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Acute Myeloblastic Leukemia after Propyl-Thio-Uracil, a Simple Coincidence?

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The occurrence of acute myeloblastic leukemia (AML) following propylthiouracil (PTU) has been reported once [1]. Here we report a 2nd patient with AML after 2 years of the use PTU and mention a 3rd unpublished case observed in the Clinic of Endocrinology, University of Ankara [2].

A 59-year-old farmer had all clinical and laboratory findings of toxic goitre in 1981. His thyrotoxico-sis was controlled by PTU, 300 mg daily, during almost 2 years. PTU was lowered to 100 mg daily 10 days before his admission to our clinic in 1984. Data on admission: Hb 7.6 g/dl, PCV 0.23, platelets $12 \times 10^9/l$, WBC $3.4 \times 10^9/l$ with 22% segmented neu-trophils, 2% neutrophilic band forms, 68% myelo-blasts, 2% monocytes and 6% lymphocytes. Bone marrow aspirate from sternum was hypercellular with 90% myeloblasts. There were Auer bodies in some myeloblasts. AML was diagnosed and TRAP combination was given without success.

In addition to this case, in 1984, Prof. Dr. S. Kologlu, Department of Endocrinology, Faculty of Medicine, Ankara, observed a case of AML in a 52-year-old patient with hyperthyroidism 7 years after the use of PTU [2]. Like our patient with hyperthyroidism the case of S. Kologlu was not treated with radioactive iodine.

If we add the 2 new observations of AML, the one presented and the 2nd observed by Prof. S. Kologlu to the one published previously [1], 3 cases of AML after PTU have been described.

The time between the use

of PTU and the occurrence of AML varied between 2 and 7 years. Out of these 3 patients, 2 received only a moderate dose of PTU, daily and overall. Therefore, it seems likely that the dose of the drug did not play a significant role. Overall hematological side effects of PTU occur in 1.5% of the patients treated with PTU [3, 4]. Until now there is no strict evidence of a causal leukemogenic role of the drug.

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