the polymerase chain reaction with BCR probes may further complicate the definition of cure.

One definition of cure, as Dr Pinkel indicates, is a long plateau on a semi-logarithmic graph of disease-free survival by Kaplan-Meier analysis. This type of analysis and result led us to begin using the term "cure" for patients with relapsed acute leukemia treated by marrow transplantation. Cure is achieved when the slope of the plateau for the patients is not distinguishable from that of a matched "normal" population.

Another definition of cure is that patients live out a "normal" life span and die of another cause. In Seattle, the longest disease-free survivors are now 13 years following marrow grafting for CML.

Many marrow transplant teams are also reporting long-term survivors who are hematologically and cytogenetically normal. These patients will have to be followed for several decades; thus the next generation of hematologists will be in a position to decide whether or not they are cured.

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AMYLASE PRODUCING MULTIPLE MYELOMA

To the Editor:

Ectopic production of amylase has been reported in a number of tumors, especially in pulmonary and ovarian cancers. We experienced a 53-year-old man, with IgA-\(\lambda\) type multiple myeloma associated with salivary-type hyperamylasemia, and reported amylase production by myeloma cells. Furthermore, an amylase and IgA-producing myeloma cell line (KHM-1B) was established. Four other cases of amylase-producing multiple myeloma have been successively reported (Table 1) in the Japanese literature. In cases 1, 2, 3, and 4, amylase production or secretion by myeloma cells was confirmed by chemical or immunohistological methods. Amylase production by myeloma cells was strongly suspected, because of extreme salivary-type hyperamylasemia in case 6 and its improvement after treatment with melphanal and prednisolone in cases 4 and 5.

Cytogenetic analysis of KHM-1B and its original fresh cells revealed many karyotypic abnormalities, including a translocation between 1p13 or 21, near the amylase gene locus, and 9q34, the \(\alpha\) oncogene locus. We speculate that activation of amylase gene is caused by the adjacent translocated enhancer gene or oncogene.

We are now seeking information on amylase-producing myeloma cells.

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