Clinical and Pathological Reports

ETIOLOGY


The most frequent and important factor in chronic irritation of the oral mucous membrane is probably avitaminosis B. Most patients with mouth cancer, on admission to the hospital, are suffering from avitaminosis B aggravated by the restriction of diet due to the painful mouth condition. There is considerable clinical evidence that the rest of the gastrointestinal tract is affected in these cases by the same deficiency disease, hence gastric and intestinal cancer also may be conditioned by this avitaminosis.—H. G. W.

DIAGNOSIS—GENERAL


The role of the peritoneoscope in determining the operability of intraperitoneal neoplasms is discussed.—R. C. R.


A blood reaction is described that depends upon a reduced capacity of the serum of patients with gastric cancer to absorb iodine. Thus, when Lugol's solution is so treated, many of whom had advanced cancers, could not be estimated so early, 26 patients appeared free from tumor for periods of 1 to 7 years.—M. J. E.


Endoscopic examination of the larynx, bronchi, and esophagus is discussed in relation to the incidence and diagnosis of cancer at these sites.—R. C. R.

RADIATION—DIAGNOSIS AND THERAPY


The storage of radioactive iodine was studied in a patient with metastatic carcinoma from whom the primary growth (adenoma malignum) had been removed 35 years previously with no evidence of recurrence. A tracer dose of radioactive iodine was taken up more by a metastasis in the right lower femur than by the thyroid itself. Other metastases, previously irradiated with deep x-ray, failed to take up any appreciable amount of iodine.

The fact that the femur fixed a large proportion of the material suggested the possibility of using radioactive iodine therapeutically. Accordingly a dose of 10 millieuries of radioactive iodine was given. The femoral metastasis took up about 30% and the thyroid gland about 6%.

Four weeks following administration the metastasis had lost about 85% of the radioactive iodine, while the thyroid still contained the original amount. A tracer dose then showed prompt uptake by the thyroid but no appreciable uptake by the femoral metastasis. This would suggest that at least the thyroid-like function of the metastasis had been impaired.—M. B.


A note on improvements in construction of the apparatus, certain technical problems, and the results obtained by the use of this form of therapy.—R. C. R.


The author discontinued extensive dissection of the neck in cases of cancer of the lip or oral cavity associated with metastases to the cervical lymph nodes. Instead, he employed radium needles inserted in the primary growth and about the enlarged nodes judged to be involved by cancer. The use of this form of therapy.—R. C. R.


A general discussion with emphasis upon preoperative irradiation.—R. C. R.


Description of the treatment of cancer of the cervix with preliminary roentgen radiation and application of radium by the interstitial and intracavitary method. The number of patients (53) and the length of time involved in many of the cases, as well as the fact that many of the patients had very advanced carcinoma, make it impossible to give a picture in percentages that adequately indicates the value of the method. The immediate response to treatment has been better than with the intracavitary method previously used.—H. G. W.
uptake chiefly by growing bone and by osteogenic tumor tissue. Various considerations seem to justify the therapeu
tic use of radioactive strontium in certain bone tumors.
—H. G. W.

WARREN, S., and DUNLAP, C. E. [Harvard Med. Sch.,
Boston, Mass.] EFFECTS OF RADIATION ON NORMAL
TISSUES. III. EFFECTS OF RADIATION ON THE BLOOD
AND THE HEMOPOIETIC TISSUES, INCLUDING THE
SPLEEN, THE THYMUS AND THE LYMPH NODES. Arch.
Path., 34:656-659. 1942.

An extensive review.—H. G. W.

NERVOUS SYSTEM

BAKER, A. B. [Univ. of Minnesota, Minneapolis, Minn.]
METASTATIC TUMORS OF THE NERVOUS SYSTEM. Arch.
Path., 34:450-537. 1942.

A clinicopathologic study of 114 tumors metastatic to
the nervous system is reported. Ninety-two tumors were
investigated histologically. This type of lesion is much
more frequent than is generally suspected. Of all intra-
cranial neoplasms studied at the University of Minnesota, 17.9% were metastatic. The majority of intracranial
metastases are probably hematogenous. The most common
primary sources of the metastases in this series were the
lung, breast, gastrointestinal tract, and kidney. Histo-
logically, tumor cells could be seen within the arteries of
the brain. These cells by their growth obliterated the
vessels and produced the early neoplastic lesions. In most
cases there was a remarkable resemblance between the pri-
mary lesion and the metastases in the nervous system.
Cerebral or cellellar metastases often produced softening
of the surrounding brain tissue but usually stimulated little
or no glial reaction. Toxic changes were not observed in
tissues not directly involved by the tumor elements, and
remote brain changes were not seen. When meningial
metastases secondarily invaded the brain it was usually
along the perivascular spaces of the meningeal vessels as
they penetrated the organ.—H. G. W.

Chicago, Ill.]: RESULTS OF CONSERVATIVE TREATMENT
IN CERTAIN CEREBRAL GLIOMAS. Am. J. Roentgenol.,
47:50-55. 1942.

Cerebral gliomas present a poor prognosis regardless
of the treatment. Attempts at radical removal carry a
high operative mortality, seldom if ever result in cure,
and often involve serious impairment of cerebral function.
The authors advise conservative management, usually in-
volving decompression followed by roentgen therapy,
as the best means of relieving distress and prolonging the
useful life of the patient. Heavy roentgen therapy often
brings symptomatic relief even in this unfavorable group
of tumors. Conservative treatment generally offers some
two years of survival with comparative comfort and
preservation of faculties.

In discussion, Dr. Gilbert Horrax presents the case for
radical surgery in cases of glioma. In his experience,
radiation therapy is of questionable benefit.—C. E. D.

STIRIS, J. H., and ANGRISt, A. [Queen's Gen. Hosp.,
Jamaica, N. Y.]: CHONDROBLASTIC MENINGIOMAS. Am. J.

A case of chondroblastic meningioma, the 26th recorded
in the literature, is presented with a discussion of the origin
and the clinical aspects of the disease.—H. G. W.
sarcoma. The tumor is frequently bilateral and sometimes associated with sarcoma of the cutis. It is probably metastatic in nature and constitutes the majority of malignant neoplasms which spread to involve the testicle.—H. G. W.


Urinary hormone excretion was investigated in 13 patients with tumors of the testicle and in 6 patients with nonneoplastic lesions of this organ. The test was accurate in determining whether or not a given swelling was neoplastic.—R. C. R.


A case report with discussion and a brief review of the literature.—R. C. R.


A rare case is reported.—H. G. W.

URINARY SYSTEM—MALE AND FEMALE


A case report.—H. G. W.


Pyelographic examination in a 51 year old man revealed a filling defect in the right renal pelvis. Right nephrectomy and ureterectomy were done. A benign polyp was found in the pelvis and a 0.5 cm. early renal cell carcinoma in the cortex of the kidney. The tumors were considered to be independent primary growths.—C. E. D.


A renal tumor containing elements of malignant papillary cystadenoma and papillary carcinoma with clear cells is reported. This case, with others that have been recorded, illustrates the transition from renal adenoma to malignant cystadenoma and eventually, in some instances, to papillary carcinoma with clear cells.—H. G. W.


Metastatic involvement of the skeleton is common in all cases of carcinoma of the bladder in which widespread metastases occur, especially if the tumor is of the papillary type. However, cases with large bone metastases dominating the clinical picture are rare; four such cases are reported.—H. G. W.


Renal ectopia is itself an unusual condition, and no instance of carcinoma in ectopic kidneys, previous to the 2 cases in this report, has been found in the literature.—H. G. W.


A case is added to the few such tumors already reported.—H. G. W.


A case is reported.—H. G. W.


Embryological considerations, the widely separated origin of the metanephros and the adrenal cortex, as well as the numerous renal cortical adenomas of adrenal cell character found far from the upper pole of the kidney, speak against the old theory of misplaced adrenal cells as the origin of the Grawitz tumors. The presence of characteristic hyaline droplets and hemoglobin is functional evidence of the renal tubule character of the tumor cells. The histologic morphologic findings tend to support the conception that in early fetal times, when the mesenchyma is still pluripotent, the matrix of the renal and of the adrenal cortex possesses the potency to differentiate into both renal and adrenal tissue, this potency being extinguished during fetal development. The awakening of latent potentialities occurs frequently during neoplastic proliferation of renal character and may produce tissues of a hybrid type; i.e., cells with combined renal and adrenal characteristics. This can serve as an explanation for Grawitz tumors with cystic papillary structures corresponding to tumors originating from renal cortical tubules but containing polyhedral fat-storing cells resembling cells of the adrenal cortex. —H. G. W.

ORAL CAVITY AND UPPER RESPIRATORY TRACT


In this case squamous and columnar cell epithelium and mucous membrane with the components of the stomach wall were included in the cyst. An embryonic cell rest was considered in attempting to explain the etiology.—R. C. R.

INTRATHORACIC TUMORS—LUNGS—PLEURA


Carcinoma of the lung has not been detected in a certain colored hospital in a single case in 19 years, but 3 examples in colored men are reported from a mixed service in Chicago.—H. G. W.
HEART


Among 4,050 necropsies, there were 640 cases of cancer. In 35 of the cancer cases the heart was secondarily involved but in no instance was the cardiac metastasis diagnosed before death.—H. G. W.

GASTROINTESTINAL TRACT


Five hundred gastric lymphosarcomas have been reported since the original description of this condition in 1816. In the records of the Cook County Hospital the incidence of this disease is about one in every 60 cases of carcinoma of the stomach. Pathology and treatment are briefly discussed.—R. C. R.

LIVER


A report of a tumor measuring 20 x 15 x 10 cm, successfully removed by operation.—H. G. W.


A report of 2 cases of liver carcinoma, one with calcification, in 18 month old infants.—H. G. W.

BONE AND BONE MARROW


A cowboy received an injury to the fibula, and a sarcoma developed within a year at the site of the injury.—H. G. W.


A case report.—R. C. R.


Report of a tumor located in the first sacral vertebra. The growth was benign and was removed successfully by operation.—H. G. W.


Leukemic manifestations in the blood of patients with myeloma are unusual. In the cases recorded, death resulted from urinary complications secondary to a transverse lesion in the lower dorsal cord. The presence of degenerative lesions in the nervous system was proved at necropsy to be secondary to an extradural focus of myeloma involving the vertebrae. The peripheral leukocytes numbered as high as 45,000, of which 42% appeared to be abnormal plasma cells. Myeloid deposits were likewise found in the liver.—M. J. E.


Report of the 42nd case on record.—H. G. W.


Report of a case with 5 year survival following biopsy and intensive irradiation.—H. G. W.

LEUKEMIA, LYMPHOSARCOMA, Hodgkin's Disease


The unusual disease described is a chronic, relatively mild type of leukemia, occurring at any age, and, because of the inconclusive nature of the blood smear and clinical evidence, difficult to diagnose without recourse to a sternal puncture. The authors report their observations on 22 cases. Fatigue, dependent upon the associated anemia, and pain in the skeletal system or joints are the common symptoms. Examination of the peripheral blood discloses, in addition to the secondary anemia and thrombocytopenia, a normal or subnormal number of leukocytes. An apparent increase in a mononuclear type of cell depends upon the presence of a considerable number of paramyeloblasts. Corroborative evidence is found in the homogeneous leukemic sternal marrow present in all patients. Enlargement of the spleen, lymph nodes, or liver is not a prominent feature of the disease. Spontaneous remissions occur commonly, but the process eventually proves fatal.—M. J. E.


The clinical course of the disease is outlined; it may terminate with the picture of lymphosarcoma, lymphatic leukemia, or Hodgkin's disease. Two cases are reported.—H. G. W.


The cells of 3 tumors of the lymphosarcoma group were studied by means of the supravital staining technic in conjunction with the ordinary histologic methods. Certain features of the tumor cells, inconstant or unnoticeable in the ordinary microscopic sections, are rendered prominent by this technic and it is therefore suggested that supravital staining be used in combination with the ordinary histologic methods in the study of tumors of the lymph nodes and bone marrow.—H. G. W.


An analysis of 209 cases of leukemia showed an almost equal division into the 4 types; namely, acute and chronic...
lymphatic, and acute and chronic myelogenous. In general, patients with chronic forms of the disease have larger spleens than those with acute forms, and those dying in leukaemic stages tend to have smaller spleens than those in whom pronounced leukocytosis persists to the end. If the neoplastic nature of all true leukemias is accepted lymphosarcoma can be regarded as essentially the same disease as lymphatic leukemia; namely, a neoplasm of the lymphocyte.—H. G. W.


This is usually a primary disease of the abdomen or of the abdomen and thorax combined. Whether it may arise in the spleen has not been determined. It may persist as an independent disease or may undergo transformation into polymorphous cell sarcoma. Clinically it is usually mistaken for Hodgkin's disease but the histological picture is entirely different so that diagnosis is readily made by biopsy. The disease is much more susceptible to x-rays than Hodgkin's disease, even when it has undergone sarcomatous transformation. In its earlier stages it is a comparatively innocent disorder. Even the sarcomas derived from it may likewise pursue a comparatively innocuous course for a time, but eventually they produce widespread destruction of tissues, including even invasion of bone. The disease may also undergo transformation into a variety of leukemia. There is apparently a series of disorders of the lymphoid system, including giant follicular lymphadenopathy, Hodgkin's disease, certain forms of lymphoid leukemia, lymphosarcoma, and the immature large cell sarcoma of lymph nodes, that all begin as a hyperplasia of the lymph follicle.—H. G. W.

SPLEEN


Among 640 persons with cancer, coming to necropsy, there were 23 instances (3.6%) of secondary involvement of the spleen. Of the splenic growths, 15 were metastatic and 8 were due either to implantation from generalized abdominal seeding or to direct extension. The explanation for the paucity of splenic metastasis is yet to be found.—H. G. W.

PINES, B. and RABINOVITCH, J. [Jewish Hosp., Brook-
lyn, N. Y.] HEMANGIOMA OF THE SPLEEN. Arch. Path.,
34:497-509. 1942.

Only 42 cases have been reported, including the au-
thor's 6 new cases. Of these 36 were cavernous hemangioma, 1 angiomia simplex, 3 hemangioma telangiectodes, and 2 hemangioblastoma. In 40% the tumors grew to large proportions but many were small and remained undiagnosed. Distribution in the sexes was equal, but the large tumors were mostly in females. Presumably, some congenital anomaly or developmental defect is responsible. In one case an adrenal tumor had metastasized to the hemangioma in the spleen.—H. G. W.

Adrenal


Another case is added to the 6 already in the literature.—H. G. W.


The symptoms, diagnosis, and treatment in cases of tumors of the adrenal medulla and cortex are described.—J. L. M.


A case report.—H. G. W.


An analysis is made of the 73 cases reported in the literature. In 37 instances the disease occurred in subjects over 15 years of age, and in 36 it occurred in younger persons. An additional case is reported.—H. G. W.

PituItary


A study of 113 tumors corresponding in structure with the pars intermedia. These tumors usually lie above the diaphragm of the sella turcica, although frequently they extend down to compress the hypophysis. It cannot be said that the tumor actually springs from the thin layer of cells that forms the ordinarily recognizable pars intermedia, but rather, perhaps, from that same type of cell, which is distributed along the stalk or even up into the pars tuberalis. Microscopically the structure is remarkably uniform, the cells tending to be rather cylindrical in form around capillaries, and often there are irregular spaces between the strands of cells. Nothing in the way of specific granules can be brought out by special stains. The tumor must be differentiated from chromophobe adenoma, which usually arises in the anterior lobe of the hypophysis and is composed of cells differently arranged from those in the suprasellar tumors. The symptoms are usually disturbance of vision with bilateral hemianopia and often complete blindness of one eye, loss of libido, beginning obesity, and other symptoms resembling Fröhlich's syndrome. In the same position adamantinomas also are occasionally found.—H. G. W.

PERKINS, C. W. [Norwalk, Conn.] CRANIOPHARYNGI-

A case report with discussion.—R. C. R.


The course of Cushing's disease was followed for 8 years prior to the patient's death. All the characteristic
manifestations, with the exception of osteoporotic changes, were present, and a basophilic pituitary adenoma was found at necropsy.—M. J. E.

THYROID


The estimation of malignancy in a surgically removed nodular goiter, or in a biopsy of a nodule from it, is, on the whole, a thankless task for the pathologist. Even if the histological structure seemed completely benign or even normal (struma parenchymatosa or colloides) the thyroid tissue may, in the long run, show malignant characteristics in the form of metastases at a distance, especially in the bones. Such metastasizing goiters are described here under the name of malignant adenoma.

The pathologist can offer a positive contribution to the estimation of the malignancy of a nodular goiter in the case of goiters with a papilliferous growth. Experience teaches that these papilliferous tumors of the thyroid often show local signs of malignancy in the form of infiltration into adjacent organs, metastases in the neighboring cervical lymph glands, and local recurrence. Distant metastases are exceptional in these cases.

The clinical and pathological diagnosis of malignant adenoma is generally hardly possible until distant metastases are recognized. The clinical diagnosis of probable papilliferous thyroid tumor (struma papillaris) can sometimes be made on the grounds of close adhesions between the untreated tumor and adjacent organs, and can be confirmed by histological examination. In other cases microscopic examination unmasks the true nature of the tumor before it can be recognized clinically. Struma papillaris often develops in aberrant thyroid tissue lying in the side of the neck, and is then easily mistaken for tuberculosis of the cervical lymph glands, a tumor of a cervical lymph gland, lymphogranuloma, or a salivary gland tumor. Struma papillaris must be treated as a malignant tumor.—Author's abstract. (A translation supplied by the Royal Society of Medicine.—E. L. K.)


The findings on physical examination, blood studies, and x-ray examination in cases of parathyroid tumors with hypercalceemia were presented. A case report of this type of tumor was included. The anatomy of the parathyroid and its surgical approach were considered.—R. C. R.


A case report with postmortem studies.—R. C. R.


A case is described of a diffuse adenocarcinoma of the thyroid in a man of 81. The tumor recurred after operation, causing death in 4½ months.—H. G. W.

MISCELLANEOUS


The cutaneous manifestations in two patients with internal neoplasms are described; a survey of cutaneous manifestations accompanying malignant tumors of internal origin is presented and the possible relation of the lesions is discussed.—H. G. W.

CALLISTER, A. C. [Salt Lake City, Utah] HYGROMA COLLI CYSTICUM. Rocky Mountain M. J., 36:562-564. 1941.

A short discussion of the literature, pathology, and treatment of the disease, with the report of a case.—R. C. R.


The data that are used to support the claim that lung cancer has increased faster than other forms of cancer are inadmissible for that purpose, since it is not known what proportion of lung cancer cases were unrecognized formerly or are so today. It can be stated only that diagnosed lung cancer is increasing at a rate which appears to be faster than that of other diagnosed cancers. Suggestions are made as to precautions to be taken in analyzing statistics on lung cancer. It is recommended that the search for environmental factors supposed to be the basis of the unduly great increase in lung cancer should await further proof that the increase in incidence has been as spectacular as has been stated.—H. G. W.


A clinical report of 7 cases.—H. G. W.

SYMPOSIUM ON LARGE BOWEL CANCER. FROM 16TH CLINICAL CONGRESS, CONNECTICUT STATE MEDICAL SOCIETY. Connecticut M. J., 5:890-896. 1941.

Papers were presented by J. F. Burke, W. Mendelsohn, and A. W. Oughterson.

An analysis of a series of cases in seven hospitals of three Connecticut cities indicates that delay in operation is the factor most responsible for a poor prognosis in carcinoma of the large bowel and rectum. The data presented on operative mortality, operability rate, and operation rate compare well in general with those supplied by various other clinics. It is suggested that more patients whose tumors are still operable be submitted to radical procedures, and that both physicians and surgeons attempt to reduce the delay in diagnosis and operation.—R. C. R.


A case report with discussion of the invasion and dissemination of carcinomatous cells into and through the fallopian tubes to the abdominal cavity.—R. C. R.