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Short Communication

Latin America is Waking Up to the Prevention of Retinopathy of Prematurity (ROP)

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Latin America is waking up to the need to prevent Retinopathy of Prematurity (ROP). After a period in which the incidence of retinopathy of prematurity (ROP) remained high in most Latin American countries [1], many published scientific studies have now shown a significant decrease in the incidence of blindness caused by ROP in the region [2]. Several factors have contributed significantly to both the increase in the number of patients affected by the disease in countries in this region in previous years and to the current situation, when a considerable reduction in the incidence of the disease can be observed in Latin America [2,3]. The increase in the incidence of ROP was due to greater development in neonatology and the implementation of new and better neonatal intensive care units (NICUs) in most large cities in these developing countries. This has led to an increase in the survival of patients born prematurely, but has consequently led to a greater incidence of cases of severe ROP in the region [4].

The reduction in blindness caused by ROP was demonstrated after several meetings held periodically since 2001 between groups of ophthalmologists, pediatricians, neonatologists, nursing teams, rehabilitation specialists, psychologists and researchers, among other health professionals, who, working together with the national health authorities in the various countries, made it possible to implement programs to prevent blindness caused by ROP that were based on guidelines organized for each country, respecting their individualities and population characteristics [5]. The protocols that were implemented in the various countries considered which patients would be at greatest risk of developing ROP, as well as the need for and frequency of subsequent examinations to be performed on premature babies.

These working meetings with a well-defined objective were held in Mexico, Argentina, Brazil, Colombia, Ecuador, Dominican Republic, Cuba, Peru and Venezuela, sponsored by CBM International, the International Agency for the Prevention of Blindness (IAPB) and the Pan American Health Organization (PAHO). These events allowed for greater reflection on the current situation of ROP as a disease that causes irreversible blindness and what could be done to minimize its impact on society as a whole.

The large multicenter CRYO-ROP [6] and ET-ROP [7] studies provided the basis for knowledge about when prethreshold ROP or threshold ROP will occur after preterm birth (almost always around the 36th and 37th weeks postconceptional age, respectively), and that treatment given at the appropriate time, usually around the 36th week postconceptional age (in case of prethreshold ROP type 1) or the 37th week (in case of threshold ROP), allows for better anatomical and functional results. Widespread knowledge that ROP is a disease that occurs after premature birth, that it is directly related to gestational age (GA) and the general immaturity

of the retina at birth, and the ideal time for treatment were some of the main success factors that reduced the number of serious cases of the disease. A better understanding of how to significantly reduce or even eliminate its occurrence through careful monitoring of the use of oxygen therapy in the NICU and proper management of the set of other risk factors involved in the onset of the disease, knowing that this set of factors is not static or the same in populations with different characteristics and that it shows dynamic behavior depending on the patient's GA at birth [8], and that control of the various risk factors could be better performed by neonatologists during the patient's hospitalization period, contributed greatly to the reduction in the prevalence of blindness due to ROP in the region. The use of telemedicine, which is now widely used in countries with a high human development index, to enable more efficient neonatal screening for the detection of ROP, has also been a prominent factor in some Latin American countries in recent years.

Studies from Brazil, Argentina, Chile, Colombia, Peru, Mexico, Cuba and Guatemala, among other countries, have shown a significant decrease in the prevalence of ROP in its severe forms that require treatment (ROP stages 3, 4 and 5). The current situation suggests that Latin America is able to better control this enormous problem of the modern development of Neonatology [2].

The creation of the Pan-American Society for Retinopathy of Prematurity (SP-ROP) in 2013 contributed to the union of the majority of ophthalmologists involved in the prevention of blindness due to ROP in almost all Latin American countries. Since 2013, SP-ROP has been present at almost all international events held, presenting the difficulties of the various programs in different countries, in addition to providing scientific discussions and discussions of clinical cases and, also, scientific research on the subject, facilitating publications in the literature. The creation of SP-ROP by its first president, Dr. Alejandro Vásquez de Kartzow, from Chile, was a very important milestone at this time in the prevention of blindness due to ROP in Latin America. SP-ROP formed a network of mutual and active collaboration to discuss scientific articles, aspects of clinical diagnosis, treatments, surgeries and also social and financial challenges for assistance, acquisition of equipment and medicines that may differ between Latin American countries, but the exchange of ideas contributes to the search for solutions.

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