

# Primary Squamous Cell Carcinoma of the Thyroid: A Rare Type of Thyroid Cancer

PINAR SISMAN<sup>1</sup>, AHMET BILGEHAN SAHIN<sup>2</sup>, HANDE PEYNIRCI<sup>1</sup>, OZEN OZ GUL<sup>1</sup>, SONER CANDER<sup>3</sup>, ERDINC ERTURK<sup>1</sup>, CANAN ERSOY<sup>1</sup>

<sup>1</sup>ULUDAG UNIVERSITY MEDICAL SCHOOL, DEPARTMENT OF ENDOCRINOLOGY AND METABOLISM

<sup>2</sup>ULUDAG UNIVERSITY MEDICAL SCHOOL, DEPARTMENT OF INTERNAL MEDICINE

<sup>3</sup>SEVKET YILMAZ TRAINING AND RESEARCH HOSPITAL, DEPARTMENT OF ENDOCRINOLOGY AND METABOLISM

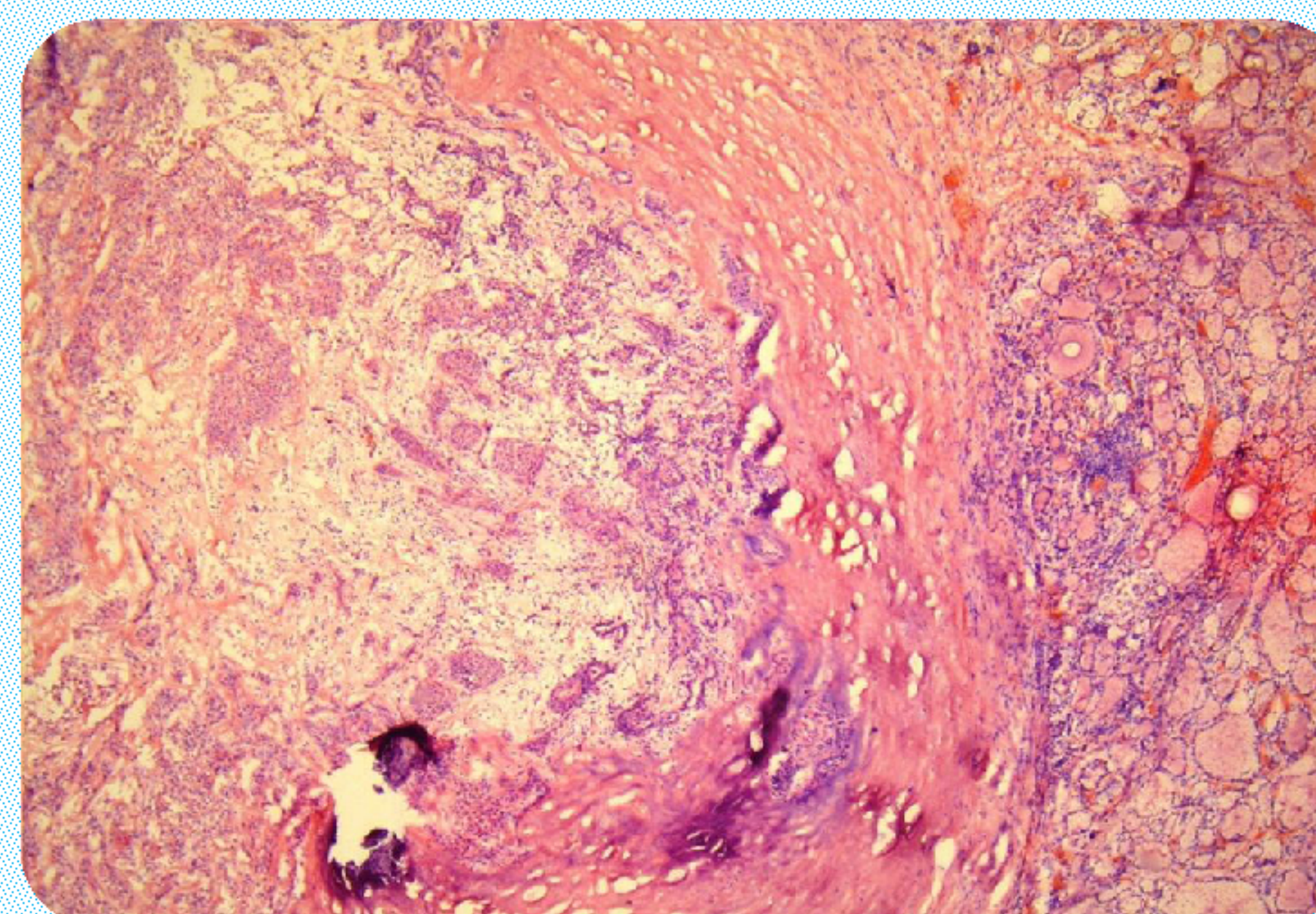
## INTRODUCTION

Primary squamous cell carcinoma (PSCC) of thyroid is a rare type of thyroid malignancies because thyroid gland lacks squamous epithelium. It is seen in less than 1% of all thyroid malignancies. To our knowledge, during last 30 years, only about 90 cases were published. The median age is fifth and sixth decade, but can be seen at any age. PSCC is an aggressive tumor as well as rare. It has poor prognosis and has been found fatal within one year of initial diagnosis.

## CASE REPORT

We present a 60-year-old female who had been followed up for multiple nodules in thyroid in our outpatient clinic for two years. She has no complaint of dyspnea, dysphagia, voice change, weight loss or neck mass. Her serum free thyroxine (fT4), free triiodothyronine (fT3) and thyroid-stimulating hormone (TSH) levels were 0.9 ng/dl, 1.8 pg/ml, and 3.8  $\mu$ IU/ml, respectively. Her first fine needle aspiration cytology (FNAC) was benign. During follow-ups, because of sonographic features of nodule in left lobe, evoking malignancy, we performed the second FNAC which was suspicious for malignancy. Then Total thyroidectomy was performed with no complication. In histopathological examination, well differentiated squamous cell carcinoma was

revealed. Tumor was 0.7x0.6 cm in size. It has extracapsular extension, but lymphovascular invasion was not seen (**Figure 1**). After surgery there was no increased glucose metabolism on F-18-fluorodeoxyglucose positron emission tomography. 21 months have passed after surgery and she had no complaint. She is going on the follow-ups.



**Figure 1.**  
Hystopathological examination of PSCC.

## CONCLUSION

PSCC of thyroid is rare but aggressive malignancy. FNAC is reliable for diagnosis like other types, but the metastatic SCC should be excluded. It seems complete surgical eradication of tumor is the main treatment in early stages of PSCC of thyroid. In locally advanced and metastatic cases, treatment with surgery, radiation therapy and chemotherapy alone has been found ineffective in recent publications. So early and accurate diagnosis is crucial to achieve complete cure with surgery.

## REFERENCES

1. Cho J.K., Woo S., Park J., Kim M., Jeong H. Primary squamous cell carcinomas in the thyroid gland: an individual participant data meta-analysis. *Cancer Medicine* 2014; 3(5): 1396–1403
2. Tunio et al.: Primary squamous cell carcinoma of thyroid: a case report and review of literature. *Head & Neck Oncology* 2012 4:8.
3. Primary squamous cell of the thyroid—an abbreviated clinical presentation. *Journal of Otolaryngology - Head and Neck Surgery* 2014 43:17.