THE BIG PROBLEM OF THE SMALL NEWBORN

Retinopathy of prematurity (ROP) is a significant potential problem for prematurely born babies. The gestational age and weight are the most recognized indicators. However, ROP is a multifactorial disease. For many years (over 70) scientists and clinicians have tried to evaluate the role of oxygen in the development and progression of the disease. Despite numerous studies, we still somehow do not have conclusive knowledge. It is well known that fluctuations in oxygen supply have a negative effect on retinal blood vessels and are associated with greater proliferative potential. It is also known that 90–95% oxygen is safer than 85–89%.

Neonatal development challenges the integrated care from an ophthalmological perspective, as more and more newborn survivors are at greater risk for ROP development, especially considering that in one out of 3 children ROP is associated with decreased vision and blindness. There are structured algorithms for screening and follow-up of newborn babies, which for number of years have been accepted in Bulgaria. In the country there are only several centers dealing with eye care of premature babies. One is in Varna and is a collaboration between the Obstetrics and Gynecology Hospital and the Specialized Eye Hospital. In this issue Dr. Anna Ilieva presents a paper titled: *Incidence of Retinopathy of Prematurity in Varna Region, Bulgaria, and Evaluation of Perinatal Risk Factors*. This is an innovative approach examining not only basic regional epidemiology, but also factors which offer the possibility of modification and reduction of the risk and potential-related burden. Usually, prematurity is associated with risky pregnancy, older mothers, assisted reproduction, etc. All of these are characteristics of a special social background. Prevention therefore has an effect not only on the patient but the entire family and most importantly—the mother.

The study analyzes 85 children for a period of 3+ years. It is confirmatory regarding the risk factor, but is worrisome in proving that the ROP rate is higher among the regional population in comparison to other countries. This might be related to the fact that 1/3 of the included newborns were with weight below 1000 grams. Another hypothesis is the perinatal care and control of life-support measures. Therefore, the study is very important in terms of highlighting the difficulties in the integrated care of prematurely born children with ROP.

The paper is recommended to a wide audience of readers, including ophthalmologists, neonatologists, and other ECPs.

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