
The Treatment of Leukemia

With Reference to 'MYLERAN' brand 1,4-Dimethanesulfonxybutane

IT is no longer news that some malignant processes, notably leukemia, can be halted for appreciable periods by chemotherapeutic agents. An important new addition to antileukemic agents is 'Myleran' brand 1,4-Dimethanesulfonxybutane which has produced worthwhile remissions in chronic granulocytic leukemia, apparently by suppressing granulopoiesis.

Hematological Response: 'Myleran' has a very selective effect upon mature and immature granulocytic elements of the blood, and no effect is observed on the lymphoid elements. Petrakis et al. reported that a total of 80 to 150 mg. orally, over a period of four to six days, produced a decrease in the absolute number and the percentage of both mature and immature granulocytes in all patients. The effect was remarkably uniform beginning slowly at seven to ten days after the start of treatment, and resulting soon after in an abrupt fall in leukocyte count. The lowest leukocyte count was reached in seventeen to twenty-six days, then it began to rise; that was a signal to start maintenance therapy. (In later work, doses of 50 to 100 mg. were used over a ten-day to two-week period for initial therapy.)

Duration of Remissions: When after initial therapy the leukocyte count begins to rise, and the hemoglobin level to fall, maintenance therapy is begun. Dosage requires careful individual control; it is usually between 6 and 20 mg. per week. With this treatment remissions of from one to twenty-one months have been obtained. Clinical responses are characterized by a sense of well-being, decrease in spleen and liver size, rise and maintenance of hemoglobin level, and decrease in hemorrhagic manifestations¹.

The use of 'Myleran' is restricted to patients where facilities for complete blood counts are available at weekly, or more frequent intervals. The most careful hematological control is essential, since large doses may produce irreversible depression of the bone marrow which may not become obvious for four to six months.

'Myleran' is not effective for acute leukemia; for this there is 'Purinethol' brand 6-Mercaptopurine which has given most encouraging remissions.

Full information about 'MYLERAN' and 'PURINETHOL' will be sent on request.

REFERENCES

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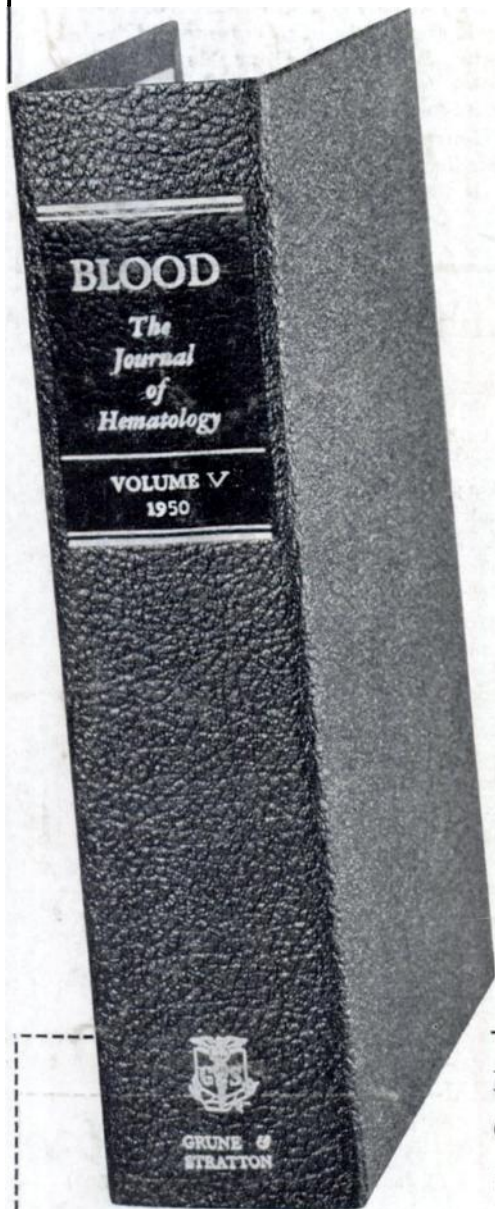
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