Surgical Education and Self-Assessment Program (SESAP)

Category 16, item 6

Question
During a routine physical examination, a firm, rubbery, 1.5-cm node is discovered in the anterior neck of a 60-year-old patient with a 58-pack/yr smoking history. The remainder of the head and neck examination is normal. The next diagnostic step should be

A Chest x-ray  
B Excisional biopsy  
C Fine-needle aspiration  
D Computed tomography  
E Sestamibi scintigraphy

Critique
A thorough history in a patient with an isolated neck mass should include the time course of the growth of the neck mass, recent upper-respiratory symptoms, oral–pharyngeal complaints, surgical history, any radiation exposure and symptoms associated with other organ systems, particularly the respiratory and gastrointestinal system. A social history including occupation as well as alcohol, tobacco or other drug usage should also be elicited. Physical examination should include evaluation of the physical characteristics of the node, examination of all mucosal surfaces, palpation of the neck for thyroid nodularity, evaluation of other regional nodal basins for lymphadenopathy, laryngoscopy, auscultation of the chest and palpation of the abdomen. The skin of the head and neck, upper torso and extremities should be carefully examined. Inflammatory and congenital disorders are the most common conditions in the pediatric age group. Malignant neoplasms are the most common cause of isolated nodal enlargement in the neck in patients over age 40, especially those with an extensive smoking history. Squamous-cell cancers arising from mucosal surfaces and lymphomas are the most common findings in patients like the one described in this scenario.

The next diagnostic step should be fine-needle aspiration (FNA) unless the mass pulsates or has an associated bruit or thrill. A skilled cytopathologist is essential for a reliable examination of the aspirated material. FNA identifies metastatic squamous-cell cancers in 29% and lymphomas in 21% of such cases. The procedure is associated with minimal risk and can be performed safely in the office setting.

Excisional biopsy should not be the initial procedure. Chest x-ray is an appropriate diagnostic tool, but like computed tomography and nuclear scanning of the neck, does not provide tissue confirmation of the diagnosis.

Bibliography

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