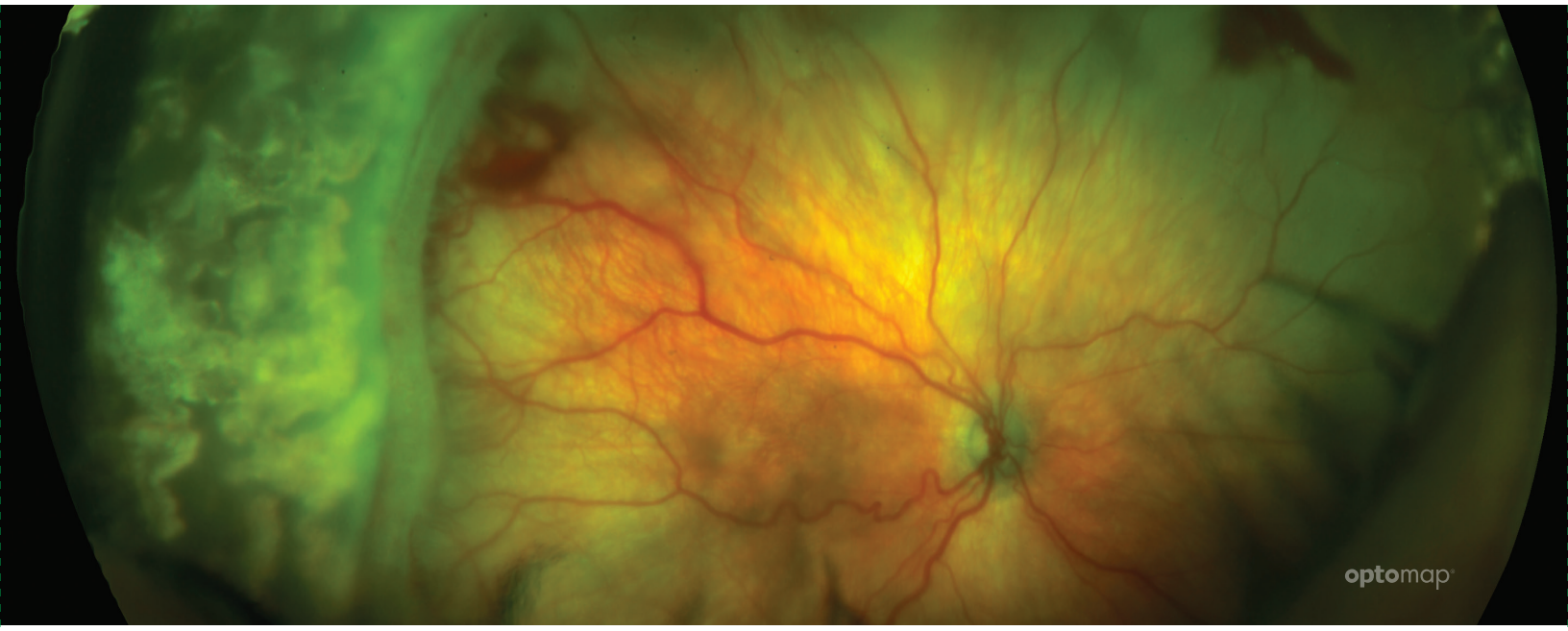
optomap®

FOR PEDIATRIC IMAGING



Optos was founded by Douglas Anderson after his then five-year-old son Leif went blind in one eye when a retinal detachment was detected too late. The intention was to create a way of non-invasively capturing as much of the retina in one image as possible to allow for more comfortable and efficient imaging of children.

Results from numerous clinical studies suggest that **opto**map may be an essential element to the screening and management of pediatric patients.

CLINICAL SUMMARY

- **opto**map can obtain high-quality images[1] in babies with retinopathy of prematurity (ROP) down to 24 week gestation. Optos imaging was faster, elicited better pediatric patient cooperation, negated the need for anesthesia, captured a larger coverage area, and achieved better image clarity compared to conventional contact-based imaging.[1,2,3,4]
- **opto**map has been shown to capture up to 75% more abnormal peripheral pathology in pediatric patients unseen by conventional imaging methods in ROP,[1,2,3,4] incontinentia pigmenti,[5] uveitis, hereditary retinal dystrophies, retinal vascular diseases, trauma, infection, tumors,[6] Familial exudative vitreoretinopathy (FEVR), Coats' disease[7], MARFAN syndrome[8] and sickle cell retinopathy[9].
- **opto**map images are obtained without contact and allow for the successful management of infants in the early post-operative stage and following intravitreal injection in high risk ROP.[1,2,3,4]

"The availability of Optos UWF imaging is helping us improve the diagnosis and management of pediatric retinal disease, in both babies and older children. With these systems we can now readily obtain non-contact, single-pass, high resolution digital images of the macula and periphery in an outpatient setting without the use of anesthesia or intravenous fluorescein. Even with patients who would not be able to cooperate with conventional imaging techniques, UWF imaging permits the identification of pathology in the periphery we might otherwise have missed and can help target laser photocoagulation."

— Chetan K. Patel, FRCOphth

See how **opto**map will help you manage your patients. For more information call **800-854-3039** or email **BDS@optos.com.**

Nikon

optos®

CLINICAL SUMMARY

optomap for Pediatric Programs

Healthy pediatric screening optomap

- Optos imaging can obtain high-quality images in ROP faster, elicited better pediatric patient cooperation, negated the need for anesthesia, captured a larger coverage area and achieved better image clarity compared to conventional contact-based imaging.[1,2,3,4]
- Researchers described the use of oral fluorescein in an office setting on a non-sedated infant with incontinentia pigmenti. optomap also correctly identified retinal neovascularization and avascular retinal zones, which subsequently permitted targeted laser treatment of retinal capillary nonperfused areas.[4,5]
- optomap *fa* is useful in children under 13 for a variety of pediatric retinal conditions. In these patients, abnormal peripheral angiographic findings were found in 75%.[6]
- Familial exudative vitreoretinopathy (FEVR) and Coats' disease, both pediatric retinal diseases that involve the peripheral retina, can be evaluated using optomap *fa*. optomap *fa* in targeting laser photocoagulation administered in an outpatient setting without the use of anesthesia has been reported useful. The investigators concluded that optomap *fa* is useful in identifying peripheral retinal pathologies in pediatric patients, guiding management, which may potentially reduce delays in diagnosis and treatment.[7]
- There is a strong correlation between Optos and OCT over a wide range of optic nerve size, in pediatric patients with optic nerve hypoplasia.[10]
- optomap has been found to be a sensitive tool to screen for sickle cell retinopathy in pediatric subjects. It is superior to dilated fundus exam in detecting capillary occlusion or anastomosis.[11]
- optomap *af* is superior to fundus photography and clinical examination in detecting pathology in children with suspected inherited retinal diseases. It is a feasible, non-invasive, and quick tool that provides important clinical information in treating these patients.[12]

References: 1 .Binocular Indirect Ophthalmoscopy Complements Non-contact Wide-field Imaging with Optos to Treat a Baby Outside ETROP Guidelines. Turkish Journal of Ophthalmology. 2018. 2. Non-contact Ultra-widefield Imaging of Retinopathy of Prematurity Using the Optos Dual Wavelength Scanning Laser Ophthalmoscope. Eye. 2013. 3. Noncontact High-Resolution Ultra–Wide-Field Oral Fluorescein Angiography in Premature Infants With Retinopathy of Prematurity. JAMA Ophthalmology. 2014. 4. Ultra-wide field imaging of retinopathy of prematurity (ROP) using Optomap-200TX. British Medical Journal. 2014. 5. Non-contact Ultra-widefield Imaging in Lasered Retinopathy of Prematurity. Indian Journal of Pediatrics. 2015. 6. Non-contact ultra-widefield retinal imaging and fundus fluorescein angiography of an infant with incontinentia pigmenti without sedation in an ophthalmic office setting. Journal of AAPOS. 2013. 7. Pediatric retinal conditions imaged by ultra wide field fluorescein angiography. Ophthalmic Surgery, Lasers and Imaging Retina. 2013 8. Ultra-widefield imaging for the management of pediatric retinal diseases. Journal of Pediatric Ophthalmology and Strabismus. 2013. 9. Retinal Disease in Marfan Syndrome: From the Marfan Eye Consortium of Chicago. Ophthalmic Surgery, Lasers and Imaging Retina. 2015 10. Direct OPTOS Nerve Size Determination of Prevalent Optic Nerve Hypoplasia in Alaska. Clinical Ophthalmology. 2020. 11. Wide-field imaging of sickle retinopathy. International Journal of Retina and Vitreous. 2019. 12. Ultra-wide-Field Fundus Autofluorescence for the Detection of Inherited Retinal Disease in Difficult-to-Examine Children. Journal of Pediatric Ophthalmology and Strabismus. 2019

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