presented. The nature of the active substances is unknown.—M. H. P.


A number of mouse and rat tumors including a bronchogenic carcinoma, sarcoma 180, an ovarian embroyoma, an experimentally induced hepatoma, 2 mammary carcinomas, and sarcoma 39 were successfully transplanted to certain sites in alien species. The heterotransplanted tumors, in contrast to a group not transferable in this manner, possessed the ability to invade and metastasize in the parent strain and to survive and grow in unrelated strains. On this basis it was concluded: first, that in mice, as well as in man and in the rabbit, invasion marks the attainment of autonomy; and second, that from the viewpoint of autonomy true homologous transfer and heterologous transfer possess the same significance.—Authors’ summary.


Sarcomatous transformation of the stroma is a common occurrence during the transplantation of mammary carcinomas of high cancer strain mice. The histological evidence of sarcomatous change was confirmed by study of the growth characteristics of tumors in vitro before and after they had undergone transformation. In tissue cultures mammary carcinomas exhibited the typical epithelial growth pattern, with few cells of the monocyte-macrophage type, and stimulated fibroblastic growth. The sarcomatous nature of the transformed tumors was indicated by their growth pattern and general cellular morphology, resembling fibroblasts; by their high content of cells of the monocyte-macrophage type; and by their inhibiting fibroblastic growth. Of the factors responsible for the frequency of sarcomatous change in the high mammary cancer strains, special significance is attributed to: (a) the considerable stimulation of fibroblastic growth by the carcinoma cells; and (b) stromal cells surviving transplantation because the cells of the graft are homozygous with those of the new host.—Authors’ summary.


The hospital from the beginning has been a center for research in dermatology, and the present report outlines the various phases of research activity being carried on. Progress is reported in the study of the relation between the cutaneously applied carcinogen and early epidermal reactions. The advance has been made possible by the use of fluorescence microscopy.—M. E. H.

Clinical and Pathological Reports

Clinical investigations are sometimes included under Reports of Research


Some data have been collected upon the relation between (a) the total incidence and (b) the incubation period of cancer in man. A more intense stimulus is required to shorten (b) than is necessary to increase (a), and (b) seems to be especially under the influence of genetic factors. Thus, the mean age at death from cancer of the scrotum is almost the same in chimney sweeps as it is in the general population, although the liability to this disease among sweeps is enormously greater than it is in most other occupations. Even the extremely high incidence of lung cancer among the workers at Grisheim is not accompanied by any early age at which death from this disease occurs. On the other hand, some forms of cancer in which a familial factor is concerned (cancer of the colon, and rectum in families showing polyposis intestini, the cancers of the gastrointestinal tract and endometrium in the family “G” of Warthin, some cases of cancer of the breast, xeroderma pigmentosum) lead to death at an age which is, on the average, much earlier than that seen in subjects of similar forms of cancer in the general population, while in these families cancer of other organs occurs at the usual “cancer age.”—Authors’ summary. (J. L. M.)

TRAUMA


The author analyzes 13 cases of cancer of the penis, seen at the Barnard Free Skin and Cancer Hospital, in every one of which a history of a single trauma to the penis was present and the growth followed all the postulates laid down by Segond as necessary to establish the causal relationship between trauma and the later development of cancer—J. L. M.


Two cases of generalized metastasis first brought to attention by trauma were carefully studied. In one case the primary tumor was in the lung, in the second, in the stomach. Metastasis developed at the site of the trauma, and apparently all the requirements for indicating a relationship between trauma and tumor were established. However careful study of other metastatic areas showed the same appearance without injury. Deliberate trauma to other areas failed to produce metastasis. It was concluded that there was probably no scientific proof of a causal relationship and that the unknown laws of metastasis influence the localization of secondary deposits.—R. E. S.
THERAPY—GENERAL


Patients with advanced or metastatic cancer should be given the benefit of irradiation or neurosurgery since palliation can frequently be obtained with relief of pain and prolongation of life. Seven illustrative cases are described.—R. E. S.


Presentation of several cases to combat the idea that a cancer patient is not entitled to treatment for an intercurrent condition requiring surgery.—M. E. H.


The beneficial effects of castration of the male in carcinoma of the prostate are discussed together with the changes in androgen output after castration by surgery or irradiation. In the female, castration seems indicated in carcinoma of the breast when there is associated pregnancy. A plan of treatment is offered for such cases, which includes: interruption of pregnancy by x-ray followed if necessary by surgery; in early cases, preoperative radiation to the breast, followed by radical surgery and postoperative irradiation; continuation of pelvic irradiation at intervals of 60 to 90 days until all symptoms of the climacterium have ceased, or for at least 2 years; and administration of androgen, e.g., testosterone, during preoperative irradiation and at intervals postoperatively.—R. E. S.

SKIN AND SUBCUTANEOUS TISSUES


Vascular nevi of infancy should not be treated before the patient is 6 years of age since spontaneous involution will have occurred in the majority of lesions by that time. X-ray and radium have no place in the therapy of these lesions.—M. E. H.


Report of a case in a woman aged 31. There were multiple lesions confined to the upper lip and forehead. Biopsy tissue showed laminated keratin distending the upper part of a follicle. There was some hyperplasia of basal cells arranged in palisades suggesting an attempt at the formation of hair follicles. The upper lip is severely affected in this condition as distinct from adenoma sebaceum. The Brook's tumor is a frequent precursor of basal celled carcinoma.—L. W. P.


Report of a typical case of a rare tumor. Early surgery is the treatment of choice.—M. E. H.


This tumor is not yet well known; it is frequently overlooked and the patient considered to be neurotic or a malingerer. The author calls attention to his so-called "pin" test, which is based on the supersensitivity of the tumor to light tactile stimulation. He has found the test to be valuable not only in the diagnosis but in the localization of the tumor. The treatment of this lesion is surgical excision.—J. L. M.


Case report, with tabulation of the findings in 10 similar cases collected from the literature. Trauma is suggested as a possible predisposing factor.—J. G. K.


Twenty-eight malignant growths of the face and neck, of which 24 were examined microscopically, occurring in 24 patients, were treated by the application of sodium bicarbonate as a saturated watery solution, or as various mixtures of this solution with glycerin, or as ointments, which were less efficacious (15 to 30% in lanolin, eucerin, or soft paraffin). Successful treatment required from 10 days to 10 months. Eight of 16 uncomplicated rodent ulcers, verified histologically, disappeared; of these, 4 have been healed for more than 5 years, one for more than 3 years, and 3 for about a year. Two of the lesions cured were considered to be, in part, epithelomas. Full histories of 11 cases, 2 photographs, and 3 photomicrographs are included.—E. L. K.

EYE


A description of 2 cases with a discussion of the signs of malignancy and of the possible methods of treatment.—E. L. K.


A brief description with case reports of each condition.—E. C. R.


A case reported because of its apparent rarity.—M. E. H.


These rare tumors are usually of the mixed type and when invasive tend to erode through the roof of the orbit. A case in which operation was performed through the intracranial approach is reported.—E. C. R.
FEMALE GENITAL TRACT


Description of a case of cystic degeneration of a corpus luteum of pregnancy.—M. H. P.


Report of 2 cases. The yellow, malignant growths did not produce masculinization and were different from the lutein cell tumors; they apparently arose from mesonephric structures within the ovary and seemed to be histologically identical with the hypernephroid carcinomas of the kidney.—J. G. K.


Estrogenic stimulation induces the formation of uterine fibromyomas in certain species of experimental animals. The histories of 130 consecutive, unselected women having fibroid uterine tumors were analyzed. Of these women 52% gave a history of menorrhagia, probably functional, 5% had symptoms associated with high estrogen levels in the body. Human fibromyomas may be of estrogenic origin. If true, this offers a clue to their prophylaxis, which should be one of the first aims of gynecology. The prophylactic measures should probably include the use of such anti-estrogens as thyroid extract or vitamin E.—Author’s summary.

(M. E. H.)


Of 1,319 female volunteers between the ages of 30 and 80 years, 416 reported regularly for examination twice a year for 5 years, and a total of 545 more or less intermittently completed the 5 year period. The pelvic examinations were started in 1938; since January of 1942 the breasts have been examined also. In the first examination of 1,319 volunteers, early cancer of the cervix was discovered 3 times and in each instance in areas of papillary erosion. In the total 9,111 examinations, 4 early cancers of the cervix and 1 early cancer of the uterus were discovered; all were successfully treated. Of 461 inflammatory lesions of the cervix discovered, 200 were treated and eliminated. In the course of the work, 18 cancers of 10 different organs were discovered by, or reported to, the authors. "The death rate from cancer of the uterus could be materially reduced by the semiannual pelvic examination of married women 30 years of age and over."—M. E. H.


One hundred and forty cases of cancer of the endometrium are presented for consideration with respect to marital status of the patient, gravidity, age incidence, symptoms, and associated diseases. The 5 year survival rate for 80 cases treated between 1924 and 1938 was 36%. The results are considered from the standpoint of clinical stage and pathological grade, as well as for type of treatment. The author concludes that cancer of the endometrium is essentially a disease to be treated by surgery, i.e., hysterectomy, but that the prognosis can be greatly improved through the use of radium or x-ray as a preliminary to the surgery.—M. E. H.


Excessive dosage of male sex hormone should be avoided in gynecological practice because of the danger of injuring the ovaries. The benefits of this hormone in glandular cystic hyperplasia are not lasting, according to the author’s experience. Questions are also raised concerning the use of large doses in hemorrhage from myoma, and small doses in climacteric disorders, mastodynia, and chronic cystic mastopathia.—M. H. P.


Report of a case in which the patient survived 13 years after operation, with multiple local recurrences, and finally died with generalized metastases. No other reports of melanoma arising primarily in this location were found in a search of the literature.—J. G. K.


Myofibromas in the pelvis may arise in or from structures other than the uterus. These tumors have the same macroscopic and microscopic appearance as the uterine myofibroma and, after removal, are indistinguishable therefrom. Extraterine myofibromas may occur in association with those of uterine origin, but may also occur in women whose uterus either has been removed or shows no signs of involvement. Two case reports are presented of myofibroma in the vagina and retroperitoneum respectively.—J. L. M.

MALE GENITAL TRACT


A review with special reference to therapy by castration and estrogens.—J. L. M.


A review of the pathology, diagnosis, and treatment of this disease.—J. L. M.

The correlation of 925 determinations of serum acid phosphatase with clinical observations indicates that the simplified determination method employed provides sufficiently consistent and specific results to be a valuable, but not conclusive, supplement to other procedures in the diagnosis, treatment, and prognosis of prostatic carcinoma. Acid phosphatase values of 0.8 to 1 unit (method of Bodansky, J. Biol. Chem., 101:93. 1933) suggest the presence of metastasizing carcinoma of the prostate, especially when the alkaline phosphatase is normal. Acid phosphatase values of 1.2 units or more are pathognomonic of carcinoma with bony metastases, especially if the alkaline phosphatase also is elevated. However, a normal acid phosphatase level does not prove that metastases are absent.—M. H. P.


Two cases of interstitial cell carcinoma of the testis, occurring in men of 62 and 32 years, are reported, with autopsy records. Both tumors had almost entirely an endocrine structure and were composed of cells possessing all the essential characteristics of Leydig cells. Histologically they were similar to other interstitial tumors that were reported in the literature as benign or malignant and that, after removal, did not recur or metastasize. It was possible to ascertain the cancerous nature of the tumors described here, only because the patients were followed for several (4 and 9) years.

The first tumor was uninodular and unicentric and seemed to arise from normal Leydig cells. Its cells showed division by mitosis only and metastasized by the lymphatic channels. The second was multinodular and multicentric and contained figures of mitosis and amitosis. It was located in a testicle in which interstitial cells were few, aplastic, and atrophied. Each autonomous tumor nodule was formed of Leydig cells, locally derived from mesenchyme cells by progressive differentiation. This mode of cytogenesis was also evident in the spermatic cord 9 years after removal of the primary lesion. The funicular nodule formed gave rise to the visceral and bone metastases via the blood vessels.

These two human tumors are analogous to the interstitial tumors experimentally produced in mice by the prolonged administration of estrogens. The first case resembles triphenylethylene-provoked tumors in arising from preformed Leydig cells, and the second resembles stilbestrol-induced tumors, which develop from outgrowths of new interstitial cells, mesenchymal in origin, after the normal Leydig cells have disappeared.

The induction and growth of Leydigian tumors in mice and the formation of metastases requires a genetic and a hormonal (i.e., a permanent excess of estrogen) factor. The necessity for the genetic factor in man is implied. In the second case reported, there was an abnormally high excretion of estrogens by the kidney. Experimental tumors induced by stilbestrol secrete androgenic substances. The urine of the second patient contained each day, besides an excessive amount of estrogens, 1 gm. or more of androgens (50 times normal). No hormonal assays were made in the first case.—C. A.


The tumor was removed from a Persian, who was in good health a year later. The tumor cells were all of one type and resembled closely those described by Bonser and Hawsley (J. Path. & Bact., 55:295. 1943; abstr. in Cancer Research, 4:664. 1944).—E. L. K.


After a statistical study of reported and personal cases the author concludes there is no direct relationship between mumps orchitis and the development of testicular neoplasia.—V. F. M.

Urinary System—Male and Female


A classification, and symptoms, diagnosis, therapy, and end results in 54 cases of carcinoma of the kidney seen at the Brooklyn Cancer Institute are presented. Tumors are divided into those arising in the kidney cortex, in adrenal rests (hypernephroma), and in the kidney pelvis. Papillary adenocarcinoma is the most frequent. Diagnosis may be delayed until metastasis is produced, since the primary growth is often silent. Bone metastases are usually single with little bone reaction. Lung metastases are usually cottony and suggest hematogenous origin. Fourteen of the 54 patients had presenting symptoms arising from metastases. Only 11 patients are now living, and only 5 of these have survived 3½ to 7 years. Preoperative radiation is theoretically worth while, and it was given in a few instances. The primary tumor may be radiosensitive, but the metastases are almost uniformly resistant.—R. E. S.

An analysis of 117 cases of carcinoma of the kidney gives a 5 year survival rate of 27% for the entire series. Late diagnosis is the chief obstacle to reducing the mortality rate. Nephrectomy is the treatment of choice except possibly in Wilms' tumor where irradiation seems more useful than in other types of kidney cancer. If surgery is used in Wilms' tumor, it should be in conjunction with x-ray. Preoperative x-ray may reduce the size of a mass and make it more easily removed, and postoperative x-ray may inhibit the growth of tumor cells left behind after nephrectomy. For metastases, x-ray is valuable for palliation and relief of pain. Forty-seven references are appended.—R. E. S.


Case report with autopsy findings. The possible hormonal imbalances involved are discussed.—M. E. H.


The patient, a 52 year old male, died 6 years after nephrectomy for carcinoma of the kidney and was found to have a similar tumor in the other kidney, with pulmonary metastases.—E. E. S.


Clinical discussion.—J. G. K.


A case of a rare disease is reported.—M. E. H.


Report of 4 cases in adults and 1 case in a male child 3 years old.—M. E. H.


Five cases of obstruction of the neck of the bladder, due to extravasal growths, are presented with roentgenograms. The literature is reviewed, and points in differential diagnosis are emphasized.—R. E. S.

Intrathoracic Tumors—Lungs—Heart


Nine persons suffering from pulmonary growths consulted a psychiatrist or a neurologist concerning their initial symptoms. Violent adrenal pains, negative hysterical depression, and increased blood sedimentation rate are a triad of symptoms indicating organic disease and demanding immediate radiologic examination of the lungs. Diagnosis is made difficult by the initial psychologic interpretation of the symptoms.—M. E. H.


About 6% of bronchial new growths are adenomas. This type is more frequent in women than in men, and occurs in a much younger age group than carcinoma does. It should be considered an entirely separate entity from carcinoma since the clinical course is very different. Only 2 or 3% of adenomas give metastases. The clinical features depend on the stage of the disease and the degree of obstruction. On x-ray examination the appearance may be that of atelectasis of a segment or a whole lobe. When there is extrabronchial extension, a mediastinal mass may be demonstrated. Bronchietasis may occur, and iodized oil injection may show a "cap-shaped" defect in the bronchus. Body section roentgenography may be of great value and importance in diagnosis; bronchoscopy is necessary for final diagnosis; biopsy may be inconclusive. Adenomas bled easily. Treatment may be by bronchoscopic removal in certain cases in which there has been little lung damage. When the lesion is treated by this means, follow-up should be maintained by roentgenography, including planography. Irradiation has had only a limited trial. The present view is that pulmonary resection is the treatment of choice in most cases because of the high incidence of local recurrence and extrabronchial extension. Lobectomy or total pneumonectomy may be necessary. Reports of 7 cases are given.—R. E. S.


A statistical study of 128 cases of primary carcinoma of the lung, with reference to symptomatology. Only 66% of the patients first reported at the hospital with pulmonary signs; 34% had extrapulmonary signs and symptoms. In the latter group are included cases with enlarged liver (7%), nervous system symptoms (6%), cardiac symptoms (5%), osseous involvement (5%), and dysphagia (4%). In most of the group with pulmonary symptoms, the symptoms preceded physical signs, usually by some months, and a plea is made for early diagnosis.—C. W.


A general discussion of the means available for the early diagnosis and treatment of primary carcinoma of the lung.—M. E. H.


Case report and discussion.—J. G. K.


Discussion, based upon a review of the literature and upon a study of 6 examples selected from a total of
90 cases of primary carcinoma of the lung. The author presents evidence to show that regenerated alveolar epithelium arises not from septal cells but from the basal cells of the bronchioli, and because of this he considers that "alveolar cell tumors" also arise from the basal cells of the bronchioli and not from septal cells.—J. G. K.


The authors failed to find reports in the recent literature of other cases of pneumothorax as a complication of metastatic tumor of the lung. —J. G. K.


A report of a case, with autopsy findings.—M. H. P.

**Gastrointestinal Tract**


The authors found anemia in 64% of 122 patients with gastric cancer. The anemia varied widely with respect to the size of the red cells, but in most instances it was normochromic. "There is reason to believe that the macrocytic and normocytic anemia of these patients is not on the same basis as that of Addisonian pernicious anemia but probably is related to the associated hepatic insufficiency." —M. E. H.


Of 24 patients with carcinoma of the stomach, 12 showed complete gastric anacidity, 9 had very low acid secretion, and 3 had rather high acid secretion, after a 7% alcohol test meal. Gastric acidity generally showed an inverse correlation with extensiveness of the cancer, but some patients with large lesions showed higher acidity than did some patients with small lesions.—M. H. P.


Attention is drawn to the proliferative changes in mucosal epithelium, accompanying the development of exudate, when the stomach is the site of chronic inflammation. These changes are thought to be of significance as precancerous alterations.—E. E. S.


Ulcerating gastric carcinoma was found at surgery or autopsy in 4 patients. Evidence is offered that these persons had peptic ulceration of a carcinoma, rather than malignant change in a pre-existing ulcer. Ulcers in a gastric carcinoma can undergo healing despite the progression of the carcinoma.—E. E. S.


Simultaneous resection of the stomach and omentum major to remove as many lymph nodes as possible (the Finsterer modification of the Billroth technic) is recommended as the method of choice for gastric resection when radical intervention is indicated. Statistics on 1,020 cases of gastric cancer during the years 1928 to 1938 are reported from Sklifosofski Institute.—M. H. P.


The author reviews the significant symptoms and signs of early gastric carcinoma and points out the essentials to future progress in diagnosis and treatment.—E. E. S.


A case history. Surgical excision was performed on the evidence from gastroscopic findings alone; the roentgenologist was unable to demonstrate the lesion. The appearance of the ulcerated tumor is described.—E. E. S.


No single clinical pattern is regarded as diagnostic of this condition, and the findings in 11 patients are presented to illustrate the difficulties in establishing a diagnosis. Methods of treatment are described.—E. E. S.


A review of 26 cases of primary malignant neoplastic disease of the small bowel demonstrated that adenocarcinomas were commonest, occurring most frequently around the second part of the duodenum and duodenojejunal junction. Sarcomas were much more rare. One case of Hodgkin's disease is included. The age incidence in the group as a whole was higher than in other series; the average incidence in females was lower than in males.—M. E. H.


Two cases of malignant carcinoid tumors of the ileum are reported, one with widespread metastases involving retroperitoneal lymph nodes, liver, lungs, spleen, ribs, sternum, and spine. Both were diagnosed post mortem. There is a possibility that some carcinoid tumors of the small bowel may be diagnosed by x-ray. Irrespective of the location, the treatment is surgery, even in the face of metastasis.—J. L. M.
Argentaffin Tumors of the Gastrointestinal Tract. 
A case is reported of argentaffin carcinoma of the ileum with metastases in the liver and spleen.—J.G.K.

Report of 3 cases in which morphological changes served to differentiate the growths from so-called carcinoid tumors.—J.G.K.

General discussion of preoperative and postoperative care as well as the surgical problems involved in treating polyposis, carcinoma, and diverticulitis.—M.E.H.

The clinical features, diagnosis, and surgical treatment of carcinoma in the various regions of the colon and rectum in 117 cases are presented.—R.E.S.

The end results of treatment in 173 cases of carcinoma of the rectum showed a 5 year survival following surgery in 34% of 69 cases that were considered operable. The remaining 104 patients were treated by irradiation and 5% of them survived 5 years. However in this series adequate irradiation was felt to be of appreciable palliative value, and in some cases previously inoperable tumors were made amenable to surgery.—R.E.S.

Case report, with discussion and photomicrographs.—J.G.K.

Liver and Biliary Tract
A case history, with photomicrographs.—E.E.S.

A case of malignant hepatoma in a 2 month old white male infant is reported with a brief review of the subject.—J.L.M.

Primary biliary tract carcinoma, involving the pancreas and ductus choledochus by direct extension, and hepatic cirrhosis were found at autopsy.—M.E.H.

Pituitary
Attention is called to the facial changes of early acromegaly that occur before recognizable prognathism. The importance of roentgenograms of the skull in the early diagnosis of acromegaly in patients with headache or unexplained amenorrhea is emphasized.—M.E.H.

CANCER CONTROL AND PUBLIC HEALTH
Cancer reporting in upstate New York began on Jan. 1, 1940, following legislation enacted in accordance with recommendations made by the State Legislative Cancer Survey Commission. As would be expected in the reporting of any chronic disease, the largest number of reports was received during the first year. The number of reports of new cases has decreased each year by approximately 20%; this decrease is expected to continue until the number of new cases is stabilized at a level approximating the number of deaths plus the number of cured cases. In 1942, the number of new cases reported exceeded the number of deaths by 36%.
The total number of known persons with cancer alive at some time in 1942, as indicated by reporting for 1940 to 1942, was 35,378, giving an annual prevalence rate of 579 cases per 100,000 population. This is 3.6 times the mortality rate. It is the general practice for estimations of cancer prevalence to be based upon a ratio of 3 cases per death. Allowing for incompleteness of morbidity reporting, these figures for New York state indicate that this ratio is probably too low, and that prevalence may be 4 or 5 times as great as mortality. The factors of duplication of reports and the maintenance of a statewide cancer roster are discussed.
Cancer reporting has proved useful: first, in providing material for epidemiologic investigation and for evaluation of progress in cancer control; second, in public education; third, in professional education; fourth, in aiding the follow-up of cancer patients; and fifth, in the administration of public health nursing service to cancer patients.—J.L.M.

Corrections


Downloaded from cancerres.aacrjournals.org on October 29, 2017. © 1945 American Association for Cancer Research.