

Vision screening and vision loss

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Objectives

1. Discuss **Vision Screening** in the **Primary Care setting**
2. Recognize the **difference between urgent and non-urgent** visual complaints
3. Identify tools needed for **basic ophthalmic evaluations**

Disclosure

I have no financial disclosure or conflicts of interest with respect to the material in this presentation.

Case

Your 64-year-old female patient calls your office for an urgent appointment about **loss of vision in her right eye**. She was feeding her cat this morning when she noticed she **couldn't bring the cat's food bowl into focus**. She has a history of hypertension, coronary artery disease, emphysema and multiple sclerosis.

Q1. Should you see her today?

Q2. What history is important?

Q3. What examinations should you do?

Q4. To whom should you refer her, if at all?

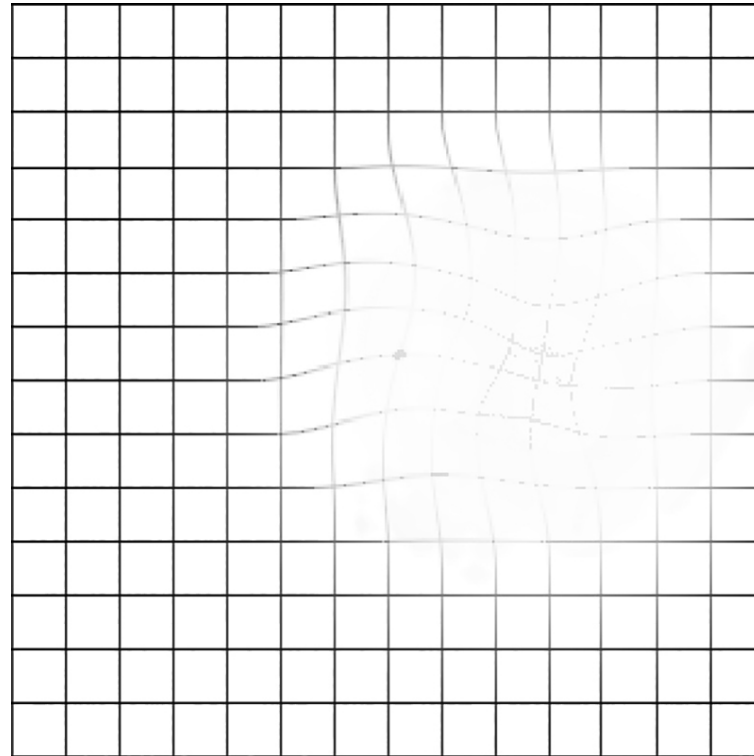
Examining visual fields



Comm Eye Health Vol. 32 No. 107 2019 pp 58-59. Published online 17 December 2019.

Amsler chart testing

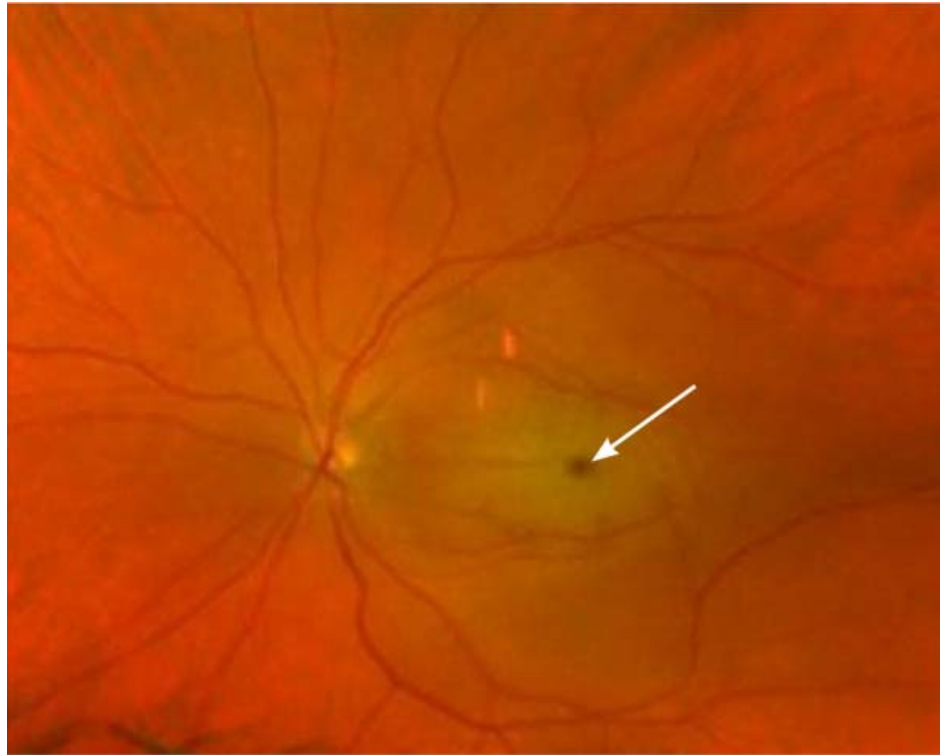
Used to detect abnormalities in the central field as well as paracentral defects.



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Fundoscopic examination

Dilated fundoscopic exam usually shows retinal whitening with a cherry-red spot in the fovea.



<https://www.aafp.org/afp/2020/1101/p539.html#afp20201101p539-t1>

Vision assessment and the PCP

Children/Adolescents

- Developmental screening in infants/children
- Sports physicals

Young adult

- Pre-employment physicals
- Wellness screening

Middle aged-older adult

- Chronic disease care
- Welcome to Medicare evaluations

Why be concerned about vision screening?



[https://www.jpeds.org/article/S0891-5245\(20\)30167-X/abstract](https://www.jpeds.org/article/S0891-5245(20)30167-X/abstract)

<https://www.cancer.gov/news-events/cancer-currents-blog/2020/retinoblastoma-global-disparities-low-middle-income-countries>

Infant/child

- Retinoblastoma
- Amblyopia/strabismus
- Severe myopia/hyperopia

Young adult

- Driving/employment

Older adult

- Glaucoma
- Cataract
- Amaurosis
- Retinal detachment

Eye emergencies

Sudden painless vision loss

- Central retinal artery occlusion
- Retinal detachment

Eye pain

- Acute glaucoma

Infections

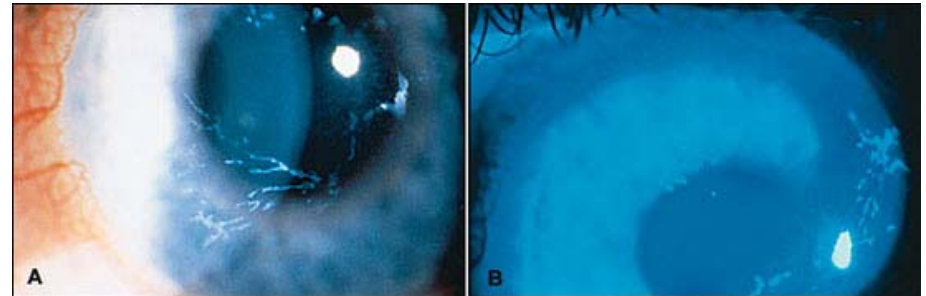
- Herpes ophthalmicus

Trauma

- Globe rupture or penetrating injury

Chemical burns

- Alkali burns



<https://www.aafp.org/afp/2002/1101/afp20021101p1723.pdf>



<https://www.aafp.org/afp/2020/1101/p539.html#afp20201101p539-t1>

What do you need?

Basic

- › Penlight
- › Snellen chart
- › Ophthalmoscope
- › Fluorescein
- › UV or cobalt blue light
- › Proparacaine
- › IV fluids: normal saline or lactated Ringers
- › Eye shields

Rural/remote

- › Tonometer
- › Slit lamp
- › Morgan lens
- › Retinal camera



Clinic accommodations for patients with vision impairment

Visual impairment is not always obvious

Look at physical environment

Consider interactions

Consider mobility assistance

Consider information

