Another subject of current interest and concern, which could profit from an exchange of views based on related substantive findings, is the assumption cited in this review that rats do not harbor latent infections with oncogenic RNA viruses, as do mice, which can complicate studies on oncogenesis by radiation and by chemical and hormonal agents. In favor of the assumption are: (*a*) the studies of Pollard and Kajima in which electron microscopy studies failed to reveal virus particles in the thymus or other tissues of various rat stocks investigated (J. Natl. Cancer Inst., *39:* 135–142, 1967), whereas such particles were readily observed in all mouse strains and stocks investigated, including germ-free lines (see reference and discussion in Chapter 5); and, (*b*) the studies of Huggins and Sugiyama involving their stock of Long-Evans rats, in which a particular dosage and treatment regimen of DMBA "caused leukemia in every recipient" (see Chapter 6 for quotation and reference). Although the latter represents indirect evidence, it would be necessary to postulate an effective level of virus in an "inapparent" form, in every rat involved in the studies, in order to argue that DMBA caused the leukemia through activation of a virus rather than by direct action on host target cells. This is a postulate that few would be willing to accept at the present time, even as a basis for argument.

Contrary to the assumption that rats do not carry latent infections with oncogenic viruses is the finding of typical C-type viral particles in a transplantable rat leukemia (Shay) by Weinstein and Moloney (Proc. Soc. Exptl. Biol. Med., *118:* 459–461, 1964), as well as in some but not in other transplantable and primary chemically induced tumors of this species (personal communications regarding unpublished results of several investigators). Since rats are susceptible to infection with most of the known laboratory strains of mouse RNA tumor viruses (C-type), and since both rats and mice are sometimes housed in the same general quarters, it is possible that some rat stocks have picked up infections with mouse viruses, and that the C-particles detected by electron microscopy represent mouse passenger agents. On the other hand, although no biologic activity has yet been demonstrated for them, some of them may represent indigenous rat viruses. In any event, stocks or colonies of rats that have failed to show, after exhaustive search, C-type viruses either in normal animals or in animals treated with nonviral oncogenic agents, would represent valuable stocks for the study of oncogenesis by nonviral agents as well as for attempts to "rescue" oncogenic viral genomes (or viruses in an "inapparent" form) under the hypothesis that such may exist in this species.

The editor and the contributors have achieved, in a highly commendable fashion, the objectives set forth in the Preface. As with any monograph of this type, considerable progress has been made in some areas during the lag period between completion of manuscripts and final publication; however, no quantal jumps have been made, or entirely new approaches introduced. It will remain, therefore, a valuable textbook for a number of years to come.

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Curability of Cancer in Various Sites. E. C. Easson and M. H. Russell, London, England: Pittman Medical Publishing Company, Ltd., 1968. 149 pp. $4.20.

This little volume contains a wealth of information. The purpose of this fourth statistical report of the Christie Hospital and Holt Radium Institute in Manchester, England, is to assess the curability of cancer in a number of anatomic sites, rather than to provide so-called "five-year survival rates." To accomplish this, *observed* age-adjusted survival rates for a specific group of treated patients are compared to the *expected* rate for persons of identical sex and age from the general population. The patients under study were treated between 1932 and 1949, so that refinements in technic and equipment since that time do not contribute to the survival rates. Clearly, results for patients currently receiving radiotherapy should be better than those described in this volume.

The data and graphs are clearly presented in the body of the text. Short appendices detail the statistical technics employed, the staging technics utilized, the distribution of stages within each anatomic site by frequency, and the varying treatment technics employed during the three, more recent, five-year periods between 1945 and 1959.

In addition to the clearly presented survival data, the authors point out new areas for study as they puzzle over the possible reasons for an excess in the death rate between the 10th and 15th year after treatment for patients with Stage I cancer of the lip and Stages I and II of squamous cancer of the skin, even though survival for these patients from the 5th to the 10th years approximated that of the control populations.

This volume is recommended for all serious students of human cancer.

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Solitary Metastases. Philip Rubin and Jerold Green. Springfield, Illinois: Charles C Thomas, 1968. 251 pp. $14.75

Every physician concerned with the care of patients has been faced with the distressing problem of deciding what to do about a single lesion in the lung, brain, or liver of a patient who has had presumed curative therapy for a previous carcinoma elsewhere. Rubin and Green have reviewed and analyzed pertinent medical writings about this difficult subject and have summarized published data and provided recommendations in this volume.

While postmortem studies on cancer patients show metastatic disease to be present in the liver in 36% of them and in the lung in 30% of them, successful therapy (long survival after treatment) is accomplished more often in patients with solitary pulmonary metastases than in those patients with solitary metastases of all other sites combined. The longest survival rates occur in patients with solitary pulmonary metastases from the urinary tract (hypernephroma), female genital tract, or large bowel, while the poorest survival rates

occur following therapy for solitary metastases from melanoma, breast, or prostate cancer. The longer the interval (over two years) between treatment for the primary lesion and the discovery of the solitary metastasis, the greater the opportunity for successful therapy.

The authors list the appropriate diagnostic tests to assure that the metastasis is indeed a solitary one, for frequently it is not. In addition, they critically analyze different therapies attempted in the past.

A negative criticism of the book is that it is padded with full-page illustrations of single chest roentgenographs from the authors' institution; these, unfortunately, contribute to the high cost of the book without enhancing its usefulness.

It is satisfying to know that this volume, with its extensive bibliography, exists to help the concerned physician make intelligent decisions about problem patients with cancer.

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