To the Editor:

RJ (UNCH 87-08-17 4) is a 37-year-old man who noted swelling of his left cheek and fever in August 1992. He was found to be pancytopenic at his local hospital and referred here on August 11, 1992 where he was febrile and had a red, tender swelling just to the left of his nose. His spleen was enlarged. His hemoglobin level was 9.6 g/dL, leukocyte and platelet counts $1.2 \times 10^3$ and $24 \times 10^3/\mu L$, respectively, and there were rare blasts on the blood smear. His serum lactate dehydrogenase level was 9,000 U (36 times the upper limit of normal), and a bone marrow sample was packed with lymphoblasts. Phenotypic studies of the marrow aspirate showed the blasts were myeloperoxidase negative and terminal deoxynucleotidyl transferase positive. Antigens were present on the blasts in the following percentages: CD2, 10%; CD3, 11%; CD7, 11%; CD19, 83%; CD20, 40%; CD10 (CALLA) 81%. The patient was thought to have acute lymphoblastic leukemia. Pus was aspirated from the face lesion, and he was started on a course of antibiotics. Because of his low neutrophil count and persistent evidence of infection, granulocyte colony-stimulating factor (G-CSF) 480 $\mu g$ subcutaneously daily was started on August 14, 1992. Over the next several days his leukocyte count increased dramatically (Fig 1), reaching a peak of $179 \times 10^3/\mu L$, with 83% lymphoid cells or blasts and an absolute neutrophil count of $2.6 \times 10^3/\mu L$. G-CSF was discontinued on August 17, 1992 after three doses. On August 20 the patient was treated with an induction regimen consisting of cyclophosphamide, daunorubicin, vincristine, and prednisone. His peripheral blood count showed a rapid response (Fig 1) and he had signs of tumor lysis syndrome, from which he recovered.

The sequence of events suggests the abrupt increase in lymphoblasts in his peripheral blood was somehow related to the treatment with G-CSF. A literature search failed to disclose a precedent for this observation.

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Mobilization of calla-positive lymphoblasts during treatment with granulocyte colony-stimulating factor [letter]

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