

# 4<sup>th</sup> International Conference on Clinical & Experimental Ophthalmology

July 14-16, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

## Fibrinogen effects on erythrocyte nitric oxide mobilization in presence of timolol

**Carlota Saldanha**  
University of Lisbon, Portugal

**Aims:** The objectives of this study were to evaluate the effects of high fibrinogen concentration on erythrocyte mobilization of nitric oxide (NO) and of its metabolites in presence of timolol in healthy human blood samples.

**Main Methods:** Levels of NO was evaluated by amperometric method. Nitrite, nitrate and S-nitrosoglutathione (GSNO) were measured using the spectrophotometric Griess reaction.

**Key findings:** In the presence of high concentrations of fibrinogen and timolol (10 $\mu$ M) in the blood samples from healthy humans the erythrocyte nitrites, nitrates and GSNO concentration increased without significant changes in NO efflux. Erythrocyte scavenging NO property was preserved in the presence of timolol and high fibrinogen levels.

**Significance:** These results suggest that during in inflammation when high levels of fibrinogen are present, NO delivery by erythrocytes might be compromised that acts as a compensatory mechanism against the overproduced NO by endothelial inducible nitric oxide synthase.

### Biography

Carlota Saldanha has completed her Ph.D. at the age of 39 years from Universidade Nova de Lisboa; postdoctoral studies from Faculdade de Medicina da Universidade de Lisboa (FMUL). She has a Master in Medical Education. She is Associate Professor with Habilitation in FMUL and Head of Unit of Microvascular Biology and Inflammation in Instituto de Medicina Molecular (IMM) of FMUL. She has published more than 80 papers in reputed journals and serving as an editorial board member of reputed journal.

[carlotasaldanha@fm.ul.pt](mailto:carlotasaldanha@fm.ul.pt)