Highlighting Cancer Chemotherapy Reports

Contents and commentary on the
February 1970 (Volume 54,
Number 1) issue of
CANCER CHEMOTHERAPY REPORTS

Jerome B. Block, M.D.
Scientific Editor
CANCER CHEMOTHERAPY REPORTS

This issue of Cancer Chemotherapy Reports illustrates one of the incongruities of "modern" chemotherapy: the difficulty of the therapist in laying aside definitively the old drugs. For example, Fink and Foye writing from California for the VA Cancer Chemotherapy Group seek to mine new gold with an intermittent high dose schedule for 6-mercaptopurine. This old friend has been used for almost 2 decades and carries the hoary number 755 of the NCI's National Service Center. While only a few unexpected nuggets of response were found among 230 nonleukemic patients in this rigorous clinic study, it would be presumptuous to assume that this is the last we'll be hearing from 6-MP. Foley and Lemon, writing from Omaha, top the previous authors' Archaeotherapeutics by working with methotrexate. Using this agent in low doses with cyclophosphamide, they observed objective tumor responses with no major toxicity. Most chemotherapists consider clinical drug toxicity and clinical tumor regression to be strange but necessary bedfellows, given today's drugs. A controlled study by the authors using their drugs at higher doses and toxicity would be welcome to ascertain comparative tumor response rates. Leventhal, et al. (National Cancer Institute, Bethesda, Maryland) have found a new use for azaserine in human acute leukemia. They administered the drug orally with the view towards interfering with glutamine metabolism and a resultant enhancement of the antileukemic metabolic effects of L-asparaginase, aspanking new agent which is the 109,229th drug tested by the National Service Center. While the authors observed little profit from this May and December union, they were sufficiently encouraged to suggest additional clinical trials with parenteral azaserine.

The appearance now of such trials in a current issue of CCR is not because this February issue is commemorative of any pioneer in the cancer therapy field and therefore celebrating old drugs, but rather reflects the continuing and often painstaking efforts of physicians to utilize optimally and with increasing advantage all the agents now available for chemical control of cancer.

Considerable clinical interest has been generated in daunomycin as an antileukemic drug. Farmar, et al. (Microbiological Associates, Bethesda, Maryland) ascribe cardiac toxicity in the golden hamster to the agent. Clinical cardio-
toxicity with daunomycin has been repeatedly commented upon from Europe but there has been little supporting data from American studies. A new derivative of daunomycin is described by Sandberg, et al. (Bethesda, Maryland) which is therapeutically more effective against murine leukemia. Adriamycin, a drug developed in Italy, is already in clinical trial and any future controlled comparative trials with daunomycin will be of interest.

A case report from the Medical College of Virginia (Richmond, Virginia) by Valdes and Maurer demonstrates striking and persistent clinical response to chemotherapy with vincristine and cyclophosphamide in a malignant Schwannoma, a rare tumor and a more rare response.

**TABLE OF CONTENTS**

February 1970

Comparison of the antileukemic effect in mice of adriamycin with daunomycin: J. S. Sandberg, et al. Microculture of human brain tumors: T. T. Chen and J. Mealey, Jr. Pathologic changes induced by daunomycin in the Syrian golden hamster: R. M. Farnar, et al. Antitumor and toxicologic ef- fects of p-carboxycarbanilic acid, N-[p-thi- (2-chloroethyl)amino|phenyl|ester: P. Hebborn, et al. 6-mercaptopurine given intermit- tently in high doses: phase II study: D. J. Fink and L. V. Faye, Jr. Pharmacologic studies of tritiated cytosine arabinoside in children: J. Z. Finklenstein, et al. Low dosage methotrexate and cyclophosphamide for solid tumors: J. F. Foley, et al. L-asparaginase plus azaserine in acute lymphatic leukemia: B. G. Leventhal, et al. Single reversal trial of hydroxyurea in 91 patients with advanced cancer: N. H. Slack and R. Jones, Jr. Combination therapy with vincristine sulfate and cyclophosphamide for generalized malignant Schwannoma—a case report: O. S. Valdes and H. M. Maurer.

**APHRODISIAC?**

Because of the very fundamental discoveries which are going to be made, you are going to have a change in the nature of medicine. It is often said that whereas, in the past, doctors mainly dealt with people who were rather obviously ill, in the future there will be more emphasis on preventive medicine. But beyond that I think that within this period there will be a different sort of medicine coming into existence, the medicine which applies to people who are basically healthy but who want to change in some sort of way.

There already exist branches of medicine which have this character, for example, cosmetic surgery. Someone has too big a nose and thinks it would be nice to have a smaller one. I think there will be many more demands of this sort and especially for drugs which will alter people's behaviour. Incidentally, I should tell you that in preparing this talk I did notice one rather interesting omission in current medical research. As far as I know, there does not seem to be any federal money spent on research for a good aphrodisiac. I do not believe this is because somebody in authority thinks it would increase the population rate, which might be a good reason. I suspect it is due to your puritan tradition, even though this is already changing rather rapidly. I think we may expect a demand for many drugs of this general character. For example, a drug to help people memorize things more easily. As for myself, I would particularly like a little drug which would deal with the time shift I have to suffer every time I come to your country.

—Francis H. C. Crick, Ph.D., “Molecular Biology and Medical Research.”

*Journal of Mount Sinai Hospital* 36: 178-187, 1969. Page 187.