

active, if at all, in counteracting the inhibition caused by inositol. Interference could be detected when larger doses of some of these substances were given. While both *d*-desthiobiotin and an avidin concentrate were effective inhibitors of tumor growth, neutralization occurred when these two materials were tested for antagonism. Impurities in the avidin concentrate may be responsible for this interference.—Authors' abstract.

**Histologic Changes in the Central Vegetative Centers of the Hypothalamus in Carcinoma as an Indication of Vegetative Functional Disturbances.** MORGAN, L. O. [Univ. of Cincinnati Coll. of Med., Cincinnati, Ohio] *Cancer Research*, **6**:142-147. 1946.

A histologic study was made of 5 nuclei of the hypothalamus in 19 patients with carcinoma of various organs. Extensive chromatolysis and cell destruction indicate that all these cell groups are involved in carcinoma. The pattern of these cell changes shows a wide range of variation. A congenital overdevelopment of some of the nuclei was indicated. The cell destruction that occurs in carcinoma makes it impossible to evaluate this factor properly. The 5 nuclei studied are regarded as constituting a central mechanism for the control and integration of vegetative functions. This control is mediated largely through the autonomic and endocrine systems and influences most if not all metabolic functions. The cell changes in the hypothalamus suggest a widespread but variable instability or irregularity of vegetative functions

in the patient with carcinoma. This is in keeping with the finding of numerous investigators who have made functional studies in experimental animals or in cancer patients.—Author's abstract.

**Melanosarcoma and Rhabdomyoma in Two Pine Snakes (*Pituophis melanoleucus*).** BALL, H. A. [Biol. Research Inst. of San Diego Zool. Soc., and San Diego Co. Gen. Hosp., San Diego, Calif.] *Cancer Research*, **6**:134-138. 1946.

Malignant melanomas occurring in a male and female pine snake are reported. The primary tumor in the female snake arose at the margin of one of the large pigmented areas of the skin of the tail. Metastatic tumors were found in the liver and the celomic cavity. In the male snake 2 large melanomas occurred on the upper lip, and another tumor, a typical rhabdomyoma, sprang from the hard palate. These tumors appear to be the third or fourth instances on record of malignant neoplasms in snakes.—Author's abstract.

**Biochemical Genetics.** BEADLE, G. W. [Sch. of Biol. Sc., Stanford Univ., Calif.] *Chem. Revs.*, **37**:15-96. 1945.

This review, with 354 references, discusses the evolution, structure, and action of genes, the characters controlled by genes (including cancer), the chemical nature of chromosomes and genes, spontaneous and induced gene mutation, and viruses and plasmagenes. Five pages are devoted to the relationship between genes and cancer.—M. H. P.

## Clinical and Pathological Reports

*Clinical investigations are sometimes included under Reports of Research*

### HEREDITY

**Tumors in One of Homologous Twins. Hodgkin's Disease with Primary Skeletal Manifestations.** CHARACHE, H. [Brooklyn Cancer Inst., Brooklyn, N. Y.] *Am. J. Roentgenol.*, **54**:179-181. 1945.

This is a report of Hodgkin's disease in one of homologous twins, who died at 5 years of age. The surviving twin was apparently normal  $4\frac{3}{4}$  years after the onset of symptoms in the deceased twin.—E. H. Q.

### RADIATION

**Skin and Lip Cancer.** SLOBODIN, H. [Vet. Admin., Hines, Ill.] Report to Chicago Roentgen Soc., Apr. 12, 1945. From abstr. in *Proc. Inst. Med. Chicago*, **15**:361-362. 1945.

Fractionated roentgen ray treatment, usually completed in less than 3 weeks, was successful in 225 skin carcinomas except for 3 recurrences, 2 irradiation ulcers, and 2 lesions that required supplementary surgery. Of the 3 recurrences, 2 were presumably controlled by subsequent surgery, and 1 patient died of extensive squamous carcinoma of the neck. Treatment was successful in all carcinomas about the eye and ear. In a series of 81 patients with carcinoma of the lip similarly treated, none showed local recurrence 2 years later, 3 developed cervical metastases, and 2 developed irradiation ulcers, which healed promptly. Of 6 patients with carcinoma of the lip treated surgically, none

had local recurrences; 1 had extensive recurrent cervical metastases after neck dissection.—M. E. H.

**The Response to Preoperative Irradiation as a Clue to the Management of Breast Cancer.** LEVI, L. M. [Los Angeles Co. Hosp., Los Angeles, Calif.] *Am. J. Surg.*, **68**:355-357. 1945.

One hundred and thirty-one patients with breast carcinoma were treated with x-ray irradiation. Fifty-three showed conspicuous regression in the size of the mass, and of these, 29 were then subjected to radical mastectomy with a survival rate of 45%. In the remainder of the group in which the tumor regressed following x-ray but surgery was not employed, the survival rate was 56%. No consistent correlation was found between the histologic appearance and the response of the tumor to radiation. The results indicate that in highly radiosensitive breast tumors, irradiation alone delays metastasis, while subsequent surgery is prone to disseminate the disease: the average time after treatment to the appearance of metastasis was 16.22 and 10.77 months, respectively.—W. A. B.

### NERVOUS SYSTEM

**Glioma of the Optic Chiasma.** MINTON, J. *Proc. Roy. Soc. Med.*, **38**:566. 1945.

Description of a case.—E. L. K.

**Intracranial Lipoma. A Report of Four Cases.** VONDERAHE, A. R., and NIEMER, W. T. [Coll. of Med., Univ. of Cincinnati, Cincinnati, Ohio] *J. Neuropath. & Exper. Neurol.*, 3:344-354. 1944.

Four cases of intracranial lipoma are reported. Three of the tumors were found between the infundibulotuberal region and the mammillary bodies. Two of the lipomas were hemangiomas in type, and one presented a collection of bipolar neurones. When the tumors are arranged in the order of ontogenetic progression, the basic similarity together with the differences are readily understood. There is a transition from simple lipoma to the more complex teratoid tumors and teratomas. Intracranial lipoma is probably never diagnosed in life. However, the present study indicates that these tumors may produce pressure effects and may invade the contiguous cerebral tissue. For this reason, intracranial lipomas must be reckoned with as possible determinants of some clinical manifestations.—A. Cnl.

**Tumors in the Spinal Cord in Childhood II. Analysis of the Literature of a Subsequent Decade (1933-1942); Report of a Case of Meningitis Due to an Intramedullary Epidermoid Communicating with a Dermal Sinus.** HAMBY, W. B. [Univ. of Buffalo Sch. of Med., and Buffalo Children's Hosp., Buffalo, N. Y.] *J. Neuropath. & Exper. Neurol.*, 3:397-409. 1944.

In a survey of the literature of 1933, reports were found of 100 cases of intraspinal tumors in children of 15 years or younger. In the subsequent decade (1933 to 1942 inclusive), 114 such cases were reported. The most frequent tumors [among the total 214 cases] were gliomas (20%), sarcomas (19%), dermoids (16.7%), and neuroinomas (10.4%). The incidence of some tumor types apparently has changed in these two time periods. A case is reported of a child having an infected epidermoid tumor extending from a dermal sinus into the congenitally elongated spinal cord.—Author's summary. (A. Cnl.)

**Cutaneous Tumors of Von Recklinghausen's Disease (Neurofibromatosis).** MCNAIRY, D. J., and MONTGOMERY, H. [Mayo Foundation and Clin., Rochester, Minn.] *Arch. Dermat. & Syph.*, 51:384-390. 1945.

Fifteen cases were studied, in 12 of which nonmedullated nerve fibers were clearly demonstrated.—J. G. K.

#### BLOOD VESSELS

**Hemangioma of the Hand.** SPEED, K. Report to Chicago Surg. Soc., Feb. 2, 1945. From abstr. in *Proc. Inst. Med. Chicago*, 15:336. 1945.

Three case reports. The differential diagnosis of these tumors is not easy and must exclude many afflictions of tendons and nerves. Radium and x-ray are probably useless for complete cure. Surgical excision must be radical and nondestructive. The histology must be studied to detect the malignant changes.—M. E. H.

#### BONE, BONE MARROW, JOINTS

**Further Studies on the Diagnosis of Bone Tumors by Aspiration Biopsy.** SNYDER, R. E., and COLEY, B. L. [Memorial Hosp., New York, N. Y.] *Surg., Gynec. & Obst.*, 80:517-522. 1945.

The results of 567 aspiration biopsies of bone were

studied and tabulated. Eighty-two per cent provided material for the diagnosis of tumor. There were no immediate complications of the procedure and no evidence to suggest more rapid development of metastasis following its use.—J. G. K.

**Benign Bone-Forming Tumours of the Jaws.** WILKINSON, F. C., and POLLAK, E. [Univ. of Manchester, Manchester, England] *Brit. Dent. J.*, 77:341-346. 1944.

Descriptions of cases.—E. L. K.

**Benign Giant-Cell Tumor of the Patella.** ROEMER, F. J. [Vancouver, Wash.] *Am. J. Surg.*, 67:563-566. 1945.

A case report. The age incidence, percentage of recurrence and of metastases, and the method of removal of the tumor in 21 cases gathered from the literature are tabulated.—W. A. B.

**Solitary Eosinophilic Granuloma of Bone.** GREENBERG, B. B., and SCHEIN, A. J. [Mt. Sinai Hosp., New York, N. Y.] *Am. J. Surg.*, 67:547-555. 1945.

Two cases of solitary eosinophilic granuloma are reported: one lesion was in the clavicle of a boy of 15 and the other in the proximal metaphysis of the tibia of a 2½ year old boy. In the first case, resection was carried out, and in the second, curettage was used; x-ray therapy was given postoperatively in both.—W. A. B.

**Lumbar Vertebral Chordoma.** ROBBINS, S. L. [Boston City Hosp., Boston, Mass.] *Arch. Path.*, 40:128-132. 1945.

Case report.—J. G. K.

**Malignant Tumors Arising from the Synovial Membrane with Report of Four Cases.** MORETZ, W. H. [Univ. of Rochester Sch. of Med. and Dentistry, Strong Memorial Hosp., and Rochester Municipal Hosp., Rochester, N. Y.] *Surg., Gynec. & Obst.*, 79:125-132. 1944.

A review of the literature, report of 4 cases, and clinical discussion.—J. G. K.

**Cancerous Synovial Tumors.** HARTZ, P. H. [Pub. Health Service, Curaçao, Netherlands West Indies] *Arch. Path.*, 40:88-93. 1945.

A pathological study of 3 cases. In 2 cases, the tumor originated in the knee joint; in 1 case, in the foot.—J. G. K.

#### PANCREAS

**Radical Pancreatoduodenal Resection for Adenocarcinoma of the Head of the Pancreas.** ERB, W. H. [Univ. of Pennsylvania, Philadelphia, and Taylor Hosp., Ridley Park, Pa.] *S. Clin. North America*, 1370-1376. 1944.

Discussion and report of a case. A successful radical pancreatoduodenal resection is recorded in which the blind end of the duodenum was utilized for anastomosis to the gall bladder.—J. L. M.

**Partial Duodenopancreatectomy. Its Use in the Treatment of Pancreatic Malignancy—Case Report.** LEE, H. C. [Med. Coll. of Virginia, Richmond, Va.] *Virginia M. Monthly*, 72:333-340. 1945.

The evolution of the operative procedure is described and discussed. In the case presented, the patient died on the 13th postoperative day of unknown cause. The authors believe it essential to preserve the pancreatic duct and implant it into the bowel if survival is to be maintained for any great length of time. Comparisons of pancreatctomized individuals with patients having congenital fibrocystic disease of the pancreas are made.—M. E. H.

**Multiple Venous Thromboses with Associated Carcinoma of the Pancreas.** FERRIS, E. B., and RITTERHOFF, R. J. [Cincinnati Gen. Hosp., Cincinnati, Ohio] *Ohio State M. J.*, 41:437-440. 1945.

Report of a case. Many of the thrombi were apparently composed only of fused platelets and were present in both venules and arterioles, in contrast to the pattern of thrombosis of larger veins usually associated with pancreatic carcinoma. The occluded vessels did not contain tumor emboli, nor were they involved in an inflammatory process.—E. E. S.

**Hyperinsulinism in Relation to Pancreatic Tumors.** WHIPPLE, A. O. [Columbia Univ., New York, N. Y.] *Surgery*, 16:289-305. 1944.

The syndrome of hyperinsulinism due to islet-cell tumor of the pancreas has been seen in 27 patients at the Presbyterian Hospital. Surgical excision rather than conservative therapy is advocated for 3 reasons: (1) On conservative treatment patients become too obese for later surgery. (2) Mental deterioration is frequently associated with repeated episodes of hypoglycemia. (3) Many islet-cell tumors are malignant. The surgical technic for removal of these tumors is outlined. A review of the literature since 1929 shows 106 tumors found at autopsy or operation that were considered benign, 28 tumors that were suspected of being malignant, and 15 cases of proved malignancy with metastases.—W. A. B.

**Tumors of the Islands of Langerhans.** RABINOVITCH, J., and ACHS, S. [Jewish Hosp., Brooklyn, N. Y.] *Arch. Path.*, 40:74-77. 1945.

A report of 4 cases and discussion.—J. G. K.

**Islet Cell Tumors of the Pancreas.** BRESLIN, L. J. [Toronto, Canada] *Canad. M. A. J.*, 53:160-162. 1945.

In this case, the chief presenting symptom was obstructive jaundice of fairly long duration. On exploration the case proved to be one of islet-cell carcinoma of the beta type that invaded not only the body but the head of the pancreas and a regional lymph node. The patient manifested signs of dysinsulinism.—M. E. H.

#### PARATHYROID

**Functional Parathyroid Tumors and Hyperparathyroidism. Clinical and Pathologic Considerations.** ALEXANDER, H. B., PEMBERTON, J. DEJ., KEPLER, E. J., and BRODERS, A. C. [Mayo Clin., Rochester, Minn.] *Am. J. Surg.*, 65:157-188. 1944.

A review of the literature and a report of 14 cases of parathyroid tumor producing hyperparathyroidism. In 13 of the 14 cases, the tumor showed cytologic evidence of malignancy. In 12 patients the growth was removed surgically with complete relief of symptoms. The gross and microscopic pathological changes and the divergent clinical pictures are discussed, and the laboratory methods available for diagnosis evaluated.—W. A. B.

**Osteitis Fibrosa Cystica: Differential Diagnosis.** FOX, N., and TAGLIA, V. [Univ. of Illinois Coll. of Med., Chicago, Ill.] *Arch. Otolaryng.*, 37:377-390. 1943.

A case report. Abnormal blood calcium and phosphorus levels returned to normal after removal of a parathyroid tumor.—W. A. B.

**Severe Osteitis Fibrosa Cystica with Parathyroid Tumor.** COBURN, D. E. [Fitch Clin., St. Johnsbury, Vt.] *Am. J. Surg.*, 66:252-258. 1944.

A report concerning a woman of 60, who had had symptoms, chiefly pathological fractures, for 15 years before the finding of a parathyroid adenoma in the superior mediastinum.—W. A. B.

#### PINEAL

**Pinealoma.** DUBLIN, W. B. [Emery Cancer Clin., Los Angeles, Calif., and Tacoma Gen. Hosp., Tacoma, and West. State Hosp., Ft. Steilacoom, Wash.] *Northwest Med.*, 44:86-87. 1945.

A case report. The tumor was thought to have been present from birth, producing internal hydrocephalus. A brief review of the literature on the clinical and pathologic features of this tumor is included.—E. E. S.

**The Endocrinologic Aspect of Tumors of the Pineal Gland.** DAVIDOFF, L. M. [Jewish Hosp. of Brooklyn, Brooklyn, N. Y.] *Surgery*, 16:306-314. 1944.

Cases of pineal tumor are rare and in those reported there has been either precocious pubertal development or no endocrinologic disorder. An instance of the former type, occurring in a 9 year old boy, is reported. The theory that the pineal secretion initiates rather than inhibits puberty is discussed.—W. A. B.

#### MULTIPLE TUMORS

**Multiple Carcinomas. A Case of Four Consecutive Primary Carcinomas with Apparent Cure.** HOLLAND, C. A. [Temple Univ. Hosp., Philadelphia, Pa.] *J. A. M. A.*, 128:356-359. 1945.

A case report. Four metachronous primary cancers occurred in different organs of the body in the same patient within a period of 10 years. These were adenocarcinoma of the right breast, squamous cell carcinoma of the esophagus, adenocarcinoma of the transverse colon, and basal cell carcinoma of the left cheek. All apparently have been cured, 2 by radical surgery and 2 by roentgen therapy. This is one of the first recorded cases of 5 year cure following roentgen irradiation for carcinoma of the esophagus.—M. E. H.

**Multiple Primary Malignant Neoplasms of the Rectum and Sigmoid Colon.** BACON, H. E., and GASS, O. C. [Temple Univ. Med. Sch., Philadelphia, Pa.] *Am. J. Surg.*, 68:240-249. 1945.

Five new cases of multiple neoplasms of the rectum and colon are presented, and cases in the literature are reviewed and tabulated to show sites of the independent neoplasms. One hundred and thirteen references.—W. A. B.

#### MISCELLANEOUS

**Important Factors in the Prognosis and Treatment of the Patient with Malignant Disease.** JACOBS, A. W. [New York, N. Y.] *M. Rec.*, 158:165-166. 1945.

General discussion.—E. E. S.

**Some Long Shot Cases of Cancer that Recovered.** HORSLEY, J. S. [Richmond, Va.] *Virginia M. Monthly*, 72:321-332. 1945.

The object of the paper is to show that in some instances

what appear to be hopeless cases may be cured or at least benefited. Among the 7 cases reported are 3 of mammary carcinoma, 2 of carcinoma of the stomach, 1 of carcinoma of the anterior mediastinum, and 1 of extensive basal cell cancer.—M. E. H.

**Neoplasms Observed in an Army General Hospital.** PRESENT, A. J. [Hoff Gen. Hosp., Santa Barbara, Calif.] *Am. J. Roentgenol.*, **54**:47-53. 1945.

In the first 3,045 admissions to an Army General Hospital, 45 instances of neoplasm were found: 28 were benign, 17 malignant. The latter arose in bone, skin, lip, rectum and sigmoid, eye, brain, pancreas, and testicle. The range of age incidence was 20 to 58 years, the average being 29. Three especially interesting cases are discussed in detail: a dermoid cyst of the mediastinum, a teratoma of the mediastinum, and a fibroma of the stomach.—E. H. Q.

**Case Reports of Barnes Hospital. Clinical and Postmortem Records Used in Weekly Clinicopathologic Conferences at Barnes Hospital, St. Louis.** WOOD, W. B., JR., and MOORE, R. A. [St. Louis, Mo.] *J. Missouri M. A.*, **42**:146-151. 1945.

A case of malignant melanoma involving the brain, heart, lungs, kidneys, and other viscera is presented. The primary lesion may have been present in an eye removed 17 years previously for glaucoma.—M. E. H.

**Bizarre Types and Locations of Lipomas.** CAYLOR, H. D. [Caylor-Nickel Clin., Bluffton, Ind.] *Am. J. Surg.*, **67**:530-535. 1945.

Two cases are reported in which lipomas simulated inguinal and femoral hernia. Other unusual lipomas described were in association with an epigastric hernia and with a thyroglossal duct cyst, and in locations causing pressure symptoms with pain radiating down the back.—W. A. B.

**Neurocytoma of the Adrenal and Neuro-Epithelioma of the Retina.** WISE, J. M. [City Hosp., Mobile, Ala.] *South. M. J.*, **37**:637-640. 1944.

The autopsy findings are presented for a case of neurocytoma of the adrenal with widespread metastatic involvement in a 2 year old girl, and a case of neuroepithelioma of the retina with metastasis to the central nervous system, in a boy of 3 years.—W. A. B.

**Lymphangioma of the Abdomen.** MURBACH, C. F., LEWISON, E. F., and DEIBERT, G. A. *Am. J. Surg.*, **68**:391-397. 1945.

Report of a case in a 35 year old male, in whom the tumor reached the massive weight of 18½ pounds but was not readily palpable because of its jelly-like consistency.—W. A. B.

#### STATISTICS

**The Social Distribution of Cancer of the Scrotum and Cancer of the Penis.** KENNAWAY, E. L., and KENNAWAY, N. M. [Roy. Cancer Hosp., London, England] *Cancer Research*, **6**:49-53. 1946.

One case only of cancer of the scrotum occurred in England and Wales in 30 years in 17 occupations of the highest professional class; this one case was that of a person who in earlier life had belonged to a lower social class.

The number of cases to be expected among the same number of persons, not specially exposed to carcinogenic materials, in the general population would be about 22. Hence it appears that this form of cancer could be eliminated by social factors. As cancer of the penis does not show this social distribution these two types should not be pooled for statistical purposes. Data on the occurrence of cancer of the scrotum in native races and nonindustrial populations would be of great interest.—Authors' summary.

#### CANCER CONTROL AND PUBLIC HEALTH

**Diagnosis of Cancer in a National Medical Service.** STEBBING, G. F. [Lambeth Hosp., London, England] *Lancet*, **249**:65-68. 1945.

Proposals for the organization of the early diagnosis of cancer. "Cancer in this very early stage will only be recognised when it is specially looked for, and we must provide teams of highly trained and experienced specialists who will examine the patient with cancer in their minds. Such a team would have to examine a great many patients who were not suffering from cancer. It is therefore important that it should be composed of men who do not work in cancer alone. The idea of the cancer specialist has more than once been suggested, but I think it should be condemned. The team that examines the patient with these early symptoms must not only be able to decide that the patient has not got cancer, but must be able to decide what is causing the symptoms. Specialists of every kind must therefore be available for consultation with those who have to make the diagnosis. The team must work in a fully equipped hospital, and a large proportion of the patients will have to be admitted at least for a day or two. This will need a considerable number of beds. . . .

"In many parts of the body a five-years survival-rate of more than 60% has been obtained where treatment is early and efficient, and this figure can probably be bettered when methods are further improved and facilities increased. Investigating a large number of patients attending my clinic, I find that the great majority have reported early symptoms to their doctors but have had inadequate investigation, symptomatic treatment, and discouragement from further attendance until some aggravation or complication has emphasised the need for further investigation. In other cases the general practitioner has recognised this need, but has allowed the matter to slide, perhaps for weeks or months before overcoming the difficulties in arranging the necessary investigation. There are still too many hospitals with a long waiting-list in which the patient has to take his turn. . . .

"However perfect we can make the consultant and specialist services, it is important that the general practitioner should make as many examinations as possible himself. We must not come to look on the general practitioner as merely a signpost to a hospital special department. . . .

"The relations between doctor and patient must be intensely personal, and this cannot be so if the doctor is a salaried servant of a public body, however that body may be constituted."—E. L. K.