#114: EYE PAIN

Eye pain and visual impairment can be associated with serious health consequences for older adults, including limitations in physical activity, impaired mobility, and poor balance, associated with higher levels of morbidity (e.g., hip fractures) and mortality (VU, 1995). Assessment of common eye conditions in older people is crucial to facilitate optimal patient outcomes. Many eye disorders share common presenting symptoms, namely some degree of eye pain/discomfort and a red eye.

Normal Changes of the Aging Eye:
- Tear production decreases; predisposing to dry eye
- Can have a gray-white ring around the “color” part of the eye; no significance (see photo on the right)
- Sensitivity of eye is diminished; may lead to corneal damage, “floaters” common
- Pupil size diminishes/reactivity to light (constriction) & in dark (dilation) is slower; helpful assessment

Recognition/Assessment
- Pain: onset, location, duration, character (quality/severity; foreign body sensation; acute vs. chronic), & radiation
- Any precipitating factors (triggers), trauma, or similar symptoms?
- Associated symptoms: fever, visual complaint (be it transient, deteriorating, or improving), headache, nausea, not eating, fatigue, cough, change in mentation, or dizziness

Observe/assess the lids, conjunctiva, cornea, iris, and pupils for the following:
- Lids: Swelling, changes in skin color, excessive watering
- Conjunctiva: Redness & discharge
- Cornea: Cloudiness, ulceration, foreign body
- Iris: Compare each/same color?
- Pupils: Pupils should constrict & dilate rhythmically to light (though often slow)

Compare your findings to this eye disorder chart

<table>
<thead>
<tr>
<th>History</th>
<th>Observation</th>
<th>Potential cause</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sudden severe pain in and around eye with nausea, visual loss</td>
<td>Red tender eye, fixed mid-dilated pupil, headache over affected eye</td>
<td>Angle-closure glaucoma</td>
<td>Emergency: call 911 per protocol and on-call provider</td>
</tr>
<tr>
<td>Pain, visual loss, intense light sensitivity, (can affect both)</td>
<td>Tender eye, pronounced redness around cornea, fixed small pupil</td>
<td>Acute Iritis</td>
<td>Urgent call to provider</td>
</tr>
<tr>
<td>Mild-moderate itching, burning, grittiness, little/no effect on vision</td>
<td>Red eye with discharge (sticky lids), watery (viral); purulent (bacterial)</td>
<td>Conjunctivitis</td>
<td>Gentle cleansing/notify provider</td>
</tr>
<tr>
<td>Pain, light sensitivity, foreign body sensation, tearing</td>
<td>Generalized redness</td>
<td>Corneal abrasion, superficial injury to the cornea/often due to dry eyes</td>
<td>Call provider</td>
</tr>
<tr>
<td>Painful rash forehead to upper lid/side of nose (one side only)</td>
<td>Grouped red pustules, cornea may have opacity</td>
<td>Herpes Zoster Ophthalmicus</td>
<td>Keep skin clean/Urgent call to provider</td>
</tr>
</tbody>
</table>

Assessment Tool: Numeric and faces pain assessment tools can be found: [www.geriatricpain.org](http://www.geriatricpain.org).

Interventions
- Recognition is critical. All eye complaints warrant immediate assessment to preserve vision and avert complications. See specific interventions in table to rapidly notify provider/call 9-1-1 as per protocol.
- Non-pharmacologic: maintain a calm environment, reassure patient, and provide staff (family) support
- Conduct frequent reassessment

References: