

Defining Success with AMD and GA

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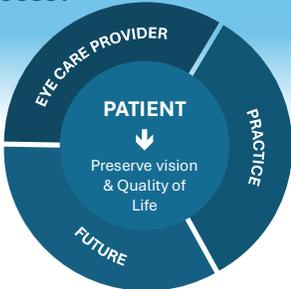
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- Alcon
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- Sight Sciences
- Tarsus
- Vision Source
- Visus
- LENZ



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What is success?




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What is success?

EYE CARE PROVIDERS → Deliver patient care

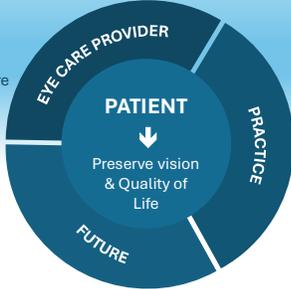
- Proactively detecting/managing disease
- Establishing expertise

PRACTICE → Enable delivery of care

- Modern medicine & technologies
- Consistent protocols

FUTURE → Optimize opportunity

- Patient outcomes
- Positioning in health care delivery stream





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Why does it matter?

QUALITY OF LIFE

Irreversible cell loss from GA results in changes to visual function that can affect daily activities and independence

Vision function ≠ Visual acuity



It takes **2.5 years** for GA to reach the central fovea on average



~67% of people with bilateral GA **lose their ability to drive 1.6 years** after diagnosis



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Success Tips for Eye Care Professionals Managing AMD/GA

1. Be an expert in the disease
2. Leverage your diagnostic tools
3. Know the treatments
4. Put the AMD Protocol to Use
5. Provide Actionable Education
6. Plan for Practice Growth



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SUCCESS TIP #1:
Be an expert in the disease

Stages of AMD

Early
(AREDS category 2)

Intermediate
(AREDS category 3)

Advanced
(AREDS category 4)

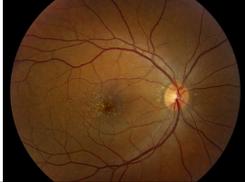



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SUCCESS TIP #1:
Be an expert in the disease

Stages of AMD

Early
(AREDS category 2)



- Multiple small drusen
- Few intermediate drusen (16-32 microns diameter)
- Mild RPE abnormalities

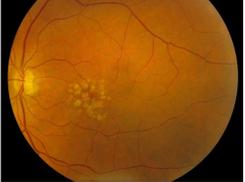


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SUCCESS TIP #1:
Be an expert in the disease

Stages of AMD

Intermediate
(AREDS category 3)



- Numerous intermediate drusen
- At least one large druse (125 microns or larger)



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SUCCESS TIP #1:
Be an expert in the disease

Stages of Dry AMD

Advanced
(AREDS category 4)



- Geographic atrophy
- Neovascular maculopathy

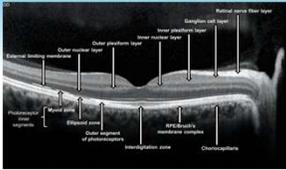


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SUCCESS TIP #1:
Be an expert in the disease

HEALTHY RETINA

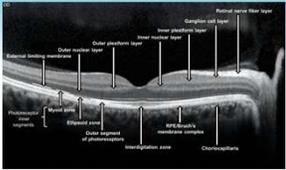
- RPE/Bruchs
 - provides nourishment, waste disposal, and protection to the overlying photoreceptor cells
- Photoreceptors
 - cells in the retina that detect light and affect color perception.




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SUCCESS TIP #1:
Be an expert in the disease

AMD & GA



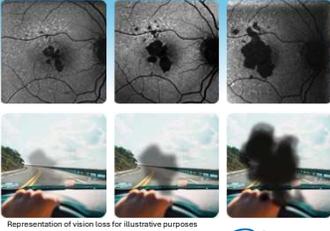
- Drusen formation
 - lipids, proteins, and cellular waste products deposited between RPE/Bruchs
 - Can eventually cause RPE/Bruchs dysfunction
- RPE/Bruchs degeneration
 - Eventually **unable to support** the overlying Photoreceptors
- Photoreceptor breakdown
 - Photoreceptor **cell loss leads to areas of atrophy/blind spots**



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SUCCESS TIP #1:
Be an expert in the disease

- Geographic atrophy
 - Pathophysiology
 - RPE "gobbling" complex
 - Progressive and Irreversible
 - Early intervention critical
 - Risk factors
 - Patient history
 - Risk factors
 - Findings



Representation of vision loss for illustrative purposes

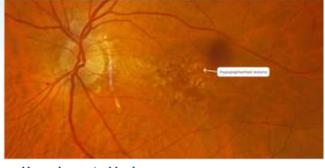


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SUCCESS TIP #2:
Leverage your diagnostic tools

- Optos/Fundus photography
 - Document anatomical changes to the external retinal anatomy
 - Easy for patient to view and understand

GA DIAGNOSTIC BIOMARKERS | CFP



- Hypopigmented lesions

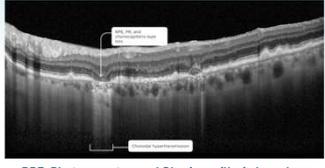


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SUCCESS TIP #2:
Leverage your diagnostic tools

- Optical Coherence Tomography (OCT)
 - Allows visualization of the underlying retinal structures
 - Helpful in monitoring anatomical changes to the retinal layers over time.
 - Able to identify precursors to progression (ex, hyperreflective foci, drusenoid PED)

GA DIAGNOSTIC BIOMARKERS | OCT



- RPE, Photoreceptor, and Choriocapillaris layer loss
- Choroidal hypertransmission



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SUCCESS TIP #2:
Leverage your diagnostic tools

- Fundus Autofluorescence (FAF)
 - Utilizes fluorescent properties of lipofuscin within RPE
 - Hyper-autofluorescence
 - Increased lipofuscin/compounds
 - Lipofuscin can increase in **RPE dysfunction**
 - Hypo-autofluorescence
 - Absence of RPE or decreased lipofuscin/compounds

GA DIAGNOSTIC BIOMARKERS | FAF



- Hypo-autofluorescence
- Hyper-autofluorescence

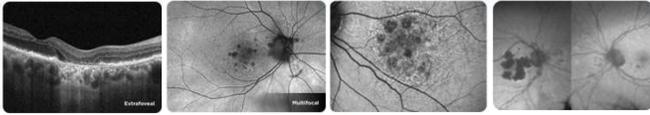


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SUCCESS TIP #2:
Leverage your diagnostic tools

- Assess progression risks

GA often grows faster if the lesions are:



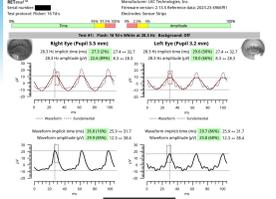
- Extrafoveal
- Multifocal
- Surrounded by hyperfluorescence
- Bilateral



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SUCCESS TIP #2:
Leverage your diagnostic tools

- Multifocal Electroretinography (mfERG)
 - Measures electrical responses of the retina to light stimuli
 - Can often give status on function of
 - Ganglion cells
 - Photoreceptor layer
 - Bipolar cells




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SUCCESS TIP #2:
Leverage your diagnostic tools

- Dark Adaptometry
 - Rod photoreceptor loss often occurs at greater rate than cones in early AMD
 - Patients often will have worse night vision/dark adaptation in early forms of AMD




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SUCCESS TIP #3:
Know the treatments

- Lifestyle?
- Vitamins
- Other options?



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SUCCESS TIP #3:
Know the treatments

- Lifestyle changes
 - Sun protection
 - Active lifestyle
 - Healthy eating (leafy greens)
 - Cardiovascular health
 - Smoking cessation
- AREDS 2 supplementation
 - May help reduce the risk of progression from intermediate to advanced AMD.
 - No reversal of existing damage
- Low vision aids?



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SUCCESS TIP #3:
Know the treatments

- THERAPEUTICS AVAILABLE TODAY:
 - Complement Inhibitors
- ONGOING CLINICAL RESEARCH:
 - Retinal implants/prosthetics?
 - Neuroprotective agents?
 - Gene editing?
 - Cell replacement therapies?

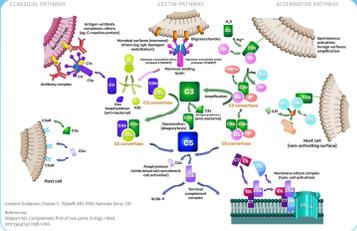


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SUCCESS TIP #3:
Know the treatments

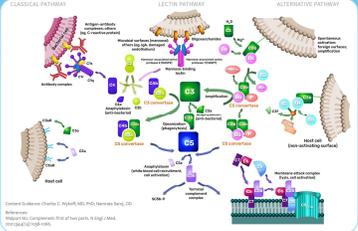
Complement system

- Marks foreign pathogens for destruction
- Can become **hyperactive or dysregulated** in disease states
 - Inflammation and tissue damage ensue




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SUCCESS TIP #3:
Know the treatments



Complement Inhibitors

- Block the overactive immune response to:
 - Reduce retinal damage
 - Slow progression of GA by limiting damage caused by inflammation



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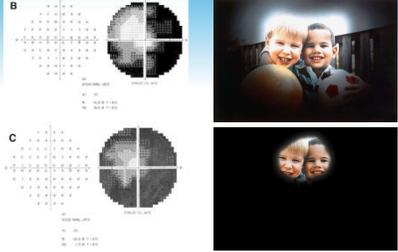
SUCCESS TIP #3:
Know the treatments

- Syfovre (Pegcetacoplan injection)
 - **Targets C3** to reduce inflammation, retinal cell death and loss of photoreceptors
 - Dosing once **every 25-60 days**
 - Extension study showed **up to 35% reduction in 3 years** in a subset of patients compared to sham
 - Has been associated with IOI (FDA Warning & Precaution for retinal vasculitis and intraocular inflammation)
- **IZERVAY** (Avacincaptad pegol intravitreal solution)
 - **Targets C5** to reduce inflammation, retinal cell death and loss of photoreceptors
 - Dosing once **every 28 ± 7 days**, now approved for use beyond 12 months
 - Pivotal trial showed slowed growth as early as 6 months and **up to 35% in 12 months** compared to sham
 - 58% fewer patients lost driving eligibility compared to sham over 12 months
 - RNA aptamer that binds with specificity and associated with low likelihood of inducing an immune response



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30 degrees vs. 5 degrees





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SUCCESS TIP #4:
Put the AMD Protocol to Use

- Examination
- Determine findings
- Categorize
- Monitor/Treat/Refer



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SUCCESS TIP #4:
Put the AMD Protocol to Use

No AMD
AREDS CATEGORY 1

- Education/yearly examination
- Fundus photos yearly
 - If strong family history or other risk factors

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
	\$164



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SUCCESS TIP #4:
Put the AMD Protocol to Use

Early AMD
AREDS CATEGORY 2

- 6 – 12 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler grid

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
	\$395



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SUCCESS TIP #4:
Put the AMD Protocol to Use

Intermediate AMD
AREDS CATEGORY 3

- w/o pigmentary changes
 - 6 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supplementation

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
	\$395



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

**Intermediate AMD
AREDS CATEGORY 3**

- w/ pigmentary changes
- 3-6 month f/u**
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supplementation

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
FOLLOW UP (6-Month)	
• Office visit	\$ 84
• OCT/FAF	\$ 32
• ERG	\$120
	\$633



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

**Advanced AMD
AREDS CATEGORY 4**

- GA
 - Foveal
 - Refer for treatment**
 - Extrafoveal
 - Assess risks, consider referral**



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

**Advanced AMD
AREDS CATEGORY 4**

- GA
 - Extrafoveal**
 - Single lesion **unilateral**
 - 3-6 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supp

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
FOLLOW UP (6-Month)	
• Office visit	\$ 84
• OCT/FAF	\$ 32
• ERG	\$120
	\$633



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

**Advanced AMD
AREDS CATEGORY 4**

- GA
 - Extrafoveal**
 - Single lesion **bilateral**
 - 3-6 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supp

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
FOLLOW UP (6-Month)	
• Office visit	\$ 84
• OCT/FAF	\$ 32
• ERG	\$120
	\$633



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

**Advanced AMD
AREDS CATEGORY 4**

- GA
 - Extrafoveal**
 - Multiple lesion unilateral**
 - 3 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supp
 - Consider referral for tx

VISIT 1	
• Examination:	\$132
• Fundus photos:	\$ 32
FOLLOW UP (3-Month)	
• Office visit	\$ 82
• OCT/FAF	\$ 29
• ERG	\$120
FOLLOW UP (6-Month)	
• Office visit	\$ 84
• OCT/FAF	\$ 32
• ERG	\$120
	\$633



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**SUCCESS TIP #4:
Put the AMD Protocol to Use**

- Advanced AMD (AREDS cat 4)**
 - GA
 - Extrafoveal**
 - Multiple lesion bilateral**
 - 3 month f/u
 - Fundus photos
 - OCT/FAF
 - ERG
 - Amsler
 - AREDS 2 supp
 - Referral for tx**



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SUCCESS TIP #5:

Provide Actionable Education

- Use technology and protocols to identify GA or GA-Suspect Patients and then:
 - Explain the condition in easy-to-understand formats
 - Use analogies when appropriate
 - Lay out the options
 - But remember you are the expert – give them your recommendation
 - "if my family was in the chair I would recommend"
- Explain the expected outcome to patients/family members
- Explain the risks



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SUCCESS TIP #6:

Plan for Practice Growth

- Form relationships over time with surgeons
- Communication is key (with patients and surgeons)
 - Set expectations for outcomes with both (allows for continuity between offices)
 - Makes sure those outcomes align
 - Follow up communication is key
- Thoughts/Treatment must align between parties (referring doc and surgeon)
- Implement comprehensive billing and code procedures



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Questions?

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