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Research

ORIGINAL INVESTIGATION

171 Automated Machine Learning for Predicting Diabetic Retinopathy Progression From Ultra-Widefield Retinal Images

P S Silva and Coauthors

This diagnostic study evaluates the performance of automated machine learning models for identifying diabetic retinopathy progression from ultra-widefield retinal images.

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180 Four-Year Progression of Myopic Maculopathy in Children and Adolescents With High Myopia

F Jiang and Coauthors

This study investigates the 4-year progression of myopic maculopathy in children and adolescents with high myopia and explores potential risk factors.

Invited Commentary 186

188 Amblyopia Care Trends Following Widespread Photoscreener Adoption

CD Stults and Coauthors

This cohort study evaluates trends and factors associated with screening, referral, or diagnosis of amblyopia in children aged 3 years before and after photoscreening expansion across a relatively large health care system in late 2017.

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199 Diabetic Retinopathy and Quality of Life: A Systematic Review and Meta-Analysis

MG Zayed and Coauthors

This systematic review and meta-analysis assesses the association between diabetic retinopathy and quality of life by examining studies of adults with diabetic retinopathy that include measures of vision-specific or general health-related quality of life or both.

208 Visual Impairment and Real-World Home Physical Activity With Home Environment in an Older Population

S Banerjee and Coauthors

This study investigates the association between home environment features and home physical activity in patients with visual impairment.

Invited Commentary 215

216 Long-Term Risk and Prediction of Progression in Primary Angle Closure Suspect

Y Yuan and Coauthors

This cohort study examines whether ophthalmic examination findings at baseline can predict the long-term risk of progression in primary angle closure suspect.

Invited Commentary 224

226 Self-Supervised Learning for Improved Optical Coherence Tomography Detection of Macular Telangiectasia Type 2

S Gholami and Coauthors
for the MacTel Research Group

This comparative effectiveness research study describes a self-learning approach designed to improve optical coherence tomography detection of macular telangiectasia type 2 using limited labeled data.

Invited Commentary 234

235 Sociodemographic and Clinical Predictors of Prolonged Length of Corneal Ulcer Hospitalizations

S Akosman and Coauthors

This cross-sectional study investigates the sociodemographic factors and/or medical comorbidities associated with extended length of stay in patients hospitalized for corneal ulcers.

Invited Commentary 241

243 Presence of Copy Number Variants Associated With Esotropia in Patients With Exotropia

M Martinez Sanchez and Coauthors

This cross-sectional study investigates if genetic risk factors for esotropia are also risk factors for exotropia.

Invited Commentary 247

249 Risk of Herpes Zoster Ophthalmicus Recurrence After Recombinant Zoster Vaccination

A Wallia, Y Sun, and NR Acharya

This cohort study assesses the association between recombinant zoster vaccination and reactivation of herpes zoster ophthalmicus (HZO) among patients with a history of HZO.


BRIEF REPORT

257 Circulating Tumor DNA Posttreatment Measurements and Clinical Correlates in Retinoblastoma

DH Abramson and Coauthors

This cohort study investigates the association between the disappearance of plasma *RB1* circulating tumor DNA and metastasis-free survival in retinoblastoma.

 Online at
[JAMA Ophthalmology.com](https://www.jamaophthalmology.com)

 AUDIO
Automated Machine Learning for Predicting DR Progression From Ultra-Widefield Retinal Images

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RESEARCH LETTER

268 Gaps in the Vision Screening Pathway for School-Aged US Children

I Oke and Coauthors

This cross-sectional study uses a nationally representative survey of the US pediatric population to identify gaps in the vision screening pathway.

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INVITED COMMENTARY

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Clinical Review & Education

JAMA OPHTHALMOLOGY CLINICAL CHALLENGE

262 Older Woman With Proptosis, Ptosis, and Blurred Vision

AB Gibbons, C Eberhart, and E Li

A woman in her early 70s with a history of coronary artery disease, hypertension, and colon polyps presented to oculoplastic surgery with 1 week of progressive right-sided proptosis, headache, right eyelid ptosis, and blurry vision. Outside magnetic resonance imaging demonstrated an infiltrative mass involving right greater than left orbital apices, the right optic nerve, and right extraocular muscles. What would you do next?

➤ CME

264 An Atypical Optic Nerve Head Mass

MJ Maywood, VK Govindaraju, and T Begaj

A 47-year-old man presented with a sudden decrease in vision in the right eye and a history of binocular diplopia, bilateral cranial nerve 6 palsies, and an undifferentiated pontine mass. Examination revealed a large optic nerve head mass with optic disc hyperemia, scattered dot hemorrhages, a placoid lesion in the posterior pole, and a mass protruding out of the optic nerve head. What would you do next?

➤ CME

266 Cystic-Appearing Eyelid Lesion in a 62-Year-Old Man

Y Feng, CA Chiou, and N Wolkow

A 62-year-old male was referred for evaluation of a painless right lower-eyelid lesion noted during routine glaucoma follow-up. The lesion had been present for 3 years with slow, gradual enlargement. What would you do next?

➤ CME

OPHTHALMIC IMAGES

➤ Simultaneous Pigmented Paravenous Retinochoroidal Atrophy and Retinitis Pigmentosa in the Contralateral Eye

DG Plaza, AB Jelstrup, and R Navarro

This case report describes a simultaneous diagnosis of paravenous retinochoroidal atrophy and retinitis pigmentosa in the same patient.

➤ CME

➤ Corneal Plug Keratoplasty for the Treatment of Small Corneal Perforation

X Qi and H Gao

This case report describes the performance of corneal plug keratoplasty in a male patient aged 30 years who presented with corneal perforation secondary to metal foreign body.

➤ CME

➤ Laser In Situ Keratomileusis Flap Free-Floating on Interface Edema in Acute Corneal Hydrops

EJ Warner

This case report describes a patient with a history of laser in situ keratomileusis who presented with pain, photophobia, and blurred vision secondary to a corneal flap free-floating on interface edema in the setting of acute hydrops.

➤ CME

➤ Dystrophic Calcification in a 3-Piece Silicone Intraocular Lens

A Annadanam and B Purt

This case report describes a diagnosis of dystrophic calcification of a silicone intraocular lens implant in a patient who presented with foggy vision and glare.

➤ CME

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COMMENT & RESPONSE

Potential Biases in Trial Evaluating Swab Pressing for Incisional Leakage

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Is Recommending 0.01% Atropine for Myopia Control Clinically Meaningful?

271 S Khanal and JR Phillips

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272 K Zadnik, I Flitcroft, and HD Hemmati

➤ Available online

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