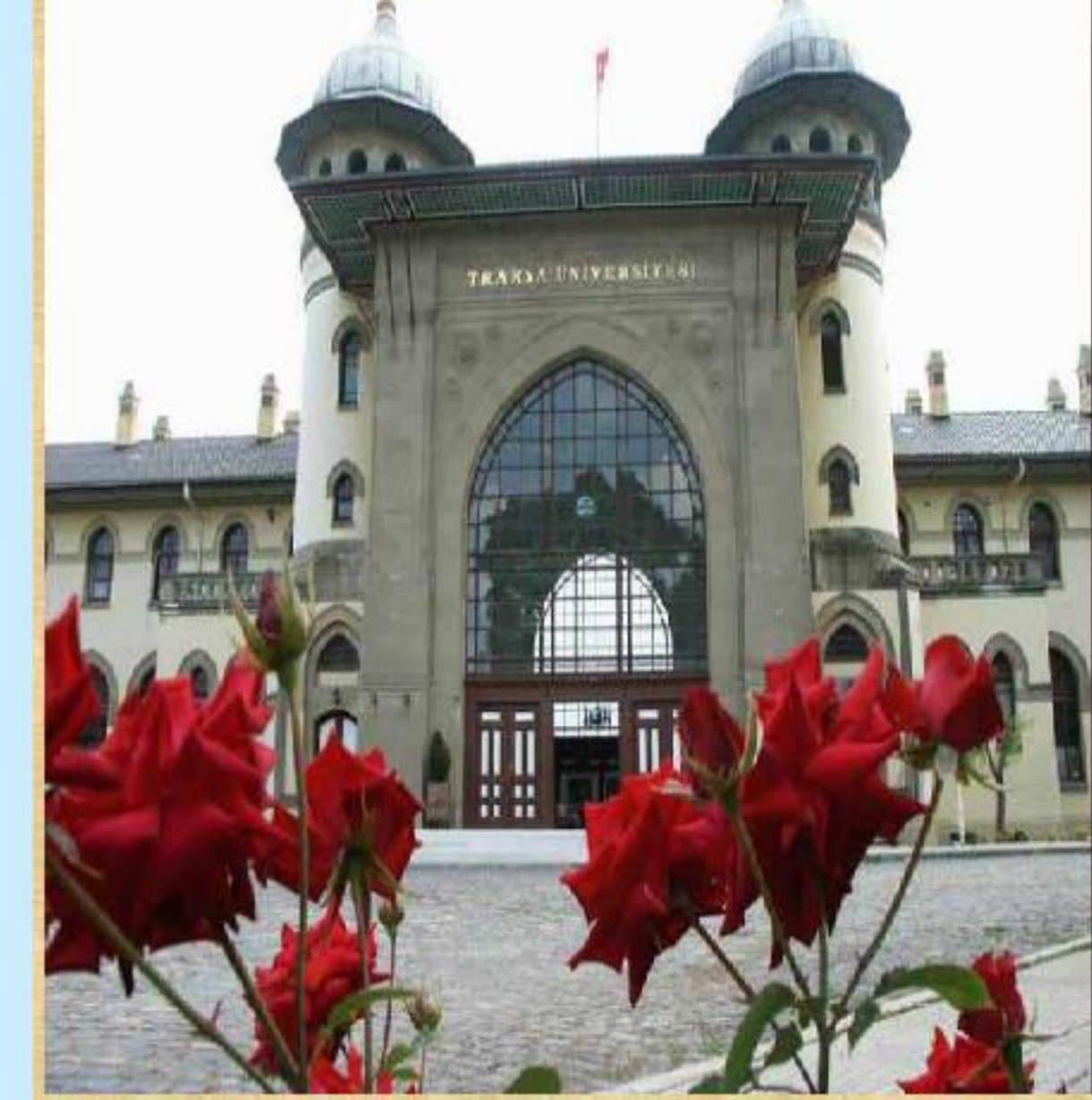




# A Rare Case: Co-Occurrence of Aplastic Anemia and High-Risk Thyroid Papillary Carcinoma



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- Aplastic anemia is an idiopathic/idosyncratic or hereditary bone marrow failure characterized by hypocellular bone marrow and pancytopenia without abnormal infiltration and increase in reticulin fibers. Papillary thyroid cancer(PTC) constitutes 85% of all differentiated thyroid cancers. There is no data on the application of radioactive iodine treatment for the treatment of high risk differentiated thyroid carcinoma detected in the subjects with aplastic anemia.
- A-60-year old male patient was referred to our clinic for pancytopenia detected on the examinations performed for ecchymosis on the skin. Physical examination revealed ecchymosis on the skin and cervical lymphadenopathies. Leukocyte:2170 uL(4230-9000), hemoglobin:6.4 gr/dl(13.7-17.5), thrombocyte:12000 uL(150000-400000). Bone marrow aspiration biopsy demonstrated hypocellular bone marrow. The patient with the initial diagnosis of aplastic anemia underwent neck US examination, which revealed a 28x30x32 mm sized, expansile and heterogeneous nodule with lobulated margins, microcalcification and intranodular vascularisation on the upper part of the left thyroid lobe and multiple pathologic lymph nodes on the cervical region. The patient was in euthyroid state. PTC metastasis was detected on lymph node biopsy and the patient underwent total thyroidectomy and central and lateral lymph node dissection. Histopathologic examination revealed PTC tall cell variant, tumor size of 3 cm, extrathyroidal invasion and carcinoma metastasis in seven of 25 lymph nodes. The patient was diagnosed with aplastic anemia and high grade PTC; radioactive iodine treatment was delayed until the 6th month of aplastic anemia treatment after hematology and nuclear medicine department consultations and TSH suppression treatment was commenced.
- In conclusion, high dose radioactive iodine treatment is known to cause bone marrow suppression. As in our case, since radioactive iodine treatment may deteriorate pancytopenia in the patients with severe aplastic anemia, multidisciplinary approach is required in the management of such particular cases.

