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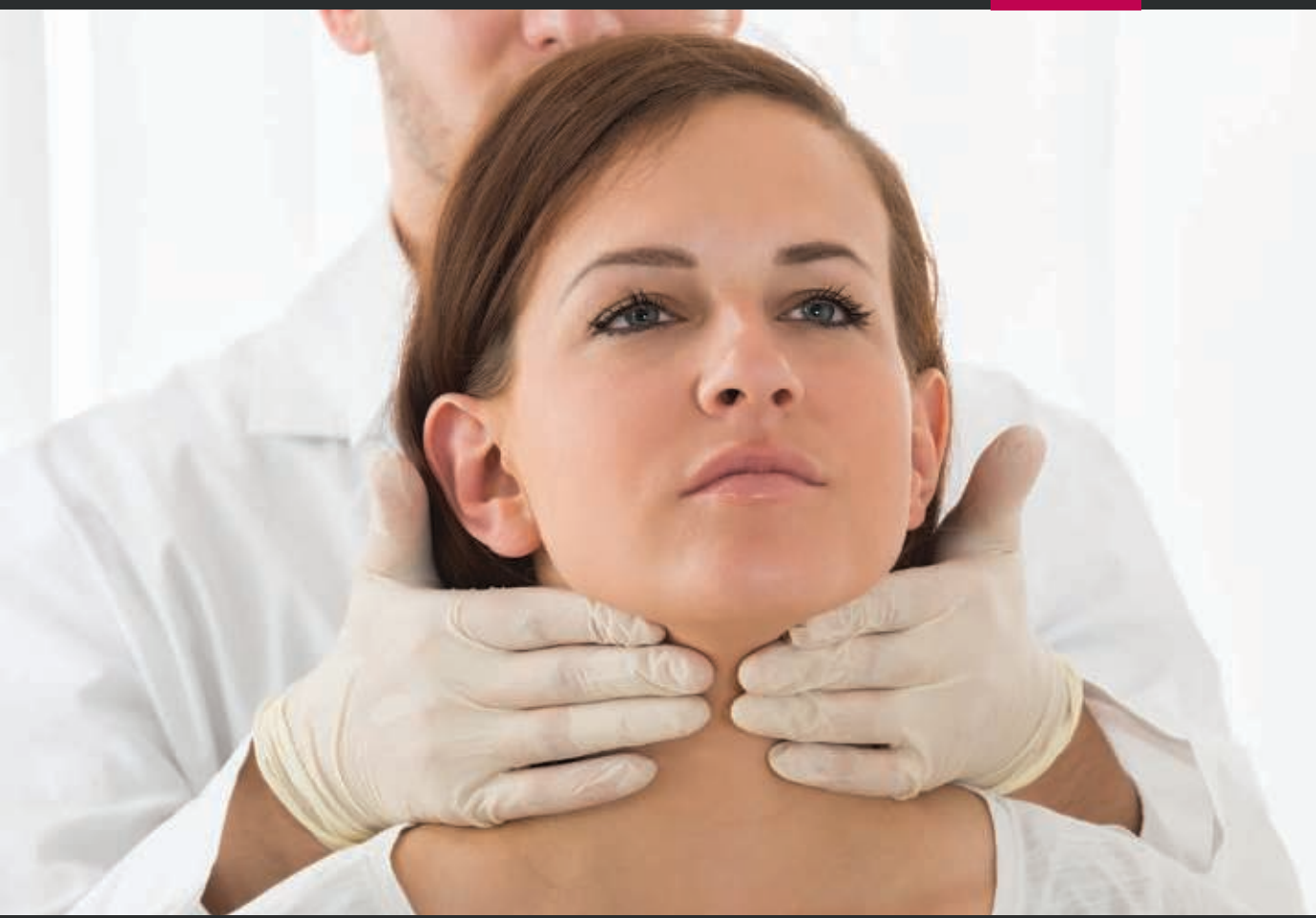

A review of thorough head and neck examinations for the practicing dentist

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ABSTRACT

A thorough head and neck examination may arguably be the most important part of a comprehensive or periodic exam and can be valuable in helping diagnose a plethora of disorders, many of which require early detection for effective cure. With high utilization and recommendations of biannual preventative care visits, dentists can be pivotal in screenings and diagnosis. Systematic and regular screenings are key factors. The examination should cover lymph nodes, muscular anomalies or tension, asymmetrical growths, the temporomandibular joint and other head and neck structures, and form and function of facial anatomy. This article provides a thorough analysis of the flow of a dental head and neck examination, recommendations on implementing a more comprehensive exam with consistency in dental practice, a review of the normal anatomy, and methods to identify abnormalities and effectively follow up.

EDUCATIONAL OBJECTIVES

At the conclusion of this educational activity, participants will achieve the following:

1. Discuss the value of the role of the dental practitioner in oral cancer and other pathologic early detection and diagnosis.
2. Review head and neck anatomy and be able to understand signs of abnormality or variations of normal.
3. Identify the need for follow-up or referral to other practitioners and effectively communicate form and location of abnormalities.
4. Understand how to effectively incorporate a thorough head and neck examination into the flow of a dental practice.

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DENTISTRY AND DIAGNOSIS

Prevention is at the core of the function of the dental profession. More patients see their dentists on an annual basis than see their primary care physicians. About 65% of adults in the United States saw a dentist in the past year[29] as compared to only 28% of US men and 17% of women who saw or even report having a primary care provider.[7] This affords the industry of dental medicine an incredible opportunity to change primary care and preventative medicine for people in countless communities. In addition, both dictated by traditional recommendations and insurance reimbursement policies, patients have the ability to see their dentists for preventative and maintenance appointments at least twice a year versus only being able to see their medical practitioner counterparts once a year.

Dentists also are traditionally well trained in integrating oral health with total body wellness. The education system and dental boards place an emphasis on incorporating dental health with other systemic conditions and their outcomes, to the extent that this is written into the very accreditation guidelines of dental education programs.[1] In a position statement regarding the dental community's role in oral and systemic health, the American Dental Association states, "A dental visit means being examined by a doctor of oral health capable of diagnosing and treating conditions that can range from routine to extremely complex" and defines the dental scope of practice to diagnosing and treating "teeth, bone, and soft tissues of the oral cavity" and "maintaining or restoring oral and systemic health."[1]

This contrasts with the gap in training most physicians have with regard to the oral cavity. Most medical programs have little to no oral health training, which limits the preventative and emergency dental care that a patient can receive without access to a dentist.[3] In parts of the country where access to dental care is limited, medical schools are trying to incorporate additional dental education for their physicians, but the knowledge gap is currently still prevalent across the nation.[30] The combination of the higher use of dental medical clinics and the higher frequency of preventative care coupled with the link between oral and systemic conditions and robust comprehensive dental training adds up to helping patients diagnose their immediate and chronic conditions faster, sooner, and with more accuracy.

To utilize this opportunity, an emphasis on thorough examinations done regularly and systematically is vital. At every preventative visit a patient has in a dental clinic, a thorough examination must be completed. This begins with a very thorough review of the patient's social and medical histories. The information collected from a patient's social history is important as it covers the use of recreational drugs and other mind-altering substances, increased stress levels, behavioral changes, and other considerations that can increase the propensity for many oral and systemic conditions including oral cancer. The medical history should be comprehensively recompleted on an annual basis but should be updated at every visit within the clinical notes and chart. This will update the practitioner on clinical and medicinal drug changes, the diagnosis of other comorbid conditions, and changes in health, which could indicate a new condition that has been left undiagnosed. Systems should be built within the management of every dental practice to ensure this vital data collection is performed at every visit and is not delayed or skipped.

In addition to the social and medical health history, an equally important component to effective diagnosis is a thorough and systematic head and neck exam. The dental examination codes—either comprehensive (D0150) or periodic (D0120)—both specify "complete evaluation of all hard and soft tissues and cancer exam."[26] It is imperative that this examination not be limited to simply teeth and the oral cavity, as many systemic conditions manifest in lymph tissue, soft tissues of the oral cavity, face or neck, or musculature. Therefore, an effective head and neck exam has two major components: a thorough oral cancer screening coupled with a detailed dental examination. As a profession, dentistry is falling short of these standards. Although we are regularly conducting dental examinations, multiple studies that were conducted over 10 years apart demonstrate that less than 15-25% of patients who had been seeing a dentist regularly reported that their dentist conducted an oral cancer screening.[15,18] By conducting quick and cursory oral cancer screenings or skipping them altogether, we are leaving our patient population subject to an elevated risk level, which is unnecessary and avoidable.

INCORPORATING THE EXAMINATION

The head and neck examination needs to be done regularly and systematically. The head and neck examination should be incorporated into every preventative visit the patient has in the dental practice. The examination, which typically takes 90 seconds or less,[10] can be pivotal in early detection of a number of different conditions including oral cancer. There are just over 195,000 practicing dentists in the US,[17] and each of them sees an average of between 8 to 15 patients per day.[18] For less than 20 minutes of time per dentist, per day, from the community health perspective, we could screen the entire population of the US twice a year!

Incorporation of the examination into the daily workflow is simple. The exam can be conducted by the dental hygienist or the dentist, and for the most effective screening should be done by both. A blood pressure and pulse reading should be taken at every routine visit to help establish a baseline and to inform the patient of any acute changes that may indicate an underlying condition. This is quick and easy with automated blood pressure cuffs, without sacrificing accuracy, and can be delegated to any member of the dental team.

Another important element of the examination is an open conversation with the patient. The patient should be made aware that a screening will be performed, at which frequency to expect the screening, and that the screening is for oral cancer but evaluates the head and neck region including oral soft tissues to screen for any abnormalities and other conditions as well. This is also an opportune time to educate the patient regarding the link between oral cancer and its risk factors.

The conversation aims to increase patient awareness of oral cancer. As demonstrated in other public health awareness campaigns regarding Pap smears, mammograms, and prostate exams, patient awareness has a key

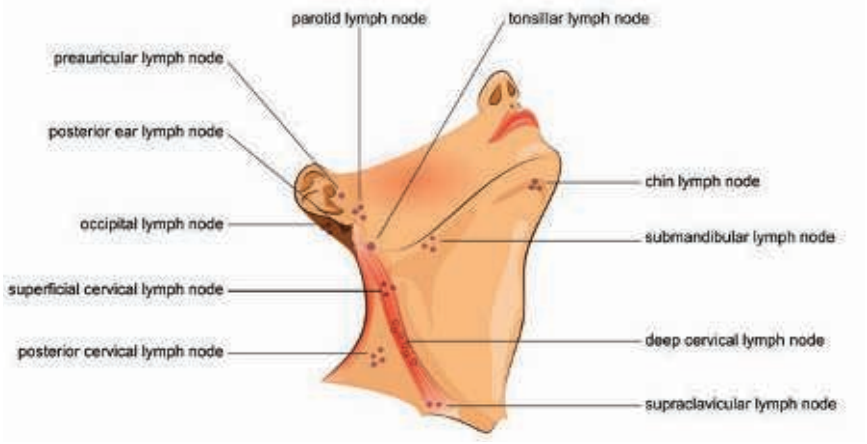

FIGURE 1: Anatomy of cervical lymph nodesv

impact on decreasing incidence.[18] This also helps prompt the patient to discuss changes they may have noticed, as many subclinical changes are noted by the patient first. This is also an optimal time to discuss items noted on the updated medical and social histories that increase the risk of oral cancer or other conditions. Some questions that can be prompted from a comprehensive medical and social history include the following:

1. How often are you smoking tobacco, marijuana, or vaping?
2. Have you been unusually stressed lately?
3. How well have you been able to take care of yourself lately?
4. Have there been any major changes to your nutrition, exercise, or self-care routines lately?

The exam should start with the patient sitting upright in the dental chair, discussing the prevalence of oral cancer, addressing any risk factors the patient has, and discussing any concerns the patient has or any changes the patient has noticed. Some questions the practitioner can ask the patient to prompt this conversation include the following:

1. Have you noticed any lumps, bumps, or swelling in your mouth or neck?
2. Have you noticed any difficulty in swallowing or speaking?
3. Have you noticed any changes in size or color of anything in your mouth?
4. Is there anything else you have noticed that concerns you?

Once the patient has outlined their concerns or any of their observations, the patient can then be leaned back in the chair to conduct the physical portion of the exam.

FLOW OF THE PHYSICAL EXAMINATION

The examination should be conducted in the same order at every visit with every patient. This is an important factor to ensure all areas are checked without being missed. It should also be conducted with proper lighting and adequate retraction (a mouth mirror typically works best) to ensure accuracy. All removable appliances should be removed from the patient's mouth prior to assessment.

The extraoral exam starts with a visual assessment of the patient's face, scalp, and neck and checks for any visual signs of tissue change, unilateral growth, or swelling. The providers should also visually check for hypotonicity, a lack of muscle tone that usually presents after stroke or nerve trauma, or spasticity. The eyes should be assessed for redness or other color changes, signs of conjunctivitis, and other abnormalities. The skin should be assessed for extraoral lesions, particularly on patients who have high exposure to sun, especially if they report not protecting themselves with daily sunscreen. Any indication of crusts, fissuring, and growths should be carefully documented and brought to the attention of the patient for self-monitoring.[10] The lips tend to be extremely exposed to the sun, so the vermilion borders should be checked closely for any color, texture, or surface abnormalities.[13]

The provider can also assess nerve and muscle function. To check orbital muscles, the provider can have a patient follow a pen or their fingers with their eyes. To check trigeminal nerve function, the provider can lightly touch the patient's forehead and cheeks bilaterally and assess if the touch feels equal on both sides. To check facial nerve function, the provider can instruct the patient to furrow their forehead, elevate their brows, close their eyes, smile wide, and inflate their cheeks, and then assess for discrepancies in bilaterally equal movement.[27]

The next part of the extraoral examination is a palpation of the major head and neck lymph nodes (figure 1). When palpating any of these lymph nodes, it is vital to provide resistance to the tissue to be able to accurately palpate the nodes. To create this resistance, depending on the part of the body, the provider can use the muscle to which they lay peripherally, the bony structures around them, or the palm of their hand, strategically placed on the opposite side to stop movement of the lymph node away from palpation pressure. Generally, to palpate lymph nodes that lie inferior to muscles, the provider can use the muscle to provide resistance by pushing the lymph nodes up and against the muscle. If the lymph nodes lie superior or lateral to a large muscle or bony structure, you can also use the large muscle or bony structure by pushing sideways into the structure to create resistance. If none of these techniques are anatomically favorable, then the provider can rest one flat palm on the opposite side of the movable muscle to create resistance when palpating.[23]

When palpating the lymph nodes, the provider should be assessing three major concerns: size, consistency, and tenderness. The carotid bulb can be identified as non-lymph tissue due to pulsation.

Size—Generally, in the head and neck region, palpable lymph nodes less than 2 cm in radius are considered to be within normal limits with the notable exception of the supraclavicular fossa, for which any lymph node greater than 1 cm is considered notable.[23]

Consistency—Lymph nodes should be soft and freely movable. Lymph nodes that appear rubbery or hard are indications of lymphadenopathy.

Tenderness—If a lymph node demonstrates lymphadenopathy via size or consistency, then tenderness is significant. All normal lymph nodes should be nontender to touch. If an abnormal lymph node is tender,

it is generally an indication of infection. If an abnormal lymph node is nontender, it can indicate potential malignancy. Children (ages 2-12) will commonly present with insignificant lymph nodes in the neck due to common recurring viral infections. They will typically be nontender to touch.[23]

LYMPH NODES

Anterior cervical lymph nodes—Both superficial and deep, they sit above and underneath the sternocleidomastoid muscle bilaterally. The sternocleidomastoid is a significant enough muscle to provide resistance upon palpation. They drain structures of the throat, parts of the posterior pharynx, thyroid, and tonsils.[9]

Posterior cervical lymph nodes—These are found posterior to the sternocleidomastoid, anterior to the trapezius muscle, from the mastoid bone to the clavicle. They drain the skin on the back of the head but are also frequently inflamed due to upper respiratory infections.[9]

Tonsillar lymph nodes—Located just below the angle of the mandible, they drain the tonsillar and posterior pharyngeal region.[9]

Submandibular nodes—These nodes are located under the jaw on either side. When palpating, you can use the posterior surface of the mandible to provide resistance. They drain the most significant part of the intraoral cavity including the lateral borders of the tongue, maxillary teeth, maxillary sinus (except the maxillary third molar area), the mandibular canines, all mandibular posterior teeth, floor of the mouth, the cheeks, the hard palate, and the anterior nasal cavity.[21]

Submental nodes—They exist just below the chin, in between the anterior bellies of the digastric muscle. They drain the anterior third of the tongue, the anterior mandible, and anterior mandibular incisors.[9]

Supraclavicular nodes—They are located in the fossa above the clavicle and drain mostly areas of the thoracic cavity. Abnormalities in lymph tissue in this area should be referred to a physician. Note: Nodes greater than 1 cm in this region classify as an abnormality.[9,23]

The provider should also palpate the thyroid gland (figure 2), which can be a challenging structure to locate. When locating the thyroid gland, the provider should search for the thyroid isthmus, which can be palpated just inferior to the cricoid cartilage. When sliding a finger from the chin down the midline, the first hard structure is the top of the thyroid cartilage (or Adam's apple), and despite the name, is not actually where the thyroid gland is located. A provider must continue inferiorly down the midline to the second hard structure, the cricoid cartilage, and inferior to that, overlaying the first two rings of the trachea is where the thyroid gland sits. When assessing the thyroid, look for signs of inflammation, asymmetry, or nodules. Have the patient swallow and note any asymmetrical elevation of the two lobes of the thyroid gland, which would suggest nodularity of the thyroid gland.[8] Any deviation from normal is usually indicative of a thyroid abnormality and should be referred to their primary care physician for lab tests and potential treatment. Symptoms such as thinning of the hair, sudden weight loss or gain, rapidly beating heart, depression, and poor temperature regulation are also indications of thyroid abnormality.

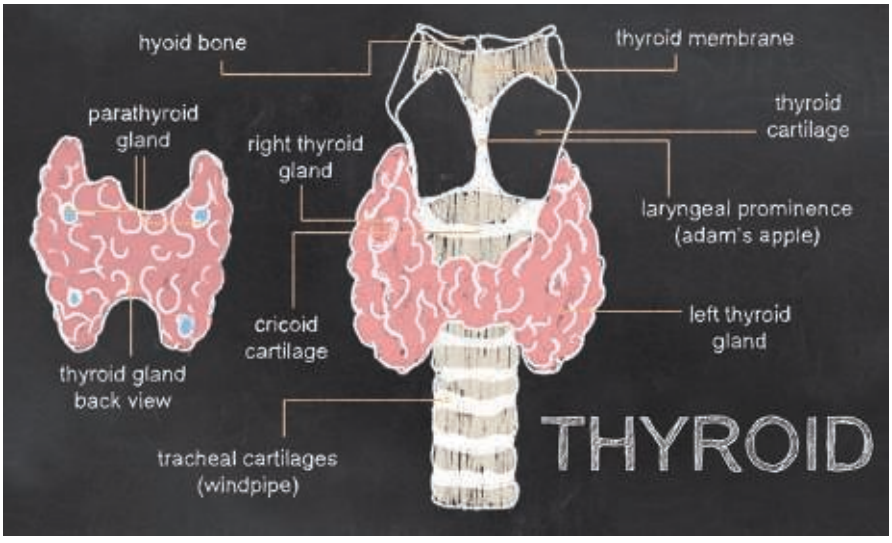

FIGURE 2: Anatomy of thyroid and related structures

After palpating the thyroid, the provider should palpate the areas of parotid and salivary glands to assess for masses, enlargement, tenderness, palpable calcifications, and any other abnormalities, especially unilateral in nature.

Then the provider should palpate the temporomandibular joint, noting any clicking, popping, crepitus, deviation, deflection, or limitation in range of motion. Maximal opening should be noted to establish a baseline. In adults ages 18-70 with no TMJ symptoms, the average maximum interincisal opening is about 52 mm for men and 48 mm for women.[31] These can be used as baselines to assess ability but will vary upon size and anatomy of the patient.

Then the exam continues intraorally.[10]

INTRAORAL STRUCTURES

Labial mucosa—To allow mobility and manipulation of the tissue, have the patient close slightly and assess upper and lower labial mucosa for abnormal color, texture, swelling, or growths. Assess the frenulum and vestibular sulcus for trauma or abnormal growths as well.

Buccal mucosa—Have the patient open wider and then retract to assess the buccal mucosa bilaterally back to the labial commissures and anterior tonsillar pillars for color, texture, and swelling abnormalities.

Gingiva—Have the patient close and bite together allowing full retraction of the buccal mucosa to visualize maxillary and mandibular gingiva. Start from the upper right buccal quadrant and note any erythema, discoloration, swelling, or drainage. Move across the arch to the left upper quadrant, then down to the mandible, working quadrant by quadrant, systemically to assess the tissues. Then have the patient open and repeat the process for the palatal and lingual gingiva.

Tongue—Have the patient open their mouth to visualize the tongue in its resting position and inspect the dorsal surface for ulcerations, swellings, or variations in color, size, or texture. Have the patient protrude their tongue to assess for range of motion problems or positioning abnormalities. Visualize the base of the tongue. Inform the patient about the next step, then grasp the tip of the tongue firmly with a piece of gauze to check the lateral borders. Wetting the gauze slightly can help with patient comfort. Run your index finger along the lateral borders to assess for growths or hardened tissues. Note that the most common area for oral cancer related to smoking and alcohol is the posterior lateral border of the tongue.[25] Have the patient elevate their tongue to assess the ventral surface.

Floor of the mouth—While the tongue remains elevated, assess the floor of the mouth visually for ulcerations, swellings, or variations in color, size, or texture. Then palpate the floor using your fingers to feel for calcifications or hardened tissues. If saliva is causing difficulty in visualization, dry the floor of the mouth with gauze or have the patient close and swallow.

Palate—With the mouth still in maximal opening, have the patient tilt their head back and use a mouth mirror to visually assess the hard and soft palates. A mirror can be used to depress the base of the tongue with careful consideration for gagging patients.

Oropharynx—Have the patient stick out their tongue and say, "ah" to visualize the oropharynx, back of throat, and tonsillar pillars.

If any adjunctive oral cancer screenings are used, it must be noted that they are not a substitute for, and therefore should not replace, a visual and tactile exam. After this initial evaluation, which assesses for oral cancer and other conditions, a dental examination can be completed assessing the health of the teeth and periodontium and identifying carious lesions.

FINDING ABNORMAL TISSUE

Common signs of abnormality in this exam include the following:

- Certain variations in color, size, or texture of tissues
- Elevated or depressed lesions
- Abnormal fissuring
- Indurated tissue (tissue that is deeply thickened or hardened, firm to palpation)
- Ulcerations with flattened or raised borders
- Masses or enlargement of normal tissues
- Numbness, tenderness, or pain (but lack of pain should not necessarily be noted as an indication of normalcy)
- Restriction in range of motion, maximal opening, or deviation during movement
- Any abnormality that presents unilaterally
- Any difficulty breathing or swallowing (dysphagia or dyspnea)
- Changes in voice, hoarseness, or chronic sore throat
- Any sign of purulence—draining or contained
- Any sudden or unexplained change in occlusion
- Bleeding sores, especially those nonhealing over two weeks or those without identified etiology
- Leukoplakia—a white area that cannot be rubbed or scraped off and cannot be otherwise classified as a specific disease. These white areas can be thickly keratinized and dry or can be barely noticeable changes in the tissue surface.
- Erythroplakia—lesions in the oral mucosa that appear as red patches that cannot be classified as any specific disease[6,11,19]

It should be noted that the general practitioner's role in the screening of patients is to identify abnormalities and not necessarily diagnose them. There are two components to the identification of a disease process: discovery and diagnosis.[18] Discovery entails the recognition of abnormal versus normal form or function. Diagnosis identifies the etiology and can gain more information toward a cure. Definitive diagnosis of any oral cancer can occur only after a diagnostic biopsy; biopsy is the only way to confirm a cancer diagnosis.[4] A general practitioner's duty to their patient involves adequate discovery, documentation, follow-up, and referral.

If any abnormalities are identified, they should first be explained to the patient, giving the patient an opportunity to ask questions and assessing and confirming the patient's understanding of the finding. It should be emphasized that this is a simple discovery of abnormal tissue and that further steps to a definitive diagnosis are needed.

The lesion or abnormality should be documented in detail within the clinical notes. Clinical photographs can be pivotal for monitoring progress and should be taken whenever possible at discovery to establish a baseline for changes. In documentation, the following elements should be noted:

- Initial discovery of the lesion or abnormality (doctor or patient derived)
- Size, color, shape, surface texture, and specific location (measuring with a periodontal probe and documenting with a picture is advised)
- Assessment of the borders/margins (well defined, irregular, asymmetrical)
- Mobility and consistency of lesions
- Number of lesions[28]

A decision to either monitor the lesion or immediately refer should be made together with the patient after a careful and thorough review of risks and benefits. Any lesion that does not self-resolve within two weeks should be referred for further evaluation.[18] The patient should be made aware of this and educated on how to monitor the lesion and the importance of returning for a referral for a nonhealing or high-risk lesion. The more comprehensive the referral, the better the specialist will be able to treat the patient.

An effective referral will have the following elements, many similar to the elements recommended for effective documentation:

- Information of the patient being referred (name, contact information, and date of birth)
- Pertinent medical and social histories, including risk factors such as tobacco and alcohol use
- Chief complaints and any symptoms experienced by the patient
- Descriptive elements mentioned in your documentation. A common mnemonic to remember necessary elements is MCATSS – margins, color, appearance, texture, size/shape, and site.
- It is not required, but adding a differential diagnosis helps to assess urgency of the referral
- Contact information for follow-up with the referring clinician[22]

CONCLUSION

The head and neck exam is one of the simplest parts of the practice of dentistry, and

it has immense power, but only if done correctly, regularly, and thoroughly. The diagnostic abilities of the clinician depend on the quality of their head and neck examination. By focusing our abilities and allowing the time needed, dental practitioners have an incredible opportunity to impact true change for our patients.

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AMISHA SINGH, DDS, serves on the Colorado Dental Association house of delegates, on the American Dental Association dental wellbeing advisory committee, and on the Metro Denver Dental Society and CDA membership councils. She is the CDA new dentist committee chair-elect for Colorado. She is also a blogger and professional speaker who works with IgniteDDS to inspire other dental professionals and provide them with resources to be the best clinicians possible. Dr. Singh practices in Parker, Colorado, at Smile Always Dental.

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QUESTIONS

1. Which of the following will negatively impact a practitioner's ability to effectively screen patients for oral and systemic conditions?

A. Conducting a head and neck exam at least twice a year
B. Collecting and updating medical health histories annually
C. Palpating lymph nodes with resistance to assess size, consistency, and tenderness
D. None of the above

2. Less than what percentage of patients who regularly see a dentist report having had an oral cancer screening?

A. 10-15%
B. 15-25%
C. 25-30%
D. 50-60%

3. How long should a thorough head and neck examination take?

A. 30 seconds
B. 60 seconds
C. 90 seconds
D. 2 minutes

4. Which of the following is not recommended to increase early diagnosis of oral conditions?

A. Using more robust technological screening devices instead of a traditional visual and tactile exam
B. Screening every patient at every preventative visit
C. Educating the patient regarding abnormalities and risk factors
D. None of the above

5. Which of the following is diagnostic of cancer?

A. Leukoplakia
B. An ulcerated sore that does not heal for three weeks
C. A tender, hard, and fixed lymph node that persists for two months
D. A light white keratinized patch of tissue in the buccal mucosa which is biopsied positive for squamous cell carcinoma

6. Which of the following lymph node bodies does not drain an orofacial region?

A. Tonsillar
B. Posterior cervical
C. Submental
D. Supraclavicular

7. Which of the following indicates abnormality during a head and neck examination?

A. Hoarseness of voice
B. Restriction in range of motion or deviation on opening
C. Numbness and pain
D. All of the above

8. During the initial visualization of the patient prior to starting the physical exam, which of the following should the provider assess?

A. Dental caries
B. Hypotonicity in facial musculature
C. Hard and soft palates
D. All of the above

9. When assessing the oropharynx, which of the following structures should be assessed?

A. Soft palate
B. Base of tongue
C. Tonsillar pillars
D. All of the above

10. Lesions in the oral mucosa that appear as red patches and cannot be classified as any specific disease are known as:

A. Swelling
B. Leukoplakia
C. Erythroplakia
D. Heat ulcerations

11. Tissue that is firm to palpation, sometimes due to swelling, is known as:

A. Indurated
B. Addurated
C. Hypotonic
D. None of the above

12. When an abnormality is identified, the first thing a provider should do is:

A. Document the lesion specifically
B. Refer to a provider who can conduct a biopsy
C. Explain the abnormality to the patient and allow them to ask questions
D. Excise the lesion

13. In the mnemonic MCATSS, the M stands for:

A. Mucosa
B. Margins
C. Medical
D. Mobility

14. Which of the following should be palpated during a thorough head and neck examination?

A. Temporomandibular joint
B. Submandibular lymph nodes
C. Parotid gland
D. All of the above

15. What percentage of adults in the US saw a dentist in the past year?

A. 17%
B. 28%
C. 55%
D. 65%

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QUESTIONS

16. The anterior cervical lymph nodes drain which of the following?

A. Hard and soft palates
B. Posterior pharynx
C. Auricular cartilage
D. Thoracic cavity

17. What is the general practitioner's primary role in screening patients for abnormalities?

A. Discovery
B. Diagnosis
C. Excision
D. All of the above

18. Effective head and neck examinations are:

A. Documented and referred
B. Speedy and efficient
C. Systematic and regular
D. None of the above

19. Which of the following should be included in an effective referral of an abnormality to a specialist?

A. Identifying patient information
B. Patient's chief complaint
C. Margins, color, and site
D. All of the above

20. Which of the following are of consequence when establishing an urgent referral?

A. The patient did not notice the lesion until the dentist pointed it out
B. Patient is in pain
C. Lesion wipes off with a 2X2 gauze
D. Lesion has well-defined borders

21. Ideally, who should be completing the head and neck examination on the dental team?

A. Dental assistant
B. Dental hygienist
C. Dentist
D. B and C

22. How often should the patient's social and medical histories be updated?

A. Every six months
B. Every year
C. At every recall
D. At every appointment

23. Which of the following does not elevate the patient's risk for pathology?

A. Poor nutrition
B. Elevated stress levels
C. Annual physical examinations
D. The use of drugs and alcohol

24. Lightly touching the patient's forehead and cheeks bilaterally and assessing if the touch feels equal is a test for:

A. Trigeminal nerve function
B. Facial nerve function
C. Temporal nerve function
D. Maxillary nerve function

25. Which of the following is necessary to successfully document an abnormality?

A. Assessment of the margins
B. Color, shape, and size of the lesion
C. Number of lesions present
D. All of the above

26. The carotid bulb can be differentiated from a lymph node based on:

A. Location
B. Size
C. Pulsation
D. All of the above

27. When sliding a finger down the midline from the chin, the first hard protuberance that is encountered is the:

A. Thyroid cartilage
B. Cricoid cartilage
C. Thyroid gland
D. First ring of the trachea

28. In adults with no TMD, the average maximal opening for men is:

A. 45 mm
B. 48 mm
C. 50 mm
D. 52 mm

29. Which of the following structures should be assessed with the patient biting together?

A. Soft palate
B. Tonsillar pillars
C. Facial gingiva
D. Buccal mucosa

30. A general practitioner's basic duty to their patient involves adequate:

A. Discovery and documentation
B. Discovery, documentation, and use of technology
C. Discovery, documentation, and biopsy
D. Discovery, documentation, follow-up, and referral

NOTES

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EXPIRATION DATE:	MAY 2022

ANSWER SHEET

A review of thorough head and neck examinations for the practicing dentist

Name: Title: Specialty:

Address: Email: AGD member ID (if applies):

City: State: ZIP: Country:

Telephone: Primary ( ) Office ( ) License renewal date:

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EDUCATIONAL OBJECTIVES

1. Discuss the value of the role of the dental practitioner in oral cancer and other pathologic early detection and diagnosis.
2. Review head and neck anatomy and be able to understand signs of abnormality or variations of normal.
3. Identify the need for follow-up or referral to other practitioners and effectively communicate form and location of abnormalities.
4. Understand how to effectively incorporate a thorough head and neck examination into the flow of a dental practice.

COURSE EVALUATION

1. Were the individual course objectives met?

Objective #1: Yes No Objective #2: Yes No

Objective #3: Yes No Objective #4: Yes No

Please evaluate this course by responding to the following statements, using a scale of Excellent = 5 to Poor = 0.

2. To what extent were the course objectives accomplished overall?	5	4	3	2	1	0
3. Please rate your personal mastery of the course objectives.	5	4	3	2	1	0
4. How would you rate the objectives and educational methods?	5	4	3	2	1	0
5. How do you rate the author's grasp of the topic?	5	4	3	2	1	0
6. Please rate the instructor's effectiveness.	5	4	3	2	1	0
7. Was the overall administration of the course effective?	5	4	3	2	1	0
8. Please rate the usefulness and clinical applicability of this course.	5	4	3	2	1	0
9. Please rate the usefulness of the supplemental webliography.	5	4	3	2	1	0

10. Do you feel that the references were adequate? Yes No

11. Would you participate in a similar program on a different topic? Yes No

12. If any of the continuing education questions were unclear or ambiguous, please list them.

_____

13. Was there any subject matter you found confusing? Please describe.

_____

14. How long did it take you to complete this course?

_____

15. What additional continuing dental education topics would you like to see?

_____

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5.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	20.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
6.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	21.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
7.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	22.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
8.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	23.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
9.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	24.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
10.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	25.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
11.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	26.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
12.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	27.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
13.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	28.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
14.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	29.	Ⓐ	Ⓑ	Ⓒ	Ⓓ
15.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	30.	Ⓐ	Ⓑ	Ⓒ	Ⓓ

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PLEASE PHOTOCOPY ANSWER SHEET FOR ADDITIONAL PARTICIPANTS.

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