INTRODUCTION: Thyroid papillary carcinomas originate from thyroid follicular epithelia and are the most frequent thyroid differentiated carcinomas. Medullary thyroid carcinomas originate from thyroid parafollicular C cells and %25 are a component of Multiple Endocrine Neoplasia (MEN) syndromes. Co-incidence of the two condition on the same patient is so rare.

CASE: 78 years old female patient who has had simple goiter for 10 years, was investigated about weight loss and palpitation. In the first visit thyroid function tests and ultrasonography (USG) was applied. Thyrotropin level was <0.0025 mIU/ml and there was a 38x35 mm solid nodule on the right thyroid lobe (Picture-1). Thyroid scintigraphy showed increased tracer uptake on the right lobe and extremely decreased uptake on the left lobe (Picture-2).

The patient was informed about the treatment choices and decided to be operated. Before the surgery fine needle aspiration biopsy (FNAB) was applied, the result was suspicious for malignancy.

First, right lobectomy was performed and sent to the frozen. The result was follicular lesion. According to this result total thyroidectomy was performed.

The pathology result of the left lobe was papillary microcarcinoma 4x3 mm at diameter, no vascular invasion, no capsule invasion and no extra-thyroidal involvement.

The pathology of the tissue that had been resulted as follicular lesion on frozen, resulted as medullary microcarcinoma 3x2 mm at diameter. The tumor was surrounded by fibrous band and there were cell groups that belong to the lesion on the adjacent thyroid tissue. There was no vascular and extra-thyroidal involvement. Because of the <5 mm tumor size and low risk factors close follow-up was planned.

DISCUSSION: Either papillary and medullary carcinoma on the same patient is a very rare condition and on the follow-up need to be evaluated either with serum thyroglobulin and calcitonin levels.