1. Martin is an 82-year-old with a history of smoking and alcohol use, which are known risk factors in developing oral cancers. List another risk factor for oral cancer for developing oral cancer.

Besides tobacco and alcohol use, other risk factors for developing oral cancer include ill-fitting dentures; however, the duration of denture use, in general, is not. For Asians like myself, several genetic polymorphisms, in addition to environmental carcinogens like betel quid chewing have been associated with oral cancer development. Pipe smoking and sun exposure are also implicated in lip cancer. Leukoplakia and erythroplasia are also precursors to oral cancer.

2. What other diagnostic testing would you perform to evaluate for cataracts?

Diagnostic testing to evaluate cataracts includes visual acuity and examination of the eye. After initial screening, a referral to an ophthalmologist for a complete evaluation is recommended. Pupillary dilation and slit lamp exam would reveal white, gray, or brownish opacities if a patient developed a cataract. Small cataracts indicate dark areas on the red reflex in a dilated eye while for large cataracts, the red reflex may not be visible.

3. What would your next step be for a patient you suspect has a diagnosis of acute angle glaucoma?

For a patient that a practitioner suspects having an acute angle glaucoma, an immediate referral for a complete ophthalmic examination to an ophthalmologist should be performed. Permanent visual loss occurs within 2 to 5 days if the condition is not treated. Treatment includes peripheral iridectomy or laser iridotomy. The use an osmotic diuretic IV or orally and miotic eye drops may be used to lower intraocular pressure preoperatively. The practitioner must communicate to the specialist medical conditions that need monitoring using the said agents.

4. What education would you give your older patients about the preventable causes of hearing loss?

Education on older patients regarding preventable causes of hearing loss would include the use of protective devices to guard against occupational or recreational hearing loss, equalize ear pressure when diving, chew gums or use decongestants in airplanes, avoid flying or diving if the patient has upper respiratory infection, and to avoid ototoxic medications. It is also important to educate the patient on the proper technique for cerumen removal, avoiding Q-tip type ear swabs and other foreign bodies in the ear. Any sign if hearing difficulty in elder patients would require hearing screening tests.

5. How often should an older adult be screened for hearing loss?

Hearing screening tests for patients over 65 years old and persons who report hearing difficulty are recommended. Periodic screening for hearing loss is not recommended in asymptomatic adults as recently revised by USPSTF. The American Speech-Language-Hearing Association recommends screening every 3 years for adults more than 50years old. For those patients residing in long-term care facilities, screening for hearing loss is recommended on admission and as needed thereafter.

- 6. Age-related macular degeneration (AMD) is defined as one disease with three stages, early, intermediate, and late. Describe the characteristics of late stage AMD. Late age-related macular degeneration is characterized by significant vision loss which may occur with gradual loss due to dry macular geographic atrophy, or with rapid onset resulting from neovascularization of wet macular degeneration.
- 7. Although epistaxis can be more common in an older person, name two reasons a nosebleed would warrant an ENT referral?

Two reasons that would warrant an ENT referral would include recurrent nose bleed within the first hour and uncontrolled bleeding from the posterior nasopharynx.

8. Describe the characteristics of dry, nonexudative, or atrophic macular degeneration.

Dry, nonexudative, or atrophic macular degeneration is characterized by gradual loss of central vision in one or both eyes, with associated complaints of difficulty reading or driving, blurred or fuzzy vision (late), and the concern that straight lines appear wavy. The early-stage shows the presence of drusen, yellow deposits under the retina. Intermediate shows pigmentary disturbances in the retinal pigment epithelium happens. Late-stage shows geographic atrophy with severe central vision loss.

9. What type of glaucoma causes the most blindness in African Americans in the U.S.?

In the U.S., primary open-angle glaucoma causes 15% to 20% of all blindness and is the primary cause of blindness in African Americans.

10. Names two classes of drugs that will treat glaucoma, and list their mechanism of action.

Two classes of drugs that will treat glaucoma with their mechanism of actions:

- 1. Beta-blockers decrease aqueous production; lowers intraocular pressure 20% 25%.
- 2. Parasympathomimetic agents increase trabecular outflow; lower intraocular pressure 20%-25%.