



Continuous Intraocular Pressure Monitoring by Means of the Sensimed Triggerfish[®] System

Vetrugno Michele¹, Apruzzese Margherita¹, Jeanette Lindell² and Tritto Tiziana¹

1. Glaucoma Research Center, Department of Ophthalmology and Otolaryngology, University of Bari

2. Sensimed AG

Accepted: 20 April 2011

Citation: European Ophthalmic Review, 2011;5(1);43-5

ABSTRACT: Intraocular pressure (IOP), like other biological parameters, has a 24-hour rhythm with physiological oscillations around 5mmHg. Recently, it has been demonstrated that IOP fluctuations represent an independent parameter for progression of glaucoma. The most common clinical methods able to detect the diurnal state of IOP are the tonometric curve (with IOP measurements taken from 9:00 am to 20:00 pm) or two provocative tests, such as the water drinking test (WDT) and the ibopamine test. Recently introduced in clinical practice, the Sensimed Triggerfish[®] is a system enabling continuous IOP monitoring based on a disposable contact lens with a sensor linked to a telemetric microprocessor. The purpose of this project was to investigate the clinical applicability of the system as an additional tool, providing useful information for the management of glaucoma patients. Of eight evaluated patients, two cases are presented in detail in this report. The monitoring system that provides 24-hour continuous data appears to be very promising, as it captures clinically useful, real-life IOP fluctuations day and night while patients maintain normal activities, including undisturbed sleep.

Correspondence to: Vetrugno Michele, Department of Ophthalmology and Otolaryngology, University of Bari, Policlinico Universitario, piazza Giulio Cesare 11, 70124 Bari, Italy. mechelevetrugno@libero.it

Support: The publication of this article was funded by Sensimed AG.