
The author points out certain facts and uncertainties that argue against adopting the suggestion of Hammatt (Science, 103:714. 1946) that women with a family history of breast cancer should not nurse their children. —R. B.


A dba mouse mammary carcinoma has been cultivated continuously in eggs for 2 years and 7 months, comprising 80 transplant generations. During that period there has been no observable change in the tumor histology. The stroma of these tumors is made up of chick tissue. Transplants of this egg-grown carcinomatous tissue in mice frequently resulted in the growth of mixed carcinomasarcomas. In a series of 186 experiments involving the use of 2,440 mice, it was found that 38% of the tumors from the first transplant generation in mice contained sarcomatous tissue. Subsequent generations of mouse transplants showed stromal malignancy in 50 to 75% of the experiments. The original mammary carcinoma was completely replaced by sarcomatous tissue in 11 of the 186 experiments. The sarcomas produced in this manner were of several cell origins and had varying growth rates and cytological characteristics. Many contained giant cells, necrotic debris and unusual mitotic aberrations. When egg-grown tumor tissue is implanted back into the mouse, the stroma of the resulting tumor is composed of mouse tissue. It is concluded that the induction of malignancy in the normal cells of the stroma is due to contiguity with the cancer cells of the implant and consequent infection with the tumor agent or virus. The process is considered to be essentially the same as that involved in the production of malignant tumors by injection into the mouse of cell-free extracts of materials from tumor-bearing eggs.—Authors' abstract.


Diethylene glycol at concentrations of 1, 2, and 4% in the diet of Osborne-Mendel rats (12 per group) for 2 years produced toxic effects. Similar doses of triethyleneglycol produced no toxic effect. Diethylene glycol retarded the growth rate of rats considerably at the high concentration but was statistically significant only during the second half of the experiments. The original mammary carcinoma most frequently resulted in the growth of mixed carcinomasaarcomas. Subsequent generations of mouse transplants showed stromal malignancy in 50 to 75% of the experiments. The original mammary carcinoma was completely replaced by sarcomatous tissue in 11 of the 186 experiments. The sarcomas produced in this manner were of several cell origins and had varying growth rates and cytological characteristics. Many contained giant cells, necrotic debris and unusual mitotic aberrations. When egg-grown tumor tissue is implanted back into the mouse, the stroma of the resulting tumor is composed of mouse tissue. It is concluded that the induction of malignancy in the normal cells of the stroma is due to contiguity with the cancer cells of the implant and consequent infection with the tumor agent or virus. The process is considered to be essentially the same as that involved in the production of malignant tumors by injection into the mouse of cell-free extracts of materials from tumor-bearing eggs.—Authors' abstract.

Clinical and Pathological Reports

Clinical investigations are sometimes included under Reports of Research

Bone and Bone Marrow


At the dosage levels used neither compound affected food consumption. Diethylene glycol produced lesions in the lower urinary tract related in extent to dosage. Bladder stones of calcium oxalate occurred in all except 1 rat on the 4% concentration, and in lesser numbers in those on the lower concentrations. Bladder tumors occurred in about half of the rats on the 4% and 2% concentration, and in none of the 1% concentration. The tumors were papillary, benign, and intramural. In some cases they showed varying degrees of malignancy. Kidney lesions at the 4% dietary level of diethylene glycol were moderate to marked, at 2% slight to moderate and at 1% slight or absent.

Hepatic lesions paralleled the dosage of diethylene glycol with a moderate amount of damage at 4%, a small amount at 2%, and almost none at 1%. Very little liver damage was visible grossly.

From this and other work the authors conclude that in the ethylene glycol series the chronic oral toxicity to rats decreases with an increase in molecular weight of the glycols.—F. L. H.


The author reviews techniques and applications of methods for histological demonstration of enzymes by routine laboratory procedures. It is concluded that the importance of these reactions lies not alone in their diagnostic use but also in the fact that they may open up a new avenue of research in experimental pathology.—S. H. D.


The content of certain vitamins in mouse epidermis following painting with methylcholanthrene in benzene solution was studied by bioassays using mutant strains of Neurospora. The levels of inositol, choline and p-aminobenzoic acid did not change significantly but the biotin content rapidly decreased to about 60% of normal. There was a slight increase in the pyridoxine content after treatment with the carcinogen and with benzene alone.—H. J. C.


This is a plea for a coordinated, large scale, government-supported attack on the cancer problem.—R. B.

Treatment of the various forms of tumor (chondrosarcoma, osteogenic sarcoma, fibrosarcoma) is discussed. The 5 year cure rate is roughly 33%.—F. L. K.


A case in which primary plasmocytoma remained localized in the right ilium for 4½ years. Subsequently multiple myelomatosis developed and caused death 5 years after the first symptoms. The literature on this subject is summarized.—F. L. K.


A case of multiple myeloma is presented in which the diagnosis was first suggested by the presence of plasma cells in the routine blood smear examination. The diagnosis was confirmed by bone marrow studies, and subsequently, massive plasma cell invasion of the peripheral blood occurred. The relationship of plasma cell leukemia and multiple myeloma is discussed.—A. C.


Description of a case.—E. L. K.

Blood Vessels


A patient presented the unusual picture of two painful glomus tumors associated with 12 painless tumors. The latter lesions contained all the essential features of a glomus tumor. It has been suggested that these tumors are of the nature of telangiectases. Nerve elements were found abundantly in both types of lesions. Surgical excision of the painful tumors led to immediate alleviation of trigger-like pain.—Author's summary.—J. C. K.


The case reported is an example of a comparatively mild form of dyschondroplasia with multiple hemangiomata. The patient, a 27 year old soldier, was returned to duty for limited service. No member of his immediate family had had similar tumors. The syndrome is congenital but there is no evidence that it is inherited.—M. H. F.

Leukemia. Lymphosarcoma and Hodgkin's Disease


This case is added to the literature because it typifies acute monocytic leukemia as to course, pathology and findings. Monocytic perivascular infiltration of the brain, however, is an uncommon finding.—M. F. H.


The discussion is based on a study of 225 cases of Hodgkin's disease encountered during an 11 year period.—J. C. K.


The cases are classified in 3 ways: (a) according to the clinical course, as acute or chronic leukemia; (b) according to the type cell in the peripheral blood, bone marrow, and tissues, as stem cell leukemia (28 cases), myelogenous leukemia (53 cases), lymphatic leukemia (37 cases), and monocytic leukemia (5 cases); and (c) as leukemic or alveocytic disease.—J. G. K.


The use of radioactive phosphorus in the treatment of 11 selected patients with Hodgkin's disease in the dosage and under the conditions described has not proved of therapeutic value. Depression of hemocytopoiesis, with special emphasis on thrombocytopenia, has been noted.—Author's summary.—J. G. K.


Report of two cases in which the gross appearance of the lesion was such that it was misdiagnosed as a primary ovarian neoplasm.—J. G. K.


A case is reported in which the areas of most extensive lymphosarcomatous involvement at autopsy were almost without exception those areas not subjected to radiation previously. The author believes that treatment to the visceral gland-bearing areas lying chiefly along the midline of the thorax and abdomen should be included, even in the absence of symptoms referable to these regions.—V. J. L.


In a series of 406 cases of Hodgkin's disease, 13% showed symptoms referable to the gastrointestinal tract and in a small number of these the tract was the primary site of the lesion. Such a primary site represents a distinct entity, and lends itself to surgical treatment. The rest of the cases on the other hand had either secondary gastrointestinal involvement, or extrinsic disease. These conditions usually occurred late in the course of the illness and were found most frequently in patients who had
had the disease for a long time. Symptoms may resemble appendicitis, and may be relieved by x-ray therapy.—E. H. Q.

**ADRENAL**


A report of a case, with discussion.—J. C. K.


A report of 3 cases of adrenal cortical tumor is given. Clinical manifestations common to all (females) were premature sexual development, virilism, rapid growth, and evidence of a disturbance of adrenal function. The gonads were normal, and there was no evidence of tumors in the region of the third ventricle or pineal gland. No increase in androgens or estrogens was observed. Pseudohemaphroditism was eliminated from the diagnosis because the patients were normal at birth.

The abdominal incision is regarded as preferable in the approach to a suspected adrenal tumor. Both adrenals can be examined as well as the ovaries. Thorough exploration affords valuable information that would be lost if the lumbar route were used.—A. K.


Precocious development of female primary and secondary sexual organs and characters to an extensive degree is described in a 5 year old girl. Titters of urinary gonadotropins, estrogens, and 17-ketosteroids exceeded the range observed in small children. Both ovaries contained many yellow masses which were interpreted as adrenal rests. Similar yellow masses studied the anterior and posterior surfaces of the uterus and broad ligaments and the pelvic peritoneum. Considerable clinical and laboratory data are appended.—J. B. H.


A male infant, 9 months of age, was observed to have precocious development of the external genitalia and an exceptionally fast rate of somatic maturation and bodily growth. Upon autopsy the central nervous system, adrenal glands and testes were ascertainment to be normal. The thymus was markedly involuted and had great numbers of calcified Hassel bodies. The pathological feature considered to be responsible for this precocity was a presacral teratoma that contained clumps of cells considered to be histologically similar to those of the adrenal cortex or liver, with somewhat less of a resemblance to interstitial cells of the testis. An extract of 55 gm. of the tumor was found to contain an assayable amount of androgenically active material in contrast to renal tissue which was used as a control substance in the assay.—J. B. H.

**PANCREAS**


A case of cystadenoma of the pancreas successfully treated by extirpation is reported in detail. Difficulties in the diagnosis of a pancreatic cyst are illustrated by this case and a discussion of the diagnostic investigation of the disease is presented. It is pointed out that a progressively enlarging mass in the upper abdomen should bring to mind the possibility of a pancreatic cyst. The surgical treatment is extirpation or, if extirpation is not feasible, marsupialization is the procedure of choice.—A. C.


In 84% of 83 cases of carcinoma of the pancreas the pancreatic nerves had been invaded. The incidence of pain was 76% in these 83 cases. It suggests that neural invasion may be one of the causes of pain, although other mechanisms may have been responsible. Seventy-one per cent of the patients had jaundice. The common bile ducts of 25 of the jaundiced patients were found to be patent. It was postulated, therefore, that a physiologic block resulting from invasion of the wall of the duct and consequent inhibition of the contractive ability of the common duct occurred. The number of cases in which there was metastasis elsewhere than to the neural spaces was determined. No significant conclusions as to the association between metastasis and neural invasion could be drawn. The stages of malignancy of the tumors were determined, and there seemed to be no correlation between the grade of malignancy and the frequency of neural invasion.—J. G. K.


Case report. The rarity of the successful surgical cure of these cases warrants the presentation of this patient who has been free of symptoms for 5 years. Benign adenomas of the islet cells of the pancreas causing the hypoglycemia by hyperinsulinism, should be separated in reports from the malignant tumor of the pancreas with a similar symptom complex but from which the treatment differs radically.—M. E. H.


The present study is a review of 27 cases of verified islet cell adenoma (benign or malignant) of the pancreas, and includes all cases seen during the past 12 years on the services of the Neurological Institute (14 cases), on the medical (8 cases) and surgical (3 cases) services of Presbyterian Hospital, and at the Harkness Pavilion (2 cases). The tumors were all verified at surgery and by subsequent histological study. The clinical data are arranged in four groups: (1) autonomic-visceral, (2) somatic-neurological, (3) "psychomotor" manifestations,
and (4) seizures and seizure fragments. Glucose tolerance curves in a majority of the cases were diabetic in pattern; flat curves were the exception. The EEG findings were those of patients whose cerebral metabolism is depressed. In addition suggestive "convulsive" patterns such as spike and wave bursts were found in most of the patients even in those with no clinical convulsive seizures. —M. H. P.


In one case, carcinoma of the islands of Langerhans was found at autopsy. In the other, an adenoma of the islet cells in the head of the pancreas was successfully removed. The diagnosis, treatment, and pathology of spontaneous hypoglycemia are reviewed with 34 references.—M. H. P.

Pineal

Report of a case.—J. G. K.

Parathyroid

Only one other record of a bilateral tumor has been found in the literature. The tumor consisted of a peculiar type of columnar epithelium with intracyctic papillary processes and an abundant lymphoid stroma.—E. L. K.

Thymus

Operative technic is described.—J. G. K.

Thyroid

Almost all malignant goiters are nodular and occur chiefly in the decades between 40 and 70 years. Malignant growths appear in aberrant thyroid tissue at an earlier age. The three cardinal signs of malignant goiter are hoarseness, fixation, and hardness. Surgical therapy is indicated in all nodular goiters before these symptoms are manifest because of the high incidence of malignant change in nodular glands, particularly in men. Statistics from the University of California Hospital through 1943 showed 3,539 nodular goiters in a series of 5,439 thyroids removed. Of the nodular goiters, 168 were malignant (4.8%). Roentgen therapy may be of value postoperatively.—W. A. B.


Report of 4 cases where the development of a goiter coincided with the appearance of a cancer of high grade malignancy: a nevo-carcinoma, and a carcinoma of the breast, the cervix, and of the thyroid.—C. A.

Parathyroid

Two cases are reported of probable acute hyperparathyroidism not recognized during life. In one patient an adenoma of the parathyroid gland was found at autopsy, and in the other primary hyperplasia of the parathyroid glands was present. Diets high in calcium and phosphorus produced in each instance an exacerbation of symptoms: nausea, vomiting, lethargy, prostration and azotemia.—M. E. H.


Report of a case.—J. G. K.

Miscellaneous

The swelling of one or more lymph nodes in the left side of the neck at the angle between the posterior border of the sternocleidomastoid and the superior border of the clavicle is considered by many physicians to be an important sign of gastric cancer. Actually, it may indicate the existence of thoracic or abdominal cancer or even a non-neoplastic disease; in cases of cancer the swelling may be inflammatory but without cancer metastases. The anatomical and clinical features are discussed in the paper. A consideration of the published data and 2,704 cases of cancer seen at the Anticancer Center of Toulouse lead to the conclusion that only in very rare instances is the hypertrophic Troisier's ganglion the first clinical symptom of gastric cancer and it is therefore of little value for early diagnosis.—C. J. L.


A case of pararenal tumor in a 2 month old infant is reported. Successful removal, with survival 4 years afterwards is of clinical interest. Histological examination revealed tissue derivations of all germ layers in varying degrees and suggests that these tumors originate without the embryonic germinal fold.—M. E. H.
A fibrolipoma of the cheek which can be protruded through the mouth by the patient is reported.—E. L. K.

Description of cases.—E. L. K.


Avoidable Cancer. Rovis, P. R., Lancet, 2:98. 1946.
A valuable discussion of carcinogenic factors.—E. L. K.

A general discussion, and a tabulation of 45 cases, with photographs.—M. H. P.

Clinical discussion based on an analysis of 214 cases.—J. G. K.

A case report.—R. A. H.

CANCER CONTROL AND PUBLIC HEALTH

Of the money raised 40% will go to the National Cancer Society and 60% will remain in the State. A basic audit of the cancer needs and facilities in the State will be made. Hospitals and communities have been invited to apply for funds for improving local clinics and cancer programs.—M. F. H.

A plan for the organization of the diagnosis and treatment of cancer is presented.—E. L. K.

The plan of organization for the tumor clinic associated with a small hospital is presented.—M. E. H.

The Chicago Cancer Prevention Clinic was opened at the Women and Children's Hospital on May 13, 1943, for the purpose of providing for and encouraging periodic examinations for the early detection of cancerous or precancerous conditions. No treatments are given by the clinic and the patient is sent to her own physician if suspicious lesions are found. A report of its work and some statistics on the types of tumors detected so far are given.—E. B. B.

This is the first in a series of articles on the cancer program in New Jersey. The importance of local cancer clinics is stressed. The organization and operation of tumor clinics of 3 distinct types are outlined. Rules and regulations applicable to cancer clinics are proposed. The cost of establishment, and the equipment necessary is discussed.—M. E. H.

After the first cancer prevention clinic was opened in 1937 in New York by Dr. Elise L'Esperance, the idea of such service has spread rapidly until such clinics now exist in many of the larger cities throughout the country. Their function is to give a complete physical examination, and the patient referred to his own physician for treatment if evidence of cancer is found. There is but one requirement, that the examinee shall not be under medical treatment at the time of admission to the clinic.
Careful study of the records of 9 clinics reveals that 50% of the persons examined were found to have benign lesions needing surgical or medical care; 25% had precancerous lesions.
The discovery and treatment of cancerous and precancerous conditions is important, but equally important is the educational value of the clinics; for, after receiving a thorough physical examination, patients leave convinced of the importance of these check-ups and are ready to go on and convince others of their value.—E. B. B.