

ROP screening tool assessment and validation in a third-level hospital in argentina: A pilot study

Esposito, Evangelina, Knoll, Erna, Guantay, Carla, Gonzalez-Castellanos, Alejandro, Miranda, Alejandra, Barros Centeno, Maria F., Flores, Martha Gomez and Urrets-Zavalía, Julio A. (2020) *ROP screening tool assessment and validation in a third-level hospital in argentina: A pilot study*. Journal of Pediatric Ophthalmology and Strabismus, 58 (1). pp. 55-61. ISSN 0191-3913

El texto completo no está disponible en este repositorio.

URL Oficial: <https://journals.healio.com/doi/10.3928/01913913-2...>

Resumen

Purpose: To evaluate whether a mathematical tool that predicts severe retinopathy of prematurity (ROP) using clinical parameters at 6 weeks of life (ROP Score calculator smartphone application; PABEX Corporation) can be useful to predict severe ROP in a population of premature infants in Argentina. **Methods:** In this retrospective study, data from the clinical records of all premature infants examined between 2012 and 2018 in the ophthalmology department of a public third-level hospital in Córdoba, Argentina, were obtained. ROP Score screening was applied using a Microsoft Excel spreadsheet (Microsoft Corporation). The sensitivity, specificity, and positive (PPV) and negative (NPV) predictive values of the algorithm were analyzed. **Results:** Between 2012 and 2018, a total of 2,894 pre-term infants were examined and 411 met the inclusion criteria, of whom 34% (n = 139) presented some form of ROP and 6% (n = 25) developed severe forms that required treatment. The sensitivity of the algorithm for any ROP and severe ROP was 100%. The PPV and NPV were 35.64% and 100%, respectively, for any ROP and 9.88% and 100%

for severe ROP. Conclusions: One-time only calculation of the ROPScore algorithm could identify severe cases after validation, reducing the number of screened infants by 38% in infants with a birth weight of 1, 500 g or less or a gestational age of 32 weeks or younger.

TIPO DE DOCUMENTO: Artículo

DOI: <https://doi.org/10.3928/01913913-20201102-01>

PALABRAS CLAVE: Retinopatía. Bebés prematuros. Argentina. Hospital.

TEMAS: [R Medicina > RE Oftalmología](#)

UNIDAD ACADÉMICA: [Universidad Católica de Córdoba > Facultad de Ciencias de la Salud](#)