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**Authors:** Aadesh Kumar, Ram Avtar, Deepti Seth

**Paper Title:** Mathematical Modeling of Oxygen Transport in Retinal Layers

**Abstract:** The retina contains maximum oxygen (consumption making it particularly vulnerable to vascular infarcts, diminishing oxygen and circulation of nutrients. The goal of this paper is to develop a mathematical model for quantitative analysis of transportation of oxygen and consumption in each retinal layer. Such models allow us to predict the effect of qualitative change in retinal vasculature on oxygen supply in retinal layers. A differential equation, which is used in this paper describing how the oxygen transport and consumed by the retinal layers.

**Keyword:** Oxygen transport, Retinal capillaries, Oxygen metabolism, Oxygen consumption, Retinal vascular occlusion, Intraretinal oxygen pressure.

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