-up with his eye specialist every six months.

Trevor says, 'Everything was going fairly smoothly when I noticed news about the Finnish company Icare® and their Icare® ONE device for home testing of IOP levels. I have had glaucoma for about ten years now and I



have learned to manage the condition successfully but when something new was offered that I felt would be helpful, I was keen to try it. Once I had set up the unit and got used to it, I found it easy to use. I was reassured when I went to the opticians and found that they had a unit which enabled them to test my eye pressure and their results were the same as mine. I could then feel confident that I was getting it right.

Trevor explains, "When I saw my eye specialist she was very interested, because she just sees me once every six months and if she wanted to get the same number of readings that I take she would have to see me repeatedly 4 or 5 times through the day, and that is clearly impossible. I now keep a daily diary and my pressure readings have dropped further so I am very happy with my situation now. It is never good to find that you have any medical condition that you had not noticed and it is a relief to feel that you are in control and able to monitor your condition yourself."

