Class 6 PHE Notes

The head and neck

Mouth

1. Lips
2. Teeth
3. The gingiva
4. Tongue
5. Uvula
6. Pharynx
7. Soft palate
8. Tonsils

Issues

1. Sore throat – pharyngitis
2. Bleeding gums or swollen gums
    a. Bleeding of gums is most commonly due to gingivitis
3. Hoarseness – voice change – husky, rough, harsh, lower pitch then usual
    a. Larynx or something pressing on laryngeal nerves
    b. Ask about – smoking, alcohol, pollutants, allergies
    c. Voice strain (Voice overuse)
    d. If hoarseness lasts longer than 2 weeks refer for laryngoscopy
4. Malodorous breath (Halitosis)
    a. Have you noticed and bad breath when you talk, has anyone mention that that you have bad breath
    b. Poor hygiene, tobacco smoking, dentures, gingivitis, ulcers, periodontitis
    c. Systemic – sinusitis, tonsilitis, pharyngitis, foreign bodies, neoplasm, abscess, bronchiectasis. Gastric reflux, hepatic cirrhosis, poorly controlled diabetes, impaired fat digestion (patient with steatorrhea)

Examination – inspection

1. Inspection – lips, oral mucosa, gingiva, gum margins, teeth, roof of the mouth (hard palate), tongue
2. Inspection – soft palate, uvula, tonsils, pharynx

3. Inspect for – color, symmetry, exudates, swelling, ulcerations, enlargement, lesions
4. Palpation oral mucosa, teeth
5. Ask the patient to protrude the tongue – observe symmetry. If there is deviation to the side – hypoglossal nerve (CN XII) damage
6. Symmetry of uvula and rise of soft palate – CN X (Vagus nerve)

Patient comes to with diagnosis of angular cheilitis. What is affected in this patient. Inflammation at the corners of the mouth.

Patient comes to you with complaints of pain in the mouth. On examination you notice ulcerated papule with indurated edges. What is the possible cause of this finding? Canker sore of primary syphilis

Patient presents to you with complaints of sore throat. On examination and observation of pharynx it appears red with gray exudate. Which is the most likely cause of this finding? Diphtheria

Patient presents with complains of slight fever, malaise. On inspection of the mouth you notice several white specks that look like grain in the buccal mucosa next to molars. What are these white specs called? Which one of these is most likely cause? Koplic spots, measles. What do you expect that this patient will most likely develop in few days? Maculopapular rash found in measles.

Tongue

1. Geographic tongue – dorsum of the tongue shows scattered smooth red areas without papillae (denuded of papillae), Together with normal areas created appearance of map
2. Black hairy tongue – yellow to brown to black, hypertrophied and elongated papillae on the tongue dorsum. Associated bacterial overgrowth, candidiasis, antibiotic use, poor dental hygiene
3. Smooth tongue (Atrophic glossitis) – tongue has lost papillae. Deficiency niacin, folic acid, B12 vitamin, pyridoxine, iron, due to chemotherapy
4. Painless slightly raised oval tongue lesions that is covered by grayish membrane – Mucous patch of syphilis (secondary syphilis)
5. Tongue that is covered by thick white coat, that can be removed with scraping – Candidiasis tongue

6. Oral hairy leukoplakia – whitish raised plaques on the sides of the tongue that cannot be scraped off. Epstein-Barr virus, HIV infection
7. Aphthous ulcers (Canker sores) – painful, shallow whitish gray oval ulcerations surrounded by a halo of reddened mucosa. It self resolves in 7-10 days.
8. Leukoplakia – painless white patches in oral mucosa

Nose

1. Rhinorrhea – drainage from the nose, that can cause nasal congestion (sense of stuffiness and obstruction)
2. Epistaxis – bleeding from the nasal passages. Question is it from nose or paranasal sinuses, nasopharynx.
    a. Coughing blood – hemoptysis
    b. Vomiting blood – hematemesis
    c. Causes of the nose bleed – trauma, foreign bodies, cancer, bleeding disorders, NSAIDS, drug abuse,
3. Examination of the nose
    a. Observe outside and palpate
    b. Test of the smell (CN I, olfactory)
    c. Inspection of nasal cavity – otoscope with the larger ear speculum. Avoid touching nasal septum. Inspect nasal mucosa, nasal turbinate, nasal septum, passage through them
    d. Examination of paranasal sinuses – pressure over frontal and maxillary sinuses , followed by percussion. Dark room – transillumination of sinuses.

Eyes

1. Concerning symptoms
    a. Changes in vision, blurred vision, floaters, flashing lights
    b. Eye pain, redness, or tearing
    c. Double vision (diplopia)
    d. Hyperopia (farsightedness) – difficulty up close
    e. Myopia (nearsightedness) – difficulty with distance vision
    f. Presbyopia – aging eyes
2. Examination

    a. Visual acuity – Snellen eye chart in well lit area. Position the patient 20 ft from the chart. Reading glasses are put on. Patient covers one eye and reads the smallest line of print they see. If patient cannot read largest letters, position patient closer to chart.
    b. Visual acuity in child -Allen chart – standardized pictures – over 2 years of age
    c. Record 20/20, first number is distance (20 ft), second number is a distance at which a normal eye can read the line of letters. 20/200 would indicate that normal eye could read those letters at 200 ft. 20/40 – normal eye could that size of letters at 40 feet.
    d. In the US legally blind is person with better eye, corrected by glasses with 20/200 or less
3. Visual fields
    a. Static finger wiggle test – examiner positions arms length from the patient, closes one eye and ask the patient to close the opposite eye. Examiner places hands about 2 ft apart out of the patients view. Start wiggling fingers and move slowly towards patients center of the eye. Test each clock hour.
    b. Left homonymous hemianopsia
    c. Any deficit – refer
4. Color vision
    a. Helpful to rule out damage to optic nerve
5. Contrast sensitivity – observe bright red object
6. Eye position and alignment
    a. Esotropia (inward deviation), exotropia (outward deviation), hypertropia (upward deviation), hypotropia (downward deviation)
    b. Proptosis (abnormal protrusion)
7. Eyebrows
8. Eyelids
    a. Lagophthalmos – failure of eyelids to close
9. Lacrimal gland examination
10. Conjunctiva and sclera
11. Corneal and lens
12. Iris
13. Pupils

a. Light reaction – pupillary reaction to light
b. Near reaction – Hold object about 10 cm from the patient and ask to at the object and in distance

14. Extraocular muscles – letter H test. 2 ft directly in front of the patient
15. Ophthalmoscopic examination
    a. Darken the room.
    b. Turn the focusing wheel to the 0 diopter. (A diopter is a unit that measures the power of a lens to converge or diverge light.) At this diopter, the lens neither converges nor diverges light.
    c. Hold the ophthalmoscope in your right hand and use your right eye to examine the patient's right eye; hold it in your left hand and use your left eye to examine the patient's left eye.
    d. Hold the ophthalmoscope firmly braced against the medial aspect of your bony orbit, with the handle tilted laterally at about 20 degrees slant from the vertical. Check to make sure you can see clearly through the aperture. Instruct the patient to look slightly up and over your shoulder at a point directly ahead on the wall.
    e. Place yourself about 15 inches away from the patient and at an angle 15° lateral to the patient's line of vision. Shine the light beam on the pupil and look for the orange glow in the pupil—the red reflex. Note any opacities interrupting the red reflex. If you are nearsighted and have taken off your glasses, you may need to adjust the focusing wheel on the minus/red diopters until the structures you see at a distance is in focus.
    f. Now place the thumb of your other hand across the patient's eyebrow, which steadies your examining hand. Keeping the light beam focused on the red reflex, move in with the ophthalmoscope on the 15-degree angle toward the pupil until you are very close to it, almost touching the patient's eyelashes and the thumb of your other hand.
    g. Try to keep both eyes open and relaxed, as if gazing into the distance, to help minimize any fluctuating blurriness as your eyes attempt to accommodate.
    h. You may need to lower the brightness of the light beam to make the examination more comfortable for the patient, avoid hippus (spasm of the pupil), and improve your observations.

Red eyes

1. Conjunctivitis (Pink eye)
    a. Redness that tends to be maximal peripherally
    b. Mild discomfort
    c. Vision not affected, temporary mild blurring due to discharge
    d. Watery or mucoid, mucopurulent
    e. Pupils not affected
    f. Clear cornea
    g. Infection, viral, bacterial, or allergic irritation
2. Subconjunctival hemorrhage
    a. Homogenous sharply demarcated red area (resolves in two weeks)
    b. No pain
    c. Vision not affected
    d. No discharge
    e. Clear cornea
    f. Trauma. Bleeding disorder, sudden increase in venous pressure, cough, or no cause