Systematic Head and Neck Examination

Seventy-five percent of all head and neck cancers begin in the oral cavity. A thorough, systematic examination of the head and neck need only take a few minutes and can detect these cancers at an early—and curable—stage. Note any recent change such as erythemia, leukoplakia or swelling. Asymmetric, firm nodal enlargement or a “lump” in the neck strongly suggest cancer. Also suspect cancer if the lesion: is painless, at least initially; has a rough, ulcerated, granulated, raw or irregular surface; has firm and raised edges; is apt to bleed when scraped; is hard and fixed to surrounding structures.

The following guide to performing a head and neck exam was prepared by Dr. Arthur G. James, Clinical Professor Department of Surgery, Ohio State University School of Medicine and Director of Columbus Cancer Clinic, Columbus, Ohio.

The face: Inspect the face for asymmetry, swelling, discoloration or ulceration. Examine the lips with the mouth both closed and open noting any abnormalities in contour, color or texture. Palpate for firmness which may signal cancer. (Fig. 1.)

The neck: Have the patient sit so that his face is at your eye level; support the head with a headrest. Bimanually palpate the neck, comparing both sides simultaneously for signs of enlargement. Palpate carefully for enlarged lymph nodes. (Fig. 2.) Examine the jugular chain first. With two deeply placed fingers, palpate along the course of the sternomastoid muscles, underneath the mandible and down to the clavicle. Palpate the supraclavicular spaces on either side. Next, examine the parotid groups lying anterior and inferior to the ears, the submental and finally the submaxillary chain. To palpate a mass in the submaxillary area, insert a gloved finger in the patient’s mouth and press structures against your other hand, positioned under his chin. (See Fig. 5.) Next, palpate along the course of the larynx for signs of immobility or enlargement.
The thyroid: Sit immediately in front of the patient and examine the thyroid area bidigitally. (Fig. 3.) It is important to:

a. Palpate all of the gland, not only the nodule under consideration.
b. Observe and record the size of the mass or masses for future reference.
c. Note and record tenderness.
d. Check the consistency of any abnormality. Is it hard? Cystic?

Have the patient deviate his head toward the examining side to relax the muscles during palpation. After the lobe has been palpated, and with the fingers still, ask the patient to swallow. The gland will move upward during deglutition and any abnormality will become more apparent. On swallowing, the inferior pole of the lobes is elevated and can be outlined. Inability to palpate the inferior pole may suggest substernal extension of the thyroid gland on that side. Examine each lobe in this manner. If the patient has a very heavy neck, it may be helpful to stand behind him and palpate each lobe with his head deviated toward the examining side.

The mouth: Check the roof of the mouth, the hard and soft palates for areas of roughness, induration or granularity—early clues to cancer. With two fingers inside the patient’s mouth and with your thumbs on his cheeks, fold the upper lip up and out, and the lower lip down, to inspect both gutters along the upper and lower jaws. Pull out the cheeks to examine the mucosa for induration, firmness, leukoplakia or erythroplakia. Next, wrap a piece of gauze around the tip of the tongue and pull the tongue gently forward and to one side. With the other hand, use a tongue blade or gloved finger to push the middle of the tongue up and out of the way. (Fig. 4.)
The floor of the mouth: Inspect the floor of the mouth, between the tongue and teeth. Palpate by inserting a gloved finger underneath the tongue and simultaneously pressing upward with the other hand. (Fig. 5.)

The tongue: Ask the patient to stick out his tongue and move it from side to side. Observe the dorsum of the tongue, noting any limitation in movement which may signal a tumor interfering with muscle action. Palpate the base of the tongue by inserting a gloved or cotted finger at the base of the tongue. (Fig. 6.) Inspect for asymmetry which may be due to normal variation in lymphoid tissue or to cancer. Palpate for areas of roughness, induration or granularity—often an early clue to cancer. Next, inspect the base of the tongue and the floor of the mouth with a laryngeal mirror.
The tonsillar-pharyngeal area: Have the patient relax his tongue. Place a laryngeal mirror as far back on the tongue as possible, without touching the soft palate. Press down. (Fig. 7.) A reflex retraction of the uvula and contraction of the oropharyngeal muscles will open the area for adequate inspection of the tonsillar pillars, the tonsillar fossae, the posterior pharyngeal wall and the soft palate. Simply depressing the tongue with a tongue blade and having the patient say “ah” permits only the most superficial inspection of the tongue, cheek and pharyngeal area and many early cancers could escape notice.

The larynx and nasopharynx: Hold the patient’s tongue with your left hand. With your right, use the laryngeal mirror to visualize the posterior surfaces of the tonsillar pillars, the vallecula, the epiglottis, the pharyngeal wall and the larynx. (Fig. 8.) Then, depress the tongue with a tongue blade and reverse the mirror to visualize the nasopharynx. Occasionally it is necessary to anesthetize the mucosa to prevent gagging.