

## Book Reviews

**SIEBZEHN JAHRE STRAHLENTHERAPIE DER KREBSE.** Zürcher Erfahrungen 1919-1935. [SEVENTEEN YEARS OF RADIATION THERAPY FOR CANCER. Cases from Zurich, 1919-1935.] Hans R. Schinz and Adolph Zuppinger. Leipzig: George Thieme, 1937, x + 340 pages. 95 illustrations and 213 tables. (Published and distributed by authority of the Alien Property Custodian, 1944.) Price \$11.75.

This is a careful statistical analysis of the results of radiotherapy in patients with cancer treated in the radiological department of the University of Zurich between 1919 and 1936.

Emphasis is laid on the improvement in dosage and the results of radiotherapy during the period 1929 to 1936, as compared with 1919 to 1928. The 2,500 cases are classified according to the site of origin in 35 groups. The results of radiotherapy in each group are discussed in relation to age, sex, microscopic character of the growth, local peculiarities, extent of involvement on admission, and whether radiotherapy was the only treatment or was associated with surgery.

It is an excellent study, full of factual information of the results during that period.

MAURICE LENZ

**DER MAGENKREBS.** [GASTRIC CANCER.] George Ernst Konjetzny. Stuttgart: Ferdinand Enke. 1938, x + 289 pages. 155 illustrations and 20 tables. (Published and distributed by authority of the Alien Property Custodian, 1944.) Price \$10.70.

The author records his researches on gastric carcinoma from the pathological viewpoint. For thirty years he has studied resection and postmortem material from the University Clinic in Hamburg and from neighboring cities. He stresses the importance of absolutely fresh material in order to demonstrate the changes he reports.

The book is divided into four sections, which cover the general pathology, etiology, pathologic anatomy, and histology of stomach cancer, and the clinical picture. It is amply illustrated. There are also 20 tables, and a rather large bibliography arranged alphabetically under the name of the authors at the back of the book. The writer states that he did not make this all-inclusive.

Under the first section, on general pathology, he reviews the frequency, age, and sex incidence of gastric cancer. Tables are shown that summarize these features from his material and from a few outside reports. This section comprises only 6 pages of the book.

The second section, on etiology, covers 100 pages. The author reviews the evidence for heredity; outside agents, including types of diet such as vegetarian; raw foods; alcohol; rural versus urban incidence of cancer; and the effect of the social status. Contagion, infection, and Cohnheim's cell-rest theory have nothing to support them as etiologic factors in gastric cancer. Trauma such as a burn may have significance only as a base upon which cancer may later develop. In fact the local process, whether following the short or long end stage of the inflammatory reaction, is most important: "Gastric cancer never develops on a healthy mucous membrane;" also, "Gastric cancer develops on a base previously prepared

(by diseased tissue changes); that is, chronic inflammatory condition of the gastric mucosa or stomach wall." These changes Konjetzny calls precancerous, although some objection has been advanced against this term. The inflammatory changes of highest significance for the initiation of gastric cancer result from mechanical, chemical, thermal, infectious, and hematogenous stimuli, and progress from chronic gastritis, to chronic ulceration, to carcinoma. Gastric carcinoma is always preceded by an outspoken chronic atrophic gastritis or an atrophic hyperplastic gastritis. Under hypertrophic gastritis Konjetzny defines the changes by description and numerous photographs to illustrate his points. The usual postmortem material will not show these changes; the tissue must be fresh and from early cases, for advanced cancer is useless for demonstration of the fine details. Polyps of the stomach are always dangerous, for sooner or later they will develop malignant changes. In atrophic gastritis the alterations are found in the rugae and pits, where dark-staining, irregular epithelial cells may be found. Atrophic gastritis includes not only cases with complete loss of glands but also the progressive type. The pathological process advances through acute, subacute, and chronic changes.

Konjetzny discusses the theories of "age atrophy" and degeneration, as well as inactivation through failure of nerve stimuli. He also considers gastroscopic appearance, which he cannot correlate with the pathological picture, since the former necessarily represents "subjective interpretation".

He concludes that precancerous changes always precede carcinoma. They are present in small cancers where atrophic or hyperplastic gastritis can be demonstrated, for the malignant transformation originates not at one point, but in multiple foci over a broad surface of pathological mucosa.

He has not studied the relatively rare fundus and cardia cases, as his operative material has not been sufficient and he has had no opportunity to investigate early, small neoplasms. His conclusions are based on pyloric antrum carcinoma. He has no definite conclusions to draw on the heterotopic glands seen in these stomachs, and cannot state whether chronic gastritis has anything to do with them. He believes that the possibility of contiguous cells changing to carcinoma by "apposition" cannot be dismissed. He quotes the evidence for preceding gastritis, as shown by the atrophic gastritis of pernicious anemia with subsequent cancer. He shows by citing cases that cancer may arise in the areas of chronic gastritis at a distance from a chronic ulcer or in the stomach wall near an anastomosis.

He discusses the origin of cancer in chronic ulcer, and whether an ulcerating cancer was cancer from the first, or arose on an ulcer; it is impossible to decide by reports from the literature. In order to make the diagnosis a critical examination of all the evidence, including the histologic findings, must be made, for the question