Netherlands
The Journal of Medicine

PHOTO QUIZ

A patient with a neck mass

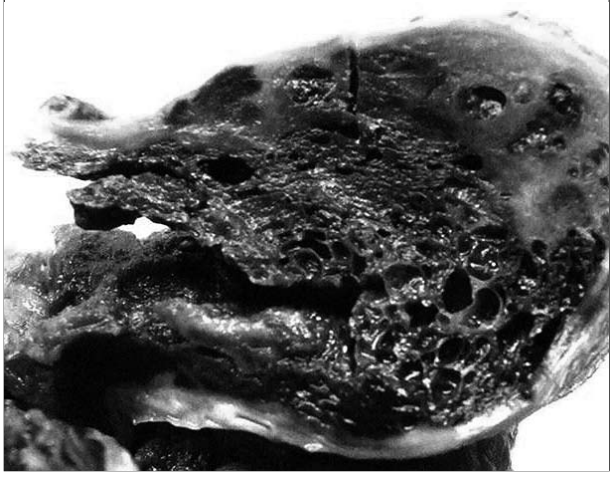
H. Ciralik[1], R. Citil[1], E. Bulbuloglu[2], S. Bakaris[1]

Departments of [1]Pathology and [2]General Surgery, Sutcu Imam University, Kahramanmaras, Turkey

CASE REPORT

A 64-year-old man presented with a two-year history of a swelling on the anterior side of the neck region. Physical examination revealed a palpable nodule measuring 70 mm in diameter, well-delimited, and located in the right lobe of the thyroid. The blood analysis and thyroid hormones were within normal limits. Thyroid ultrasonography revealed a multinodular goitre. Tc-99 scintigraphy was reported as a multinodular hyperplasia (*figure 1*). He had no history of previous fine needle aspiration. A right lobectomy was performed. Macroscopic observation showed a well-circumscribed nodular lesion surrounded by fibrous connective tissue. The nodular lesion measured 70 x 60 x 60 mm and contained many cystic spaces (*figure 2*). Microscopic examination revealed numerous proliferated vessels that enlarged into an irregular shape showing congestion (*figure 3*).

Figure 2. *Gross specimen of the thyroid*



WHAT IS YOUR DIAGNOSIS?

See page 39 for the answer to this photo quiz.

Figure 1. *The thyroid scintigraphy*

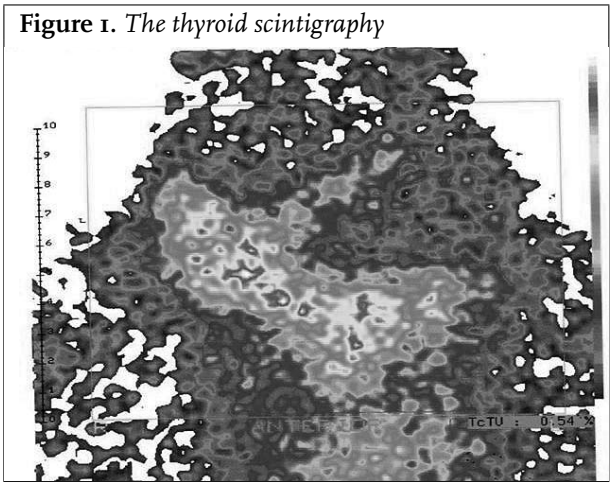
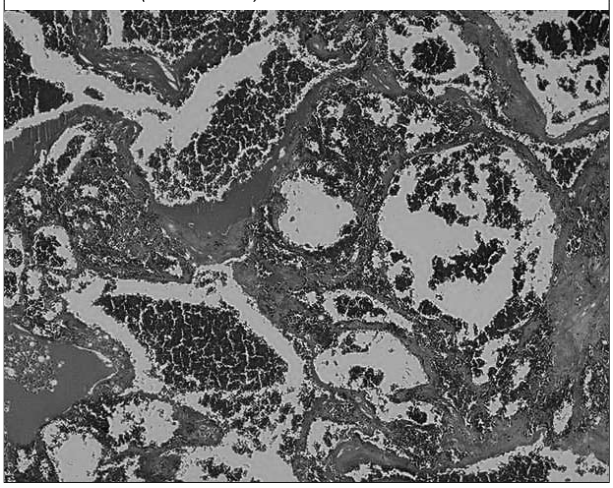


Figure 3. *Section of the thyroid showing irregular, dilated, congested, and anastomosed vascular structures. (H&E x 20)*



ANSWER TO PHOTO QUIZ (ON PAGE 38)

A PATIENT WITH A NECK MASS

DIAGNOSIS

Haemangiomas are benign vascular neoplasms that have a characteristic clinical course marked by early proliferation followed by spontaneous involution. Microscopically, they are classified into various types, including capillary haemangioma, cavernous haemangioma, venous haemangioma, and epitheloid haemangioma.[1] They occur in a number of organs, including the skin, lips, tongue, liver, colon, and brain.[1,2] Haemangiomas are extremely rare in the thyroid, with only 25 cases ever having been reported.[3]

The literature reports a large number of vascular alterations, benign and malignant, in the thyroid gland. Most of these thyroid lesions are related to previous fine needle aspirations and are the result of the organisation of the thyroid haematoma after the test.[2] Organisation of the haematoma generally results in complete resolution, but it can give rise to vascular and fibroblastic proliferative changes that resemble a cavernous haemangioma.[4] This is defined as secondary haemangioma.

Clinical onset is usually as an asymptomatic cervical tumour, occasionally fast-growing, especially if intratumoral bleeding is present. It is usually revealed in the right lobe of the thyroid. These tumours have a diameter between 20 and 40 mm. A slightly higher proportion of males are affected.

In the diagnosis of thyroid haemangioma, ultrasound usually detects a thyroid nodule. Computed tomography is good for defining the form, size and location of the tumour, and magnetic resonance imaging is very effective in showing the extent of cavernous haemangiomas.[1] 99mTc-labelled red blood cell scanning or 99mTc-labelled scanning by single-photon emission computed tomography are other good methods. Little or no increased activity is seen soon after injecting the label, and this appearance of poor perfusion and slow filling of the tumour is characteristic of cavernous haemangioma.[1] Haemangioma should be considered in the diagnosis of any pulsatile mass involving the thyroid gland. Diagnosis before surgery is difficult. Histology provides the final diagnosis of cavernous haemangioma.

Surgical treatment is indicated when there is a suspicion of malignancy or in the presence of compressive symptoms. Hemithyroidectomy or total thyroidectomy is best performed if the thyroid presents contralateral pathology.[2]

The diagnosis is cavernous haemangioma of the thyroid.

REFERENCES

1. Kano M, Kameyama K, Hosoda Y, Sugino K, Ito K. A cavernous haemangioma of the thyroid gland. J Laryngol Otol 2005;119:828-30.
2. Rios A, Rodriguez JM, Martinez E, Parrilla P. Cavernous haemangioma of the thyroid. Thyroid 2001;11:279-80.
3. Kumamoto K, Sugano K, Hoshino M, Utsumi Y, Suzuki S, Takenoshita S. Cavernous haemangioma of the thyroid. Thyroid 2005;15:1199-201.
4. Kumar R, Gupta R, Khullar S, Dasan B, Malhotra A. Thyroid haemangioma: a case report with a review of the literature. Clin Nucl Med 2000; 25:769-71.