into the anterior chamber of the eye of animals of the same species. The method permits direct observation of the growth with the naked eye or under the microscope. The present paper deals with an attempt to establish whether or not the frog carcinoma can proliferate in the eyes of alien hosts. Two species belonging to the same family (green frog and bullfrog), a species from a different family (toad), and a different classes of cold-blooded vertebrates (goldfish and alligator) were used. The tumor was found to grow as readily in the eyes of frogs of alien species as in the eye of the natural host. In toads, the tumor grew well but the proportion of successful transplantations was distinctly less (37% as compared to 61 to 67% in the frogs). In frogs and toads, the character and rate of growth of the transplants was practically the same. The neoplastic cells retained their acinar arrangement, supported by a stroma which developed as well from the tissues of alien hosts as from those of the natural host. No progressive growth occurred in the fish, although characteristic acini persisted and a few mitoses could be found long after implantation. In the alligator, no growth occurred and the transplant deteriorated rapidly. No reaction although characteristic acini persisted and a few mitoses could be found long after implantation. In the alligator, no growth occurred and the transplant deteriorated rapidly. No reaction although characteristic acini persisted and a few mitoses could be found long after implantation. In the alligator, no growth occurred and the transplant deteriorated rapidly. No reaction although characteristic acini persisted and a few mitoses could be found long after implantation. In the alligator, no growth occurred and the transplant deteriorated rapidly. 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Radiation—Diagnosis and Therapy


Various methods of irradiation of carcinomas of the skin are presented and illustrated with case reports. Massive doses of medium or low voltage x-rays with little or no filtration are used for practically all small lesions. High voltage, heavily filtered x-rays in fractionated doses are preferred for the large indurated lesions, all lesions involving cartilage, and all carcinomas of the lip. In selected cases x-ray treatment is supplemented with interstitial low intensity radium element needles.—E. A. L.


One case of leiomysarcoma and 3 of lymphosarcoma of the small intestine are reported, and the literature is reviewed. Thirty-four cases of leiomyosarcoma of the small intestine and over 400 of lymphosarcoma have been recorded in the literature. The author’s case of leiomyosarcoma was the only one to have been irradiated. It responded well. Lymphosarcomas are radiosensitive.—E. A. L.


A new radium applicator, called a hysterostat, for the intracavitary radiation of carcinomas of the corpus uteri is described. It consists of a central crosspiece and 2 to 4 lateral tandem inserters. The central crosspiece is attached to a stem permitting variation of the angle between them. The lateral inserters are not fixed instruments but are separate pieces which can be interchanged to make various shapes to correspond to the shape of the uterine cavity.

Eight of the 13 patients treated with this instrument were subjected to total hysterectomy 4 to 6 weeks after the radium treatment. Seven of the 8 showed no residual cancer. Three of the remaining 5 are alive and well 6 to 24 months after treatment. The dose varied between 4,000 and 7,660 mgH.—E. A. L.


A method is described for rotation x-ray therapy in which the beam is directed horizontally towards the tumor area and the patient is rotated on a vertical axis. The advantage of this method is that there is a volume of tissue surrounding the axis of rotation which is continuously in the beam and receives the most intense radiation, whereas the skin receives the least radiation owing to the fact that it is moving most rapidly and is in the narrowest portion of the beam.—E. A. L.


The use of radioactive isotopes as tracers and as substitutes for radium in direct radium therapy is discussed. Four representative cases of chronic myelogenous leukemia and 1 of chronic
lymphatic leukemia treated orally with radiophosphorus in the form of sodium phosphate are reported. The responses were similar to those usually following x-ray or radium therapy. To avoid a cathartic effect the total dose of sodium phosphate was kept below 3 gm. The dosage of radiophosphorus has been determined by experimentation and is probably too small. No patient received more than the equivalent of 3 r daily whole body radiation.

Two cases of polycemia vera treated in the same manner are also presented.—E. A. L.


Protracted fractionated x-ray irradiation with high voltage and heavy filtration is offered as a method of treating advanced carcinoma of the skin. Illustrated with case reports.—E. A. L.


A series of 289 patients seen from 1923 to 1935 inclusive is presented. Twenty-seven of the cases were judged unsuitable for any radiation therapy. Thirty-five per cent of the remaining 262 were in stages 1 and 2 and 65% in stages 3 and 4.

The development of radium therapy in the early years of the series is discussed. In 1930 x-ray therapy was instituted and has been used since then in conjunction with radium. In 1934 a follow-up clinic was established, and it has been possible to follow 28 patients for 5 or more years. There was a 5 year survival in 7 cases. Six of the 7 died with disease in the 6th year and 1 remained free of demonstrable disease.

The need for increasing the radiation dose to the parametria is emphasized.—E. A. L.


This is an analysis and discussion of the problems and complications encountered in treatment of carcinoma of the cervix. From 1925 to 1939, inclusive, 795 patients were seen. Until the last 4 or 5 years no case could be classed as stage I, the greater number being in stage IV. Two hundred sixty-one were transferred elsewhere for custodial care; 303 were given the complete course of treatment.

Successful treatment depends upon the general condition of the patient, stage of disease, quality of irradiation, continuity of treatment and individual response. Complications may arise in the skin from slow vascular changes; in the urinary tract from extension of the disease causing ureteral obstruction; in the rectum from small ulcerations; in the vagina from fistulae; and may arise from local extension of the disease causing intractable pain.—E. A. L.


The paper presents methods of irradiating carcinoma of the skin previously reported by others and discusses the methods used by the authors. Superficial basal cell lesions should receive between 4,000 r and 5,000 r low voltage therapy. Daily doses between 600 r and 1,000 r are given. For the larger and thicker basal cell tumors and for squamous cell carcinomas, various combinations of medium and high voltage therapy are used. The total dose is between 5,500 r and 6,000 r, and about 200 r are given daily.—E. A. L.

SKIN AND SUBCUTANEOUS TISSUES


Report of 1 case.—M. D.-R.


A case belonging to the neuro-ectodermic dysplasias of Von Bogaert, the clinical variety being that of the sclerosis tuberosa of Bourneville Brissaud. Four illustrations are appended.—M. D.-R.

FEMALE GENITAL TRACT


The extreme rarity of neoplasia in this location contrasting with the frequency of infection is emphasized, only 39 cases having so far been reported (Simendinger, E. A., Surg., Gynec. & Obst., 68:952. 1939). Two cases are described, 1 of squamous cell carcinoma and the other of adenocarcinoma. No metastases were observed, and the tumors gave the impression of being cysts under pressure. Excision was carried out in both cases and recurrence of the squamous cell tumor occurred shortly after. The paper is illustrated with 14 photomicrographs.—M. D.-R.


This is a case of the hormone-secreting tumors first described in 1932 by Löffler and Prissel (Beitr. z. path. Anat. u. allg. Path., 90:199. 1932). It originated in a woman 32 years old showing uterine hemorrhages and hyperplasia of the endometrium of a folliculinic origin. The tumor had the appearance of a fibroma with a tendency to epithelioid transformation. The cells were extremely rich in lipoids as shown by staining reactions and chemical and optical analysis. The paper includes 29 references and 22 pictures of gross and microscopic preparations.—M. D.-R.


A case thought to be a primary signet ring cell carcinoma of the ovary (Krukenberg tumor) is reported. The status of this type of tumor, whether primary in the ovary, or metastatic from primary intestinal adenocarcinomas, is discussed. Histological characteristics differentiating the Krukenberg tumor from the pseudomucinous cystadenoma are considered.—A. K.

GASTROINTESTINAL TRACT


The authors summarize the characteristics whereby gastric schwannomas are recognized according to the recent work of Masson, Gosset, Roussy, etc. They are: (a) presence of whorls of fusiform pseudo-connective tissue cells showing anastomoses; (b) presence of cylinders of cells by isolation of some nodules of the whorls; (c) formation of palisades; and (d) myxoid degeneration of the cells. The tumors are slow-growing, benign, and do not affect the general condition of the patient. All of these clinical and histopathological traits were found in the reported case which would be the first example of a jejenum-
ileal schwannoma. The tumor was removed together with 20 cm. of intestine, and the patient, a woman of 44, promptly recovered. One color plate of the growth and 2 photomicrographs are appended.—M. D-R.

BONE


Report of 1 case accompanied by 4 illustrations.—M. D-R.


A report based on the study of 28 giant cell tumors (6 in the tendon sheaths, 18 in the jaw bones, 3 in the large bones, and 1 in a rib) and also on that of the small lesions induced in 10 rabbits fed large amounts of cholesterol and in which tendons were experimentally injured. The primary lesion of all these pseudo-tumors is one consisting of histiocytes. This lesion may later develop into a fibroblastic, xanthomatous, or giant cell growth. All these lesions have a remarkable tendency to become sclerotic, and their varied morphological aspects depend either on their type or on the phase of their evolution. Although hypercholesterinemia, associated or not with trauma, is a factor in the genesis of the lesions, the part it plays is only subsidiary. Various other factors such as bacterial toxins, endocrine disturbances, vitamin deficiency, circulatory alterations, etc., acting either alone or in combination, are sufficient in most cases to explain the different reactions of the bone tissues. Among them one must place the so-called tumors of myeloplasces or giant cell tumors. These granulomatous lesions are entirely different both clinically and histologically from the giant cell sarcoma, and the latter should not be segregated from the general sarcoma group no matter how rich in giant cells they are. The literature is thoroughly reviewed and about 250 references are appended. The text contains 32 illustrations.—M. D-R.

LEUKEMIA, LYMPHOSARCOMA, Hodgkin's Disease


The author describes a case diagnosed clinically and cytologically as myeloblastic leukemia where a tumor composed of myeloblasts destroyed the prostatic and periprostatic tissues. Seven photomicrographs and 30 references are appended.—M. D-R.


The Gordon reaction was positive in 16 (76.2%) of 21 cases of Hodgkin's lymphogranuloma studied by the author. Of 310 cases previously reported the test was positive in 229 (73.9%). The author found no positive reactions with material from lymph nodes from 40 nongranulomatous conditions. Of 452 control cases previously reported positive reactions were reported in 8 (1.7%). The Gordon reaction is considered reliable in differential diagnosis of lymph node diseases if it is accompanied by histological examination.

The Gordon agent, extracted from lymphogranulomatous tissue, causes spastic paralysis, incoordination, ataxia, retraction of the head, fits, and loss of weight in rabbits and guinea pigs after intracerebral injection. A photomicrograph is reproduced showing disappearance of Purkinje cells in the cerebellum following injection of the agent. The author concludes that the distribution of the Gordon agent is such as to make it unlikely that it is the causative agent of Hodgkin's disease. Its properties are those of a nonliving agent, probably enzymatic. The test, while reliable, is nonspecific.—S. B-J.

STATISTICS


The relationship between the incidence of skin cancer and general cancer rates is shown to be direct in cold climates and inverse in hot climates. The total cancer mortalities of the various North American states and Canadian provinces are shown to fall with increasing solar radiation and with the numbers of people exposed thereto and are independent of the production of skin cancer. A correlation is suggested between immunity to cancer and exposure to solar radiation or to artificial sources of ultraviolet light. Such exposure is proposed as a means of reducing mortality from cancer. The paper is illustrated by 5 graphs summarizing statistics of cancer mortalities among persons exposed to solar radiation in the American states and Canadian provinces and the relation of cancer mortality rates to Smith's solar radiation index in various regions.—S. B-J.


A review of the literature with 15 new cases not previously published. Both members of monzygous twins have tumors more frequently, have the same type in the same organ and an age of onset more nearly identical than do both members of dizygous twins. Heredity plays an important role in the production of tumors and the age at which they develop.—J. B.

CANCER CONTROL AND PUBLIC HEALTH


It is stated that the percentage of uterine cancer cases which are cured varies inversely with the stage of the disease in which the patient receives treatment. This statement is supported by the data from 50 cases of cancer of the cervix. Periodic pelvic examinations of 1,000 women 30 years of age and over are being made by the authors. This report covers the 1st and 2nd examinations. In the 1st examination 4 uterine malignancies were found, 3 of the cervix and 1 of the corpus. Benign lesions (papillomas, leucoplasic areas, polyps, endocervicitis, myomas, etc.) were found in 318 women, treatment being carried out in 113 cases. After an interval of 6 months a 2nd examination was made. No malignancies were found. Old benign lesions were present in 177 women, new lesions were found in 69 women. Of the 4 patients with malignant lesions 2 might have waited weeks or months before reporting to their physicians, since there were no pelvic symptoms except a moderate amount of leucorrheal discharge. The opinion is expressed that areas of chronic epithelial irritation predispose to the development of cancer and the only way to discover early cervical lesions is by means of periodic pelvic examinations.—A. K.
Clinical and Pathological Reports

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