Leukemoid reaction preceding the diagnosis of colorectal carcinoma by four years

Sir,

We report the case of a patient in whom neutrophilic leukocytosis was discovered incidentally. He had no signs suggesting infection or neoplasia, and the results of the hematologic study were consistent with chronic neutrophilic leukemia. He remained asymptomatic for four years, with his leukocyte counts ranging from 12.9 to 40\times10^9/L, until he developed intestinal obstruction that led to the discovery of a colorectal carcinoma. The diagnosis of leukemoid reaction was finally established after surgical resection of the tumor was followed by normalization of the leukocyte count.

Chronic neutrophilic leukemia (CNL) is an exceedingly infrequent myeloproliferative disorder in which most of the circulating myeloid cells are mature granulocytes.\(^1\,^2\) Differential diagnoses of CNL include, among others, leukemoid reaction to malignant neoplasias. In clinical practice, tumors producing leukemoid reaction characteristically have an aggressive clinical course and, because of this, both diagnoses are usually established either simultaneously or closely in time. We report the case of a patient with neutrophilic leukocytosis that preceded by four years the diagnosis of colorectal carcinoma.

A 78-year old man was referred to our center in November 1994 due to the incidental discovery of neutrophilic leukocytosis a few months earlier. The patient was asymptomatic, did not report visible blood loss in the stools or alterations in his bowel habits, and his physical examination was normal. Main laboratory data were: Hb 15.4 g/dL, WBC count 16.7\times10^9/L (neutrophils 84\%, lymphocytes 10\%, monocytes 6\%), platelet count 106\times10^9/L, ESR 6 mm/h, serum LDH level 470 IU/L (normal value: 250-450 IU/L), and uric acid 8.4 mg/dL. Serum cobalamin level and vitamin B12 binding capacity were increased, and the leukocyte alkaline phos-
course of the latter. In this context, the present case would represent an exceedingly rare instance of leuke-
moid reaction, since the neutrophilic leukocytosis was incidentally discovered in an otherwise asympto-
tomatic patient four years prior to the diagnosis of a colorectal carcinoma. Based on the present observa-
tion we conclude that the diagnosis of leukemoid reaction must be taken into account whenever per-
sistent neutrophilic leukocytosis is observed, even in asymptomatic patients with no clinical signs of infec-
tion or neoplasia. In such cases a search for occult neoplasia is, therefore, mandatory.

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