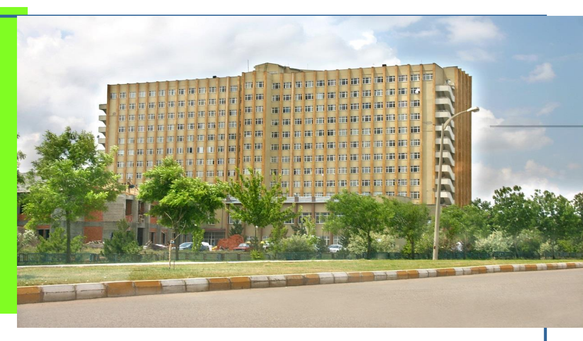
CUMHURIYET UNI. FACULTY OF MEDICINE HOSPITAL DEPARTMENT OF ENDOCRINOLOGY



A RARE VARIANT OF PAPILLARY THYROID CARCINOMA: DIFFUSE SCLEROSING VARIANT

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The diffuse sclerosing variant is a rare variant of thyroid papillary carcinoma. It occurs in children and young adults. The thyroid gland is diffusely invaded. When compared to the conventional papillary thyroid carcinoma, it is characterized by scattered microscopic tumor islands, diffuse fibrosis, calcification, abundant lymphocytic infiltrations and psammoma body. It generally does not cause mass lesion and 50% of cases may have a dominant nodule in one lobe. Almost all of the cases are identified with lymph node metastasis. Distant metastasis is also frequently seen. Despite poor prognosis, response to treatment is achieved (1,2).

CASE: An 18-year-old female patient diagnosed with hashimoto's thyroiditis applied to Numune State Hospital due to a palpable enlargement of the right thyroid gland. In the thyroid USG performed, no pathology other than coarsening and heterogeneous appearance was identified in the thyroid. The patient was called for follow-up for control purposes. As the patient felt enlargement of the thyroid gland, USG was performed again and, upon the detection of a heterogeneous appearance and microcalcifications, thin needle aspiration biopsy was conducted on the right lobe of the thyroid with the pre-diagnosis of thyroid lymphoma? **(Fig.1,2,3).** In the smear, extremely atypical, large hurtle cells with pleomorphic nucleus and distinct nucleolus were identified at the level where chronic inflammatory cells were observed. The cells were of three-dimensional pattern and composed of papillary structures. Total thyroidectomy was applied and cervical lymph node dissection was performed. Metastasis was identified in 9 of 16 lymph nodes. When the thyroidectomy specimen was examined, the patient was reported as "thyroid papillary carcinoma, diffuse sclerosing variant."

TSH	fT3	fT4	Anti Microsomal Ab	Anti Microsomal Ab	Thyroglobulin	Calcitonin
2.58 uIU/ml	**2,71** pg/dl	**1,01** ng/ml	**4381** IU/ml	**209** IU/ml	**6,56** ng/ml	**<2** pg/ml

DISCUSSION: Diffuse sclerosing variant is a rare variant of thyroid papillary carcinoma. Histopathologically, it is characterized by abundant psammoma bodies, papillary patterns in lymphovascular structures, squamous metaplasia, stromal fibrosis, and intense lymphoid infiltration (2).
In this presentation, a rare variant of papillary carcinoma, diagnosed as a result of blinding biopsy without the presence of a nodule in the USG, was discussed for the 18-year-old female patient who applied with the complaint of an enlarged thyroid.

REFERENCES:

1-Falvo L, Giacomelli L, D'Andrea V, Marzullo A, Guerriero G, de Antoni E Prognostic importance of sclerosing variant in papillary thyroid carcinoma. Am Surg. 2006 May;72(5):438-44

2-Yuri E. Nikiforov, Paul W. Biddinger, Lester D. R. Thompson Lippincott Williams & Wilkins, Diagnostic Pathology and Molecular Genetics of the Thyroid, Second Edition,

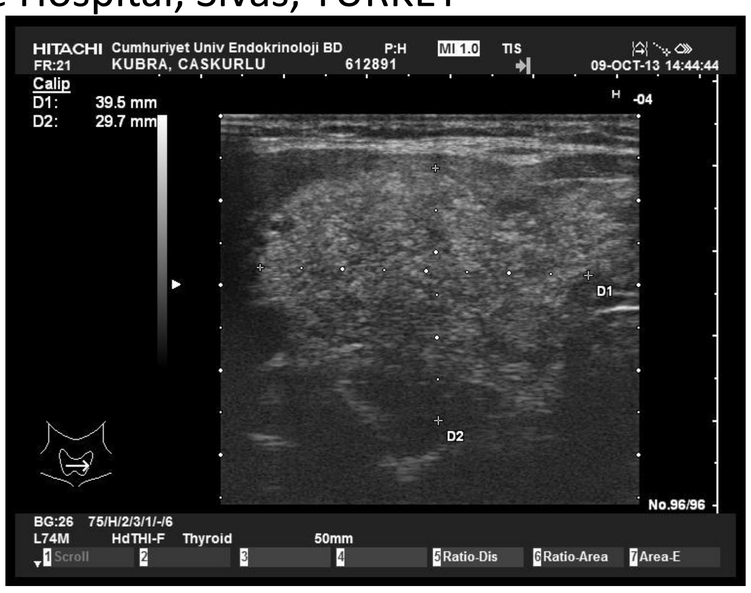

Fig. 1. USG FOR THE RIGHT LOBE OF THE THYROID: 39,5X29,7X27 mm NO HETEROGENEOUS NODULE WAS SEEN IN THE PARENCHYMA OF THE RIGHT LOBE (open squares).

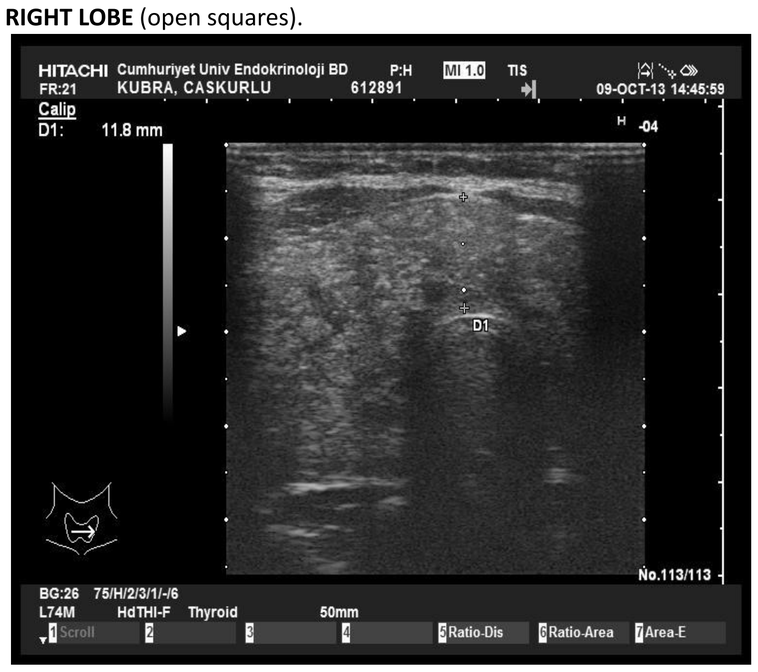

Fig.2. USG OF THYROID ISTHMUS: 11,8 mm NO HETEROGENEOUS NODULE WAS SEEN IN THE PARENCHYMA .

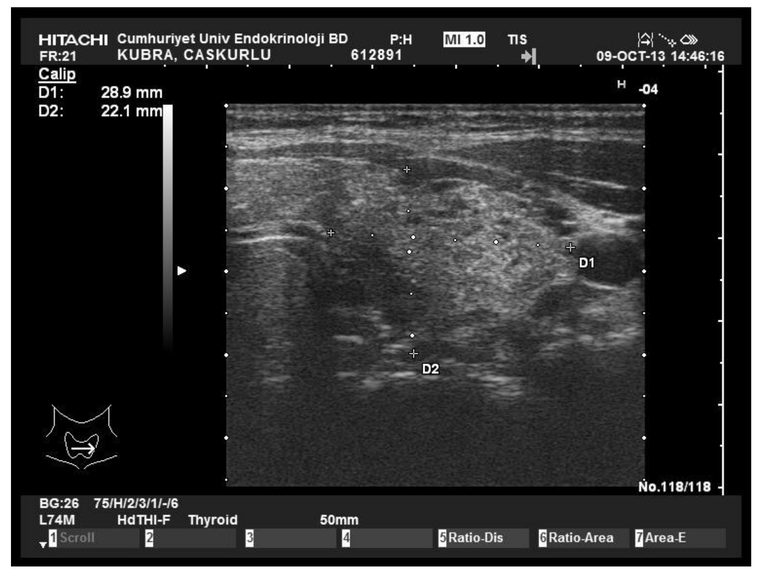

Fig. 3. USG FOR THE LEFT LOBE OF THYROID: 39,5X29,7X27 mm NO HETEROGENEOUS NODULE WAS SEEN IN THE PARENCHYMA OF THE

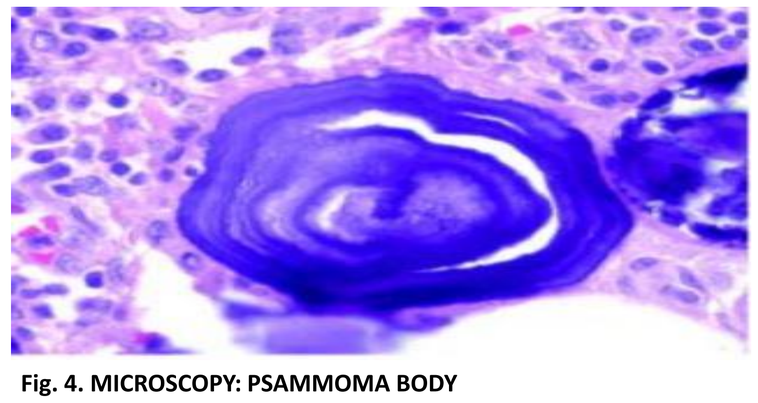

Fig. 4. MICROSCOPY: PSAMMOMA BODY

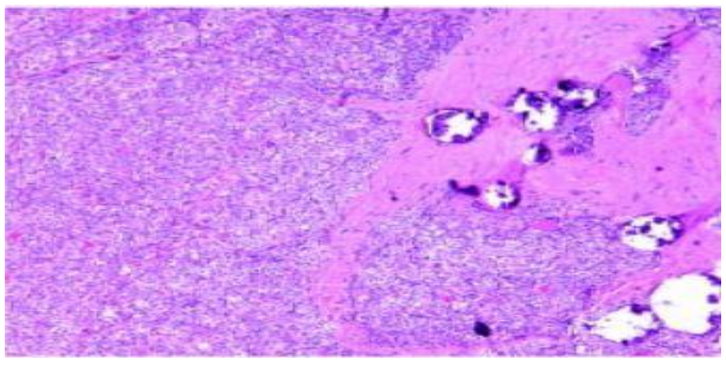

Fig. 5. MICROSCOPY: DIFFUSE SCLEROSING VARIANT OF PAPILLARY CARCINOMA CHARACTERIZED BY STROMAL FIBROSIS, PSAMMOMA BODY AND LYMPHOCYTIC THYROIDITIS.