ISSN: 2638-5007

Volume 3, Issue 1, 2020, PP: 17-20



Thyroid Gland Hematoma Sion Jo¹, Taeoh Jeong^{2,3,4*}

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Abstract

Thyroid follicular adenoma is a benign and frequent mass. After a neck injury, hemorrhage can occur and the amount can become massive and intensive. In this case report, we present an 86-year-old female, who slipped and struck her neck.

Keywords: thyroid hematoma, follicular adenoma, complication.

CASE REPORT

The patient, an 86-year-old female, slipped in her bedroom and struck her neck. Soon her neck was swollen and firm, thus visited our emergency department (ED). On presentation, she was conscious and did not seems to be distressed. She denied overt dyspnea but complained of slight dyspnea. Her vital signs were as follows (blood pressure 191/109, pulse rate 117, respiratory rate 20, temperature 36.5'C, peripheral saturation 99%). Her mass was sized as 20cm x 10cm and neck circumference was 45.5cm (Fig 1). She said that her mass did not get bigger at present. She alleged that she had nodular hyperplasia at the left thyroid previously. She felt that neck got approximately two-fold sized. Her medical record showed that previous thyroid mass was 6cm x 4cm x 7cm (Fig 2) 6 years ago and needle biopsy result was nodular hyperplasia. She was monitored continuously and planned further evaluation including a computed tomography (CT) evaluation. CT showed a huge mass at left thyroid with heterogeneous enhancement, which was suggestive of hematoma (Fig 3). Left common carotid artery and left jugular vein was deviated lateral posterior and the trachea was deviated to right. Exploration was planned and neck mass size and circumference did not change during ED stay. Hematoma evacuation and left hemithyroidectomy

were performed. Left recurrent laryngeal nerve was sacrificed and left superior and inferior parathyroid glands were saved. She discharged at POD 4. Her only complication was hoarseness. Pathologic findings were consistent with follicular adenoma. Follow up was done at POD 9 and stitch out was done.

DISCUSSION

A follicular adenoma is a benign encapsulated tumor of the thyroid gland. It is round or oval, firm or rubbery, a homogeneous tumor that is surrounded by a thin fibrous capsule. [1] Incidence was reported as $3.0 \sim 4.3\%$. [2] [3] It typically sizes between $1 \sim 3$ cm, and changes to cystic degeneration, hemorrhage, ossification, calcification, and fibrosis. [4] Hemorrhage from thyroid adenoma was reported once to our knowledge. [5] Some cases of intracapsular hematoma into a pre-existing goiter were reported previously, but it was not clear that they were adenoma or not. [6-10]

Because of the rarity of thyroid gland hematoma, there is not a well-constructed consensus for evaluation or management. Airway securement is essential in all cases. In the present case, the hemorrhage amount is extensive, but airway compromisation did not occur. To evaluate, ultrasonography would be useful in mild cases. But in the present case, the affected lesion

Thyroid Gland Hematoma

was very extreme, thus ultrasonography was not relatively useful. CT can establish the diagnosis well preoperatively. However, if the patient was unstable, CT would not be applied readily. CT showed the thyroid gland hematoma and showed surrounding structures as well.

Most cases of thyroid hemorrhage were treated well with surgical intervention. Even in extensive hemorrhage as a present case, surgical intervention was successful. In mild hemorrhage, several cases of conservative management of thyroid hematomas have been reported. [11-14]



Fig1. Gross view of patient's neck. Panel (A) : anterior view. Panel (B) : antero-lateral view



Fig 2. Previous CT scan. Panel (A) : transverse section. Panel (B) : coronal section. Panel (C) : sagittal section Archives of Emergency Medicine and Intensive Care V3. I1. 2020



Fig 3. Present CT scan. Panel (A) : transverse section. Panel (B) : coronal section. Panel (C) : sagittal section

DECLARATION OF INTEREST

The Authors report no conflicts of interest. The Authors are responsible for the content and writing of the paper.

FUNDING

This paper was supported by Fund of Biomedical Research Institute, Chonbuk National University Hospital.

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Archives of Emergency Medicine and Intensive Care V3. I1. 2020

Thyroid Gland Hematoma

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Citation: Sion Jo, Taeoh Jeong. *Thyroid Gland Hematoma. Archives of Emergency Medicine and Intensive Care. 2020; 3(1): 17-20.*

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