

### ABSTRACTS

**EXPERIMENTAL STUDIES; ANIMAL AND PLANT TUMORS**


An oily solution of methylcholanthrene was injected into the trachea in 50 rats. From 1 to 10 injections were given at intervals of five days, the total dose of the hydrocarbon varying from 0.0002 gm. to 0.0020 gm. Tumors were found in 14 of the rats after an average period of about three months; one small but distinct tumor was present in a rat which died after twenty-five days. The tumors comprised peritracheal sarcomas and esophageal rhabdomyosarcomas, but there were no epithelial tumors of the lung, though access of the oil to the pulmonary alveoli was demonstrated in one rat which died a few moments after an injection. Valade agrees with Oberling, Sanné and Guérin (Bull. Assoc. franç. p. l'étude du cancer **25:** 156, 1936. Abst. in Am. J. Cancer **28:** 401, 1936), who obtained similar results with benzpyrene, that the peritracheal sarcomas are produced by minute quantities of the solution which come into contact with the exposed connective tissue and he remarks on the infinitesimal amounts of methylcholanthrene which suffice to produce sarcomas. The carcinogenic substance, moreover, has a tropism for striated muscle fibers. Stages in the transformation of striated fibers of the esophagus into undifferentiated cells which progressively approached the sarcomatous type were traced histologically.


Subcutaneous injections of 1 : 2 : 5 : 6-dibenzanthracene stimulated the growth of the Brown-Pearce rabbit carcinoma and caused earlier and more extensive metastasis than was observed in control animals. Photographs, photomicrographs, and references are included.


The synthesis of 1 : 2 : 3 : 4-dibenzphenanthrene is described. It bears the same relationship to the highly carcinogenic 2-methyl-3 : 4-benzphenanthrene as 1 : 2 : 5 : 6-dibenzanthracene does to the less potent 5-methyl-1 : 2-benzanthracene. Its carcinogenic activity is under test.


Bonser (J. Path. & Bact. **42:** 169, 1936. Abst. in Am. J. Cancer **28:** 152, 1936) previously found that prolonged treatment with oestrone did not produce mammary cancer in male mice of Little's CBA line, although great growth and development of breast tissue occurred. In the present experiments with female mice, oestrone produced similar growth of breast tissue and, in addition, 5 out of 32 non-breeding females developed mammary cancer. No mammary tumors were found in 41 breeding females which received no oestrone, and it is improbable that the tumors in the treated mice were spontaneous. The pituitary hormone, prolactin, was administered to some of the mice

In rats and guinea-pigs large doses of folliculin produce adenoma and cysts from the rete ovarii as well as from the germinal epithelium. In women cysts originating from the rete are infrequent or escape recognition; germinal cysts are well known. Folliculin seems to exert a direct action on the rete analogous to its action on the uterus and breast. Male hormones exert an even stronger action, probably because the rete is of wolfian origin. Cysts of germinal epithelium are apparently produced differently and result not from a direct action of folliculin but secondarily from attempted regeneration in altered ovaries.


Thirty white rats were traumatized during their first pregnancy by unilateral incision of the uterus for removal of the embryos. The placentae were left in situ and daily injections of sheep anterior pituitary extract were given. In one animal a widely metastasizing adenocarcinoma of endometrial origin arose at the approximate site of the retained placentae. Photomicrographs of the tumor and references to the literature are included.


Glycerine extracts of Rous sarcoma were injected intravenously into fowls, which usually died three to eight days later. No tumors were found post mortem but lesions were present in the livers, the most characteristic being congestion and monocytic infiltration and, probably as a later stage of the foregoing, necrosis and atrophy resembling yellow atrophy of the human liver. These lesions were not produced by a similar extract of human carcinoma. An extract obtained from Rous sarcoma which had been conserved in glycerine for three months produced only slight perivascular infiltration, though implants of the tissue produced tumors. The results obtained with Rous sarcoma kept for one month were intermediate between the results with fresh and older material. It is possible, but not certain, that this action on the liver constitutes a difference between Rous sarcoma and other tumors.

The bibliography includes, in a total of nine references, seven authors who are not mentioned in the text but omits six who are.


Tumors developed at the site of implantation of fragments of liver removed from rats bearing a transplantable uterine carcinoma. No secondary growths were found in the grafted liver on microscopic examination. The results confirm those of previous observers and show that the organs may contain neoplastic cells despite the absence of metastatic tumors.


in Am. J. Cancer 21: 663, 1934; 26: 202, 1936), with special reference to the influence of hormones on the course of tumors and to the factors which determine the transformation into sarcoma.

Two tumors (T1 and T7) have now been transplanted in series. Strain T7, unlike T1, is transplantable in male rats; evidently the importance of the sex glands for the success of transplantation varies with different strains of tumor. Sometimes, when growth was not too far advanced, ovariectomy arrested growth or caused regression, but not when sarcomatous change had occurred. The menopause had no comparable effect. Pregnancy favored the growth of transplanted tumors. Experiments with transplanted ovaries were complicated by the presence in about 10 per cent of all ovaries, of tissue which was identified as male germinal tissue, often accompanied by interstitial tissue. The male tissue inhibited the growth of transplanted tumors. Pregnancy and the lactation hormone produced adenomatous proliferation and lactating adenomas, but otherwise hormones apparently did not play a prominent part in determining the structure of tumors. Unknown local factors were perhaps responsible for the different structures sometimes found in multiple grafts in a single rat. At one time or another, all the forms of benign tumor which occur in the human breast were found in transplanted tumors.

Sarcomatous transformation occurred in about 20 per cent of all transplanted tumors, but in 50 per cent of those which had persisted for more than ten months. The duration or intensity of estrus, the menopause, castration, and the administration of folliculin had no effect on sarcomatous transformation which, it seems, depends on an intrinsic cellular factor which is liberated the more readily as tumors increase in age.

There are 7 photomicrographs and a bibliography.

L. FOULDS


A series of experiments with filtrates and centrifugates of tumor emulsions (Ehrlich mouse sarcoma and various rat tumors) led the author to the conclusion that transfer of living cells is necessary for tumor production. The result of inoculation depends on (1) the number of cells inoculated; (2) the interrelations of these cells, i.e. whether they are isolated cells or small cell aggregates; (3) the presence of infection, which may have no harmful effect if fairly large fragments of tumor tissue are inoculated, but which destroys isolated cells and small cell masses; (4) the method of preparing the emulsion, since isolated cells may be so badly traumatized as to fail to produce a tumor. References are appended.


Inoculation experiments were carried out with tumor extracts obtained both by centrifugation and by passage through a Berkefeld filter. The tumors tested were the Ehrlich mouse carcinoma, spontaneous mouse tumors, Ehrlich mouse sarcoma, the ascites tumor produced by Collier by intraperitoneal inoculation of Ehrlich carcinoma, the Jensen rat sarcoma, Flexner-Jobling rat carcinoma, and the Brown-Pearce rabbit carcinoma. Over 2600 animals were used. Results with the Berkefeld filtrate were negative. With the centrifuged extract there was a decreasing inoculability as the speed and duration of centrifugation were increased. EDWARD HERBERT, JR.


Repeated intraperitoneal injections of tomato juice were made into 3 rabbits and 10 caviues, which were killed at intervals varying from four days to four months after the first injection. The trivial inflammatory lesions which resulted bore no resemblance to neoplasms. The injections caused hyperplasia of the germinal centers of the lymph
nodes and of the malpighian corpuscles of the spleen, as well as reticulo-endothelial hyperplasia in the lymphatic sinuses and splenic pulp. Focal and diffuse necrosis and localized proliferations of Kupffer cells were found in the liver. The reactions are compared with the caryoclastic processes described by Dustin. The alleged production of sarcoma by tomato juice is attributed to the disclosure of a latent pre-existing tumor. [The animals are few in number and different in species from those in which sarcoma production was described and did not live long enough to show tumors even if the tomato juice were carcinogenic, but many other observers have discredited the cancer-producing action of tomato juice in rats and some have pointed out the curious resemblance of the tumor to the well known Jensen rat sarcoma available in many research laboratories.]

L. FOULDS


From histologic examination of the lesions of a single white rat with parasitic mange, which was exposed to sunlight, it is suggested that parasitic lesions may have played a rôle in the cancers obtained by Roffo in a high percentage of a series of white rats exposed to sunlight (see Abst. in Am. J. Cancer 24: 674, 1935; 30: 769, 1937). A photograph and a photomicrograph are included.

EDWARD HERBERT, Jr


In previous experiments, Orr (J. Path. & Bact. 42: 105, 1936, Abst. in Am. J. Cancer 28: 157, 1936) constantly found hyperplasia of the bone marrow in rabbits with disseminated Brown-Pearce carcinoma. These observations are now amplified and extended to rabbits with spontaneous tumors, guinea-pigs with the Daels-Biltris sarcoma, rats with Jensen sarcoma, and mice with spontaneous tumors. In rabbits and guinea-pigs bearing malignant tumors, the bone marrow was hyperplastic in all animals with metastases and in some with large primary growths only. Apparently the same process occurred in rats and mice, but was less easily demonstrated. The hyperplasia was not the result of damage to any particular organ but was probably due to the absorption of necrotic products.

L. FOULDS


In 1917 the authors published a study of cancer of the alimentary tract in mice (J. Cancer Research 2: 401, 1917). Observations during the last twenty years have confirmed their impression of its rarity. Among 142,000 necropsies, including those upon which the earlier report was based, they have found 15 primary tumors of the stomach and 19 primary malignant tumors of the intestine, of which 11 arose in a prolapsed rectum. No esophageal tumors were found.

Details of the cases observed since the original publication are given, the literature is reviewed, and a comprehensive bibliography is appended.


A series of 9 tumors in dogs is recorded with photomicrographs and in two instances illustrations of the gross specimens. There were included 2 cases of carcinoma of the tonsil, a carcinoma of the cardia of the stomach, carcinoma of the pancreas, carcinoma of the prostate, carcinoma of the sweat glands, cystic and papillary carcinoma of the breast, mixed adenocarcinomatous and osteosarcomatous tumor of the thyroid, and a primary sarcoma of the heart. References are appended.

A benign teratoma of a horse’s testis had noteworthy features similar to those previously described by Willis in human teratomas (J. Path. & Bact. 40: 1, 1935; 45: 49, 1937. Abst. in Am. J. Cancer 24: 420, 1935; 33: 290, 1938). It provided additional evidence that developing nervous tissue can induce cartilage formation in adjacent mesenchyme and that ependyma-lined cavities result from the secretory activity of choroid plexus tissue.

L. Foulds


The authors describe a method by which seeds may be made to germinate in an aseptic medium in glass tubes. The seedlings grow under aseptic conditions which can be precisely defined. Tumors produced by B. tumefaciens were found to grow more rapidly in young plants and reach a greater relative size. The method should be valuable for many investigations on plant tumors of bacterial origin.

L. Foulds

TISSUE CULTURE


The authors were able to obtain a satisfactory growth of human fibroblasts in a medium having a glycine concentration of 0.007M (0.0525 per cent) and containing in addition cysteine, thyroxin, hemin, glucose, and insulin, but no Witte peptone. With higher concentrations of glycine, up to 0.04 M (0.3 per cent) growth may occur but becomes progressively less as the concentration increases. Media containing glycine in a concentration of more than 0.028 M (0.21 per cent) have a tendency to liquefy in the vicinity of the tissue.

The formula and method of preparation of the authors’ feeding solution are given. They include the formula for a physiological salt solution containing sodium, potassium, magnesium, and calcium in the same amounts as human blood serum.

ETIOLOGY


An address of general nature.


A brief theoretical discussion of the origin of cancer.


The author comments on the beneficial effects produced by urea (which it is stated causes rapid multiplication of cells) in the treatment of osteomyelitis. Is it possible, he asks, that urea may be a factor in the formation of cancerous growths in the human body, either owing to an excess of the substance in the blood stream or to certain organs being rendered more susceptible to the action of urea by minor lesions? A. F. Watson

This article is a long discussion based largely on the work and beliefs of Roffo. Fluorescence is a property of all carcinogenic and radioactive substances. Cholesterol can be broken down by ultra-violet light into carcinogenic substances. Hemoglobin from a traumatic hemorrhage in the tissues can also break down into carcinogenic chemicals. It is the fluorescent property of these substances which activates the tissue cells to unbridled growth. The problem of therapy lies in finding some substance which will inactivate the fluorescent carcinogenic substances. These theories are propounded at great length but with little factual basis.

Edward Herbert, Jr.

GENERAL CLINICAL OBSERVATIONS


Six hundred consecutive cases of carcinoma were studied from the point of view of anatomical distribution and of age incidence. Twenty-one patients were less than thirty-six years of age and 6 were under twenty-five; 12 were over seventy-five and 4 over eighty. The oldest patient, eighty-seven years of age, had a carcinoma of the colon, the youngest, sixteen, had carcinoma of the skin.


Twenty-four ulcerated tumors, carcinomas and sarcomas, some of the skin and others of underlying structures but extending to the skin, were tested as to their sensitivity to touch, heat, cold, pain, and pressure. It was found that in the small tumors all these senses were preserved. In the more advanced tumors all were absent except the sense of pressure, which was retained to a slight degree due probably to transmission of the pressure to underlying normal tissue. These results suggest a correlation with the findings of other authors that microscopically in early tumors there is a rich network of nerve fibers, which disappear in the later stages of the tumor growth. Thirty-three references are included.

Edward Herbert, Jr.


This article is a restatement of results obtained by Roffo and others working on the toxic action of tissue extracts and the colloidal theory. It contains nothing new.

Edward Herbert, Jr.


The author emphasizes the importance of suspecting angiomas in congenital affections of the central nervous system particularly if there is an associated vascular lesion of the skin or mucous membranes. The tendency of angiomas to become calcified makes possible an exact localization by x-ray. Because these lesions frequently undergo periodic congestion or give rise to hemorrhages, surgical removal should be performed when possible. Eleven cases of unusual angiomas are briefly reviewed.

Seaton Sailer


The tumors referred to in the title were subcutaneous granulomas of unusual type which followed repeated injections of oil of camphor into a woman. L. Foulbs

A male child born at term had an enormous tumor of the right side of the neck. The tumor was successfully removed when the child was one day old. It was a cystic lymphangioma weighing 1 kg. Two photographs, a photomicrograph, and 3 references are included. Edward Herbert, Jr.


Kopaczewski's reaction, which consists in gelatinization of blood serum by the addition of lactic acid under standard conditions (see Absts. in Am. J. Cancer 32: 296, 1938), was found to be positive in 65 per cent of 100 cases of malignant tumors, 42.4 per cent of 59 benign tumors, 50 per cent of 58 surgical cases other than tumors, and 35.7 per cent of 14 normal persons. The reaction, therefore, is worthless as a diagnostic test for cancer. References are given. Edward Herbert, Jr.


An extract of urine from cancer patients gave a precipitation reaction when mixed in suitable proportions with sera from cancer patients but rarely with sera from normal persons or from those with other diseases. The author believes that the urine of cancer patients contains an antigenic principle. [For another account of the author's observations along this line see Abst. in Am. J. Cancer 31: 511, 1937.] L. Foulds


Promising results have been obtained at the Finsen Laboratory in Copenhagen with the sero-reactions for cancer described by Waldschmidt-Leitz, Břidíčka and their colleagues of Prague during recent years. The sera from 118 patients were examined by polarographic methods, a brief description of which is given. [For further details of the technic, etc., see Břidíčka: Nature 139: 330, 1937, and 139: 1020, 1938. Abst. in Am. J. Cancer 31: 122, 123, 1937.] Positive reactions were obtained with the sera of the majority of cancer patients as well as with those suffering from certain diseases of the liver. Most of the non-cancer patients, on the other hand, gave negative results. The difference, it is stated, was unquestionable, but the statistical evidence so far obtained is insufficient to predict the future diagnostic value of the reactions.

A. F. Watson


The author reports further upon the Schmidt "parasite," which he states is to be found in the blood of cancer patients as well as of those who will later develop the disease. He claims an accuracy of over 90 per cent for his method of diagnosis. [See Absts. in Am. J. Cancer 16: abst. p. 773, 1932; 19: 116, 1933; 20: 662, 1934.]


The author advocates Bendien's biological and biochemical methods for the diagnosis and treatment of cancer. [The technic of the Bendien test is described in a review of


The authors discuss their experience with the Coutard technic of roentgen irradiation, which they have employed in 45 cases of tumors of the head and neck. They report illustrative cases but fail to give the results for the series as a whole, though they state that 25 to 35 per cent of otherwise hopeless cases can be salvaged.


Experiments with eggs of Arbacia puctulata are recorded which indicate that the slowing in division rate caused in these eggs by irradiation is due to changes in the nucleus. References are appended and there is an illustration showing whole and fragmented eggs.

THE SKIN


Seventeen cases of skin carcinoma were treated by Chaoul's method of fractionated contact irradiation. Only four cases or 23.5 per cent remained healed eighteen months later. Three other patients were greatly improved. These results do not agree with those of Chaoul, who reported from 90 to 100 per cent cures (Strahlentherapie 48: 31, 1933 and 50: 446, 1934. Abst. in Am. J. Cancer 22: 692, 693, 1934. See also Absts. in Am. J. Cancer 29: 163, 772, 1937). Nine photographs and 3 references are included.

Edward Herbert, Jr.


A physician sixty years of age following long exposure to roentgen rays had a tumor 1 cm. in diameter on the dorsum of the hand at the base of the fingers. It had developed slowly over a period of ten years and clinically resembled a fibroma. Biopsy showed it to be a squamous epithelioma but atypical in that the tumor cells were isolated in small islets throughout an abundant stroma of dense hyalinized fibrous tissue. Two photographs and two photomicrographs are included. Edward Herbert, Jr.


A forty-four-year-old man had noticed 3 violaceous painless papules on the anterior portion of the right auricular lobe four years prior to admission. These remained stationary for the following two years. A year and a half prior to admission a tumor appeared at the level of the right parotid gland coincident with inflammatory changes and pain at the site of the primary lesion. The inferior parotid chain of lymph nodes was extirpated and found to contain epitheliomatous tumor metastases. Three months and a half later the original lesion was removed and diagnosed as prickle-cell epithelioma. The patient was without signs of the disease a year later. The author remarks on the probability of recurrence of such lesions if not treated early, because of the rich lymphatic plexus about the ear.

Seaton Sailer

A girl of twelve years had a small nodule removed from the right elbow. Microscopically it was composed of groups of epithelial cells of the basal type in a stroma of connective tissue which contained many giant cells and large areas of calcification. The tumor thus fitted into the rare group, the calcified epitheliomas of Malherbe. There are no illustrations.

Erichard Herbert, Jr.


A man aged forty-nine had red blotches on the skin for some months and a tumor developed on one of them. The diagnosis rested between sarcoid, mycosis fungoides à tumeurs d’emblée and sarcoma. The biopsy diagnosis was reticulosarcoma. The tumor flattened out completely after two weeks of high-voltage x-ray treatment and some palpable lymph nodes subsided under further treatment.


This a case report of a malignant melanoma on the cheek of a man twenty-six years of age. It arose from a congenital pigmented nevus and was successfully removed by the electric cautery. No follow-up is given. Two photomicrographs are included.

Erichard Herbert, Jr.


This is a report of an anemic nevus on the chest of a man forty-seven years of age. No biopsy was performed. There are no illustrations.

Erichard Herbert, Jr.


A man forty-five years of age had a tumor of the chest wall which was first noticed two years previously and had grown rapidly during the last five months. It was removed surgically without recurrence. Histologically it was a cutaneous fibroma with malignant change, the malignant areas showing a marked polymorphism of the cell elements, with giant cells, spindle cells, and small round cells resembling lymphocytes. A photograph, 4 photomicrographs, and 5 references are included.

Erichard Herbert, Jr.


A man fifty-four years of age had had a lesion of the left chest wall since birth. Biopsy showed it to be a combination of two tumors. The central portion was a papillary adenoma derived from the sweat glands, while the periphery was a verrucous nevus. A photograph and 2 photomicrographs are included.

Erichard Herbert, Jr.


A case is reported of benign histiocytoma of several years’ duration on the leg of a man forty-two years of age. It was removed surgically and the diagnosis confirmed. A photograph and several references are included.

Erichard Herbert, Jr.

A man sixty-three years of age showed the classical picture of Kaposi sarcoma for five years. Two of his brothers had died of the same disease and the son of one of these brothers developed it at the same time as the patient. Some of the lesions became soft and fluid and could be aspirated with a needle. When this fluid was treated with potassium hydroxide a fungus was found, which was also seen in the tissues of another nodule that was biopsied. Greco found this fungus, also, in another case, and he believes it to be the etiological agent of the disease, which he considers not only infectious but contagious, since it was found in four members of the same family. Eight illustrations are included.


A man thirty-seven years of age showed evidence of a cirrhotic liver, hemochromatosis, diabetes, livedo reticularis perstans of the palms, leukopathia reticularis of the forearms, and angiomatosis of the skin and mucous membranes. It is believed from this case and from a review of the literature that there is a connection between liver disease and angiomatosis. The suggestion is made that a normal liver may counteract a tendency to blood-vessel proliferation, but that when the liver is damaged, as in cirrhosis, the check is removed, resulting in multiple angiomata in predisposed persons. Several references are given.


A girl nine years of age had a subcutaneous tumor 1 cm. in diameter on the lower leg. Biopsy showed it to be a cavernous hemangioma which was unusual in that there was a large amount of smooth muscle tissue around the veins. It is believed that this is not an angiomofibroma, but rather a hemangioma with hyperplasia of the muscle coats of the vessels. Two photomicrographs are included.


In 1918 Parkes-Weber described a condition characterized by angiomata, arterial and venous dilatations of one extremity, accompanied by hypertrophy (Brit. J. Child. Dis. 15: 13, 1918). A similar case is here recorded, in a boy fifteen years of age, which differed only in that the affected arm, the left, was smaller than the normal one. This is called atrophic hemangiectasia as opposed to Parkes-Weber’s hypertrophic hemangiectasia. Apparently it is a congenital condition for which there is no treatment. Three illustrations and 6 references are included.


A case is reported of a large angiomatous neurofibroma, of three years’ duration, on the right scapular region of a man fifty-three years of age. The diagnosis was made by biopsy. One photograph is included.


A woman thirty-three years of age developed numerous skin tumors which were biopsied and found to be chorionepithelioma. Further investigation showed pulmonary metastases and a positive Aschheim-Zondek reaction. There was a history of preg-
nancy eight months previously which terminated in a mole that was curetted out. Death occurred with symptoms of a brain lesion, and autopsy showed widespread metastases but no primary tumor in the uterus. A photograph and two photomicrographs are included.

EDWARD HERBERT, JR.

THE EYE


The authors briefly review the literature on carcinoma of the lacrimal sac and add two case reports. Their first patient, a thirty-six-year-old man, had a slowly growing basal-cell carcinoma of the left lacrimal sac. Extirpation was followed by local recurrence in three months. Radium treatment was advised elsewhere and in two years a large recurrence was present. Following electrocoagulation and radium the patient was apparently well eight months later. Death was due to unknown cause.

The second patient was a forty-seven-year-old man with a basal-cell carcinoma of the lacrimal sac. This was removed and radium was applied but in six months there was a local recurrence. This was excised and the area again treated with radium. The patient was apparently well six months later.

Seaton Sailer


This is a general review of the type of melanosis encountered in various structures of the eye, with a brief case report of a congenital ocular nevus.

Seaton Sailer


Five months prior to admission a thirteen-year-old boy received a blow over the left orbital region. The injury healed uneventfully but was followed in one month by gradually increasing exophthalmos. On admission the eye protruded from the socket but was painless and showed no inflammatory reaction. Vision was 1/6. The optic nerve showed edema of its inferior half, 6 diopters above the macula. The cervical and axillary nodes were enlarged. Biopsy of one of the latter showed lymphogranuloma. Operation on the left eye revealed a smooth soft tumor, 2.5 cm. in diameter, between the optic nerve and floor of the orbit. The anterior pole of the tumor was fixed to the posterior pole of the eyeball. The tumor was removed and forty-eight hours later occlusion of the central artery of the retina was observed ophthalmoscopically. Several weeks later optic atrophy was evident.

The authors attribute the occlusion of the central artery to spasm following traumatism to the ciliary nerves rather than to damage to the vessel's endothelial lining with thrombus formation.

Ten photographs accompany the report.

Seaton Sailer


A Chinese woman of forty-six years complained of right exophthalmos and attacks of severe headache for the past six years, sometimes associated with vomiting. Recently vision in the right eye had become progressively impaired until even light perception was gone, the headache and vomiting were more severe, and the eye was painful. A red elevated mass had appeared in the lower quadrant of the globe ten days before admission and had increased rapidly in size. The eye was enucleated and the orbit was found to be filled with a soft cystic tumor which ruptured during operation. The microscopic characteristics were those of neurofibroma, but the source was not identified. The optic nerve was not involved. Photomicrographs are included, and there are four references.

Reviewing the literature, Lindgren finds that those whose studies are based on breast tumors removed at operation generally attach grave significance to cystic disease as a precancerous condition; whereas those who have followed clinically cases which were biopsied and those who have observed the frequent occurrence of cystic changes in post-mortem examinations do not regard the prognosis as unfavorable. In a study of 120 mammary glands (from 60 persons) removed in the course of routine post-mortem examination this author observed in 38, or 32 per cent, pathological changes, 22 of which he classified, according to the scheme of Cheatle and Cutler, as mazoplasia and 16 as cystiphorous epithelial hyperplasia. In none of these cases was there evidence of true tumor growth. The incidence of cystic disease of the breast, whether occurring alone or in association with carcinoma, was found to be at its height at the climacteric, falling abruptly after the age of fifty. For carcinoma, on the other hand, the frequency curve is high between sixty and seventy years. Morbidity curves among living women show a similar discrepancy and strengthen the hypothesis that cystic disease is of endocrine origin and liable to senile involution.


This is a report of a case without unusual features. There are no illustrations.

Edward Herbert, Jr.


Among 270 cases of breast tumors 3 or 1.1 per cent occurred in men. Their ages were sixteen, twenty-nine, and thirty-four years. Two of the tumors were pericanalicular fibroadenomas and one a pure fibroma. All were removed successfully. A photograph and 5 photomicrographs are included.

Edward Herbert, Jr.

THE ORAL CAVITY AND UPPER RESPIRATORY TRACT


The first part of this paper contains a discussion of the roles of various forms of irritation in the production of buccal cancer. This is followed by a consideration of the treatment of buccal cancer by irradiation, with special reference to the prevention of necrosis of bone and injury of the mucous membranes. Vulcanite appliances for the protection of adjacent normal tissues are described and illustrated; they can be used for this purpose alone or can be adapted to serve also as carriers of radium. The appropriate treatments and appliances for cancers in the various parts of the mouth are separately described. For detailed descriptions of the appliances, which have been used successfully at the Paris Institute of Cancer, reference must be made to the original.

L. Foulds


An epidermoid carcinoma of the tongue in a man aged fifty-six was successfully treated by radium implantation and external irradiation, but a spindle-cell sarcoma
developed nearly four years later. Another patient, aged fifty-two, had papillomatous proliferation in a patch of leukoplakia, which was treated by radium implantation and a few months later excised. Seven years after this a second implantation of radium was made for ulcerated leukoplakia and, after a further five years, a spindle-cell sarcoma developed.

The two sarcomas were attributed to the action of radium. They occurred among 137 patients who had radium implantations and survived more than three years. Though the proportion of sarcomas is small, the late results of this form of treatment deserve further attention. L. Foulds


From 1917 to 1935 inclusive, 202 cases of carcinoma and 2 of sarcoma of the tongue were examined or treated in the Skin and Cancer Unit of the New York Post-Graduate Hospital. Of this number, 98 carcinoma cases with adequate histologic studies were treated by surgery or by a combination of surgery and radiotherapy and form the basis of this report. In two-thirds of the cases the cancers were advanced in the sense of having spread beyond the limits of the tongue or showing node involvement. Eighty eight were treated surgically and 10 by a combination of radium and surgery. Neither the size nor the grade of the tumor proved of much prognostic value among the cases treated surgically. The operative mortality for the entire group was 26.1 per cent, and for those treated by surgery alone 28.4 per cent. In the last five years the postoperative death rate was reduced to 16.7 per cent. The lowest mortality rate occurred among cases in which a multiple-stage operation was performed. Ninety two per cent of the patients with positive Wassermann reactions died either postoperatively or within three years. Twenty per cent of all patients treated by surgery survived five years or over. Without node involvement there were 32.4 per cent five year survivals and with node involvement 11.5 per cent five-year survivals. Among the cases treated by radium and surgery, the result as to the permanent eradication of the tongue lesion was very poor. Where radium was used for the primary lesion the permanent disappearance of the cancer was effected in only 10 per cent of the cases.

Benjamin R. Shore


This is a report of a nodular tumor of the tongue 1.5 cm. in diameter. It was removed surgically and histologic examination showed it to be a benign adenoma of the mucous glands.

Edward Herbert, Jr.


A man thirty-eight years of age had a lesion 1 cm. in diameter below the tongue. It was believed to be luetic and arsenical treatment was given. The lesion promptly healed but recurred after a few weeks, when biopsy showed it to be an epithelioma. There are no illustrations.

Edward Herbert, Jr.


This is a report of an epithelioma of the lip developing in a man fifty-two years of age on the basis of a cheilitis glandularis. There are no illustrations.

Edward Herbert, Jr.


In all cases of carcinoma of the lip the author precedes treatment of the local lesion by irradiation of the node-bearing area in the neck, whether or not nodes are palpable.
[It is doubtful, however, that such irradiation is of value.] The primary tumor is then treated by surgery, radium, or x-rays, singly or in combination. The technic of radium application and of roentgen therapy is described. In 1935 the author reported on the results of irradiation in 93 cases (Kaplan and Krantz: Am. J. Roentgenol. 34: 381, 1935. Abst. in Am. J. Cancer 27: 378, 1936). Since then 67 cases have been added to the series, but detailed results are not given. In the discussion some objection was raised to routine irradiation of the nodes in the neck.

The paper is illustrated.


The authors report 16 cases of adamantinomas of the jaw, of which 15 involved the mandible and 1 the maxilla. Seven of the patients were men and 9 were women. Of the 15 patients in whom the mandible was involved, 3 are believed to be well after conservative enucleation, repeated in one case several times. Two patients are apparently well after a second conservative enucleation followed by implantation of radium. In 5 cases complete resection with loss of continuity of the mandible was the initial treatment, with complete cure. Five cases recurring after conservative operations have finally come to radical resection, with apparent cure. In several cases the continuity of the mandible was restored, three to six months after resection of the tumor, by a bone graft from the crest of the ilium.

The authors believe that in early cases, when the tumor is small and surrounded by well defined bony walls, it is sometimes possible to obtain a cure by enucleation and curetttement without complete resection, but even in these cases recurrence is not infrequent. There is no doubt that when the tumor is large, with irregular extensions in the surrounding bone or perforation of the cortical plates into the soft tissues, complete resection should be the initial treatment.

Roentgenograms and photographs illustrate the report.

Benjamin R. Shore


A case of dentigerous cyst of the right maxilla, expanding the antrum, is described. A photograph of the patient, a Chinese woman of nineteen years, and a roentgenogram demonstrating the extent of the cyst and the position of a contained tooth are included.


This is a report of a carcinoma of the tongue in a man sixty-four years of age, which was considered atypical because histologically it was largely basal-cell in type with only a few squamous areas; yet clinically it was extremely malignant, growing rapidly and metastasizing early and widely. There are no illustrations.

Edward Herbert, Jr.


A man forty-six years of age who suffered from severe headaches and nasal symptoms was found to have a tumor of the nasal fossa, near the ethmoid plate. Biopsy showed it to be an adenocarcinoma. It was removed radically and six months later there was no sign of recurrence. Two photomicrographs and 2 roentgenograms illustrate the report.

Edward Herbert, Jr.


A sixty-six-year-old man had intermittent pricking pain in the right supraciliary region, of a year’s duration, radiating to the right temporal area. A node in the right carotid region was extirpated and found to contain metastatic carcinoma. Examination showed the nasal septum deviated to the right with distortion of the soft palate. Anisocoria and miosis were also present. A tumor occupying the right lateral wall of the
nasopharynx at the level of the opening of the Eustachian tube was biopsied and a
diagnosis of basal-cell epithelioma was made. Radium treatment gave temporary
relief, but the patient later complained of intense trigeminal pain. Examination now
showed a right internal rectus paralysis with diminution of sensation in the eyelid,
cornea, and conjunctiva of the right eye. Pain was present on pressure over the
trigeminal nerve branches. A diagnosis of nasopharyngeal tumor invading the petro-
sphenoidal fissure with resulting nerve paralysis, as described by Jacod, was made. A
brief discussion of this syndrome is given. [For Jacod’s description, see Ann. d’oto-


Brief report of 22 cases of lympho-epithelioma, 15 primary in the tonsil, 4 in the
pharynx, 2 in the lingual tonsil, and 1 in which the pharynx, tonsil and tongue were
diffusely involved and the primary site indeterminable. Treatment was by radiation.
At the time of the report 8 patients were still alive, including 5 who had metastases on
admission. The longest survival period was four years. A bibliography is appended.

Histiocytomas of the Palatine Tonsils (So-called Lympho-epitheliomas of Schmincke),
G. Giunti. Contributo alla conoscenza degli istiocitomi della tonsilla palatina
(sui cosiddetti linfeopteliomi di Schmincke), Tumori 11: 201-230, 1937.

Four cases are recorded of so-called lympho-epithelioma of the tonsil: 3 in women
and 1 in a man. From the morphology, the evidence of phagocytic properties, and the
demonstration of reticular fibers with silver stains, Giunti believes that these tumors
are derived from the reticulo-endothelial system and calls them histiocytomas. The
lymphocytes, which are invariably present, he considers simply a manifestation of the
tissue reaction to the tumor. Eleven photomicrographs and an extensive bibliography
are included. Edward Herbert, Jr.


A method is described for the roentgen irradiation, through the open mouth, of
neoplasms of the tongue, floor of the mouth, jaws, mucosa of the cheeks, tonsils, hard
and soft palate, maxillary antra, and posterior nasopharynx. This is carried out by the use
of brass lead-lined cylinders of various shapes and sizes which serve to separate the lips
and jaws, to retract certain normal intra-oral structures in the approach to the tumor,
to limit the beam of radiation to the desired area and volume, and to insure its correct
direction to the tumor. By this technic the reaction is confined to the tumor area
and the incidence of osteomyelitis and late radionecrosis is reduced. Illustrations show
the application of the method.

Carcinoma of the Oral Cavity, D. C. L. Fitzwilliams. M. Press & Cir. 193: 71-75,
1936.

A general résumé of the application of radium therapy in oral lesions.


A woman aged thirty-five had a painless tumor of the left vocal cord. There was
radiological evidence of old, healed phthisis but the biopsy diagnosis was squamous
carcinoma.

L. Foulds

Frontal Tomography of the Larynx and of Laryngeal Tumors, Canuyt and Gunsett.

Tomography is the only method of securing frontal roentgenograms of the larynx
and is, therefore, a necessary adjunct to lateral radiography. It allows more accurate
localization of lesions and often gives more precise information about endolaryngeal
cancers, especially cancer of the vocal cords where lateral roentgenograms do not always satisfy the surgeon. Illustrative tomograms are included. There are no references.

Tomography is a method of radiography which aims at delineation of a selected plane. It involves moving the tube and film during exposure so that the images of all objects in that plane occupy the same position on the film, while the images of objects in the planes above and below are blurred by the movement. For the principles involved, see Grossman: Brit. J. Radiol. 8: 733, 1935.


A girl aged six had a sarcoma of the trachea which was treated by radium. A year later there was complete stenosis of the larynx at the level of the cords. The child, now aged twelve, is in excellent health but cannot dispense with a tube. L. Foulds


Reviewing the cases of carcinoma of the tonsil, pharynx, and larynx treated by roentgen therapy at the Radium Institute of Paris in the period 1920–29, the author found that the best results were obtained in tumors of the tonsillar region, 65 cases giving 21 five-year cures, or 32 per cent. Among 114 laryngeal cancers there were 29 five-year cures, or 25 per cent; and among 200 tumors of the hypopharynx 23 cures or 11 per cent. The technic of treatment is described.

THE SALIVARY GLANDS


A man thirty years of age had an asymptomatic tumor below the left mandible, which had been growing over a period of three years. It was removed and found to be a mixed tumor of the submaxillary gland. Following the case report there is a general discussion of affections of this gland. A photograph and 4 photomicrographs are included. Edward Herbert, Jr.

THE THYMUS GLAND


Kahr reports the case of a woman forty-one years of age who complained of "rheumatic pains" of unspecified distribution one month before she became pregnant for the sixth time. X-ray studies showed an osteomalacia of the vertebrae. The blood calcium and phosphorus were elevated. During the first months of pregnancy increasing dyspnea developed with attacks of paroxysmal tachycardia. These symptoms were unexplained, but as they showed no improvement the pregnancy was terminated in the fifth month. Death occurred five days later. At autopsy a carcinoma of the thymus was found, with metastases to the mediastinal nodes, both suprarenals, the vertebrae, femur, ribs, and sternum. Extensive deposits of calcium were present in the kidneys.

It was believed that the tumor antedated the pregnancy and that the so-called rheumatic pains were due to the bone metastases. Thus no etiologic significance could be assigned to the pregnancy, but Kahr suggests that it may have accelerated the growth of the tumor.

Scipiades, in commenting on the case, reviews his former work purporting to show that osteomalacia is caused by a lack of thymus activity and can be cured by thymus
implantation. He believes that the osteomalacia in Kahr's patient antedated the osseous metastases and was caused by a depression of thymus activity by the growth of the tumor. The metastases would then be only an example of tumor spreading to previously altered bone tissue.

Four photomicrographs and several references are included in Kahr's report.

EDWARD HERBERT, JR.

INTRATHORACIC TUMORS


In this series of papers the various aspects of bronchogenic carcinoma are discussed, as indicated in the titles. Roentgenograms are included.


The writers review in detail the subject of bronchial adenomas, and discuss symptoms, bronchoscopic appearances, and biopsy. Special attention is given to the pathology and bronchoscopic treatment. Twelve cases are recorded and twelve beautiful drawings of the endoscopic appearances of the tumors are reproduced. Nine photomicrographs illustrate important features.

The authors reach the following conclusions:

1. Benign as well as malignant endobronchial tumors occur, and the bronchoscopic aspects aid greatly in distinguishing the two.

2. Diagnostic bronchoscopy is of value, whether or not the tumor is visualised in the accessible bronchi and specimens are taken for biopsy, because it may show indirect evidence of neoplasm; if entirely negative, it will demonstrate the normality of the larger bronchi, thus indicating the feasibility of surgical extirpation.

3. One of the most important groups of bronchial tumors is that constituted by the so-called 'bronchial adenomas,' which are coming to be recognized as a clinical and pathologic entity.

4. The histology of the so-called benign adenomas is confusing to those pathologists unfamiliar with this type of tumor; for, while the cellular pattern is fairly uniform and constant, it is not comparable with that seen in benign glandular tumors elsewhere.

5. Bronchoscopic treatment, by forceps, electrocoagulation, radon, or radium, is especially effective in the case of benign tumors, but it is of at least palliative value in the malignant ones.

An excellent bibliography is added.

J. SAMUEL BINKLEY


A general consideration of the signs and symptoms of pulmonary cancer, of various diagnostic procedures, and the conditions to be differentiated.


Specimens of sputum were blocked, cut, and stained in 103 cases of pulmonary disease. Cancer cells were found in 14 cases, and in each of these the future course
confirmed the diagnosis. In 89 cases no tumor cells were found and only 3 of these 89 patients subsequently proved to have pulmonary neoplasms. The procedure, if carefully done, is thus a valuable aid in diagnosis. One photomicrograph is included.

Edward Herbert, Jr.


Three cases are reported, one of which was an echinococcus cyst of the lung. The others were true tumors, a benign neurofibroma and a spindle-cell sarcoma. The neurofibroma was successfully removed. The other patient died five weeks after operation with generalized metastases. Three roentgenograms are included.

Edward Herbert, Jr.


A general discussion of carcinoma of the lung with incomplete reports of five examples coming to autopsy.


A thirty-nine year old man, operated on for a tumor of the right frontal lobe of the brain, was found at autopsy to have a primary carcinoma of the bronchus with pericardial as well as cerebral metastases. A detailed pathologic report is included. There are seven photomicrographs and two gross pictures.

Seaton Sailer


A thirty-five-year-old male with clinical evidence of a cerebellar tumor but with no pulmonary symptoms was found on roentgen examination to have a tumor of the right superior bronchus. Autopsy substantiated the existence of a cylindrical carcinoma of the right superior bronchus with cerebral, cerebellar, and cardiac metastasis.

Seaton Sailer


In 1934 Rubenfeld reported a case of undiagnosed lung tumor which, because of its response to radiation, he believed might be of a lymphoid nature (Radiology 23: 627, 1934. Abst in Am. J. Cancer 24: 449, 1935). The patient was first seen in 1932, two years after the onset of symptoms, and received repeated series of roentgen therapy over a period of three and a half years, each time with a favorable response. Not until June 1936, over five years after the onset, did evidence of lymph node involvement develop. At that time hard discrete nodes appeared in the neck, and biopsy of one of these showed mononuclear and multinucleated giant cells, lymphocytes, and eosinophilic leukocytes. Irradiation was without effect, and death ensued shortly afterward. Necropsy was performed and the final diagnosis was Hodgkin's disease of the left lung with involvement of the right lung, liver, and jejunum; generalized involvement of the lymph nodes and vertebral marrow.

Roentgenograms and a photograph showing a cross-section of the lung are included, and there are references to the literature.


The literature concerning lipomas of the mediastinum was reviewed in 1930 by Yater and Lyddane (Am. J. M. Sc. 180: 79, 1930) and in 1928 by Graham and Wise.
The total number of cases now recorded in the literature, including the author's, is 16. To date there is no record of a completely intrathoracic lipoma having been successfully removed.

The author's patient was a boy of thirteen years. At the first operation a large lobule of the tumor was removed, measuring $18.5 \times 8 \times 7$ cm. and weighing 515 gm. Relief of symptoms was obtained but there was a recurrence within six months. At the second operation it was found that the tumor had increased in size, was breaking down, and was partly liquefied. A quantity of fat weighing 1.47 kg. was removed.

Twenty-one hours after operation the patient suddenly collapsed and died of cardiac failure.

The difficulties in dealing with such cases are enumerated and some suggestions are put forward as to how these can be overcome. Because of the large size of the tumor and consequent small amount of available expansion of the lungs anesthesia presents a special problem; the anoxemia following a very small dose of avertin may result in serious collapse. A second difficulty is the oozing which is likely to occur from the flimsy capsule when the tumor has been enucleated; the negative pressure inside the chest and the movements of the chest wall and mediastinum tend to lead to persistence of this oozing. The displacement of the mediastinum following the removal of the tumor is a third problem, as this is likely to cause considerable embarrassment of the heart's action. Finally, the question of obtaining and maintaining the expansion of the lungs is a difficult one.

The author includes roentgenograms taken before and after operation, and a photograph of the gross specimen removed at the first operation. There is a complete list of references.

J. Samuel Binkley


A forty-year-old woman complained of spontaneous pain in the left posterior region of the chest at the level of the scapula, aggravated on exertion. A sharply circumscribed mass was localized by x-ray in the posterior mediastinum in the region of the fourth left rib. At operation a smooth tumor $10 \times 6$ cm., with a cystic center filled with chocolate-colored fluid, was successfully removed. Histologically it was classified as a benign fibromyoxanthoma. Six roentgenograms, 2 photographs of the tumor, and 3 photomicrographs illustrate the report.

Seaton Sailer


The author reviews the literature on the incidence of metastatic tumor in the heart and presents the case of a thirty-seven-year-old male, diagnosed clinically as hemorrhagic meningitis with electrocardiographic signs of a myocardial infarct. The heart showed a hemopericardium and microscopically an extensive linear subpericardial invasion of carcinoma cells. The primary source of the tumor could not be determined because of autopsy restrictions. One gross picture and three photomicrographs illustrate the report.

Seaton Sailer


At the Peiping Union Medical College there were seen in the fifteen-year period ending in September 1936 185 patients with esophageal carcinoma, of whom 171 were Chinese (161 men; 10 women) and 14 Russians (9 men; 5 women). The disease was usually observed between the fourth and sixth decades. The ratio of males to females, when correction is made for the relative number of admissions, is approximately 5 to 1.

The suggestion, current for forty years, that irritation from hot tea and food is a possible etiologic factor is repeated. The use of pai kan, a strong alcoholic drink, is also suggested as a cause. In 22 per cent of the cases the upper third of the esophagus
was involved, in 27 per cent of the cases the middle third, and in 51 per cent the lower third. Seventy-eight cases were examined histologically and of these 60 were squamous carcinomas. There were 2 lymphosarcomas. In 13 cases metastasis occurred above the diaphragm and in 23 cases below. The figures for metastases, however, are probably low because of difficulties in obtaining autopsies. No one symptom was found to be invariably typical, although dysphagia was recorded 160 times (86 per cent), and a sense of obstruction in the throat 55 times (30 per cent).

In practically all the patients the disease was advanced when medical aid was sought. Seventy-nine gastrostomies were performed. Six attempts at surgical resection were made, three of which ended fatally; the others had to be abandoned. Gastrostomy combined with external irradiation was attempted in three instances with two fatalities. In the other case the growth was not controlled.

Forty-four references are appended.


The authors believe that the treatment of malignant tumors of the esophagus depends on their location and that with proper technic all will show some improvement. More patients with esophageal carcinoma should be treated with x-ray rather than being regarded as hopeless and suitable only for palliative measures. Only in those cases showing massive invasion and compression of mediastinal structures is treatment contraindicated.


The author describes the management of carcinoma of the esophagus in a male of fifty-three years, by means of esophagectomy and subsequent esophagoplasty. Two months following completion of the final plastic operation the patient developed influenzal pneumonia and died. Autopsy revealed a small plaque of tumor adherent to the right pleura, posterior to the right main bronchus. No metastases were discovered.

The patient was admitted Oct. 17, 1935, and a Janeway gastrostomy was performed on Nov. 8. On Nov. 12, a first-stage operation was performed for removal of portions of the 4th to the 7th ribs. The wound was then sutured. On Nov. 19, esophagectomy was carried out. The author gives a detailed step-by-step description of his technic. Postoperatively the patient received a transfusion of 900 c.c. of blood and was out of bed on the seventh day. Postoperative shock was combated by (1) the production of a preliminary pneumothorax, (2) division of the operation into two stages, and (3) reducing the movements of the patient during the operation to a minimum.

An esophagoplasty of the Lexer-Wullstein type (jejuno-dermato-esophagoplasty) was deemed too serious a procedure for this particular patient, and the method of Lilienthal (Thoracic Surgery, W. B. Saunders Co., Philadelphia, 1925) was elected. On Jan. 10, 1936, the first stage was performed and on March 3 the operation was completed. On June 2 the patient was admitted with a "cold." Death occurred June 4.

Photographs, a photomicrograph, and roentgenograms are reproduced, and there is an adequate bibliography.

**THE DIGESTIVE TRACT**


This report comes from the Peiping Union Medical College and is based on 108 cases diagnosed pathologically or roentgenographically as carcinoma of the stomach in the years 1921–1936. Seventy-six of the patients were Chinese, 2 Koreans, and the remainder Occidentals, chiefly Russian. Ninety-three patients were men and 15 women. Twenty-five patients were less than forty years of age, 32 were between forty-one and
fifty, and 43 between fifty-one and sixty; 8 were over sixty. The average duration of symptoms was about twenty-three months. Eighty-three patients complained of epigastric pain or discomfort. Loss of weight and vomiting were also frequent complaints. An abdominal mass could be palpated in 60 patients. In nearly a third of the cases metastases had occurred and there were 4 instances of perforation.

About two-thirds of the patients examined had achlorhydria. One-fifth had less than half the normal amount of hemoglobin. About two-thirds of the stools tested showed occult blood. When x-ray examination was satisfactorily done, it was considered diagnostic in some four-fifths of the cases. In a little over half of the patients the lesion was at a distance from the pylorus. The esophagus was involved in 16 instances.

Operation was performed in 66 cases, in 25 of which it was limited to exploration. In only 16 patients was the tumor regarded as resectable. Three of these were alive at the time of the report, one three years, one twenty-two months, and one four months after operation. Carcinoma was proved histologically in 57 cases and in 15 was diagnosed from the gross appearances. Four additional cases were diagnosed on the basis of the gross findings but the microscope failed to show carcinoma.

References are appended.


From 1906 to 1931 there were operated on at the Mayo Clinic 4,793 patients with gastric carcinoma. In 1,848 cases exploration only was done, with an operative mortality of 3.5 per cent; in 833 cases gastro-enterostomy, with an operative mortality of 11.5 per cent; and in 2,112 cases partial gastrectomy, with an operative mortality of 13.9 per cent. This is a resectability of 45 per cent of the total number of patients on whom a diagnosis of cancer of the stomach was made. A low operative mortality is dependent chiefly on proper preparation of the patient for operation and meticulous attention to all those details which lessen the likelihood of development of the two chief causes of death in such cases, namely peritonitis and pneumonia.

Many factors can be taken into consideration in estimating prognosis when the growth can be extirpated, namely, the age of the patient; the duration of the symptoms; gastric acidity; the size, situation, and extension of the lesion; the histologic characteristics of the tumor. Study of the histories disclosed the interesting fact that five-year survivals were more frequent among those patients in whom gastric symptoms were of long duration, for among those patients whose symptoms had been present for twelve months or more, 35 per cent lived five years, while among those whose symptoms had been present for six months or less 25 per cent were alive and well at the end of five years. Normal secretory gastric function was found to increase the five-year survivals 15 per cent above those cases in which secretory function was markedly diminished or absent. Curiously, there was greater expectation of life among patients with the larger lesions than among those who had the smaller ones. This is probably attributable to the fact that the smaller lesions are more likely to be of a penetrating character and also of a higher degree of malignancy. The nearer the lesion is to the pylorus, the more difficult it is to cure; removable tumors of the body of the stomach show a five year curability of 40 per cent compared with 28 per cent for tumors near or involving the pylorus. The extension of the growth is of great significance for prognosis. Five-year cures were obtained in 48 per cent of patients without lymph node involvement and in only 18 per cent of those with extension to the lymph nodes.

The most accurate prognostic information obtainable in this series proved to be the grade of malignancy, as determined by the method of Broders in which the degree of cellular differentiation is recorded as of Grades 1, 2, 3 and 4. Of patients with carcinomata graded 1 and 2, 63 per cent are alive five years after operation, and ten years after operation 55 per cent of patients of this group are alive. Of patients whose carcinomata were of grades 3 and 4, only 20 per cent are alive five years after operation. These results substantiate the fact that grading of malignancy stands first in importance in prognosis.

Benjamin R. Shore

In 18 proved cases of carcinoma of the stomach the platelet count was found to be within normal limits. Since there is a diminution in the number of platelets in pernicious anemia, it is suggested that the count may be a valuable aid in the differential diagnosis of these two conditions.

Edward Herbert, Jr.


A forty-six-year-old man had an adenocarcinoma of the greater curvature of the stomach with a gastro-colic fistula due to invasion of the tumor through the wall of the transverse colon. The clinical diagnosis was substantiated at autopsy. The literature on the subject is reviewed. Two x-ray photographs and five gross and microscopic pictures of the lesion are shown.

Seaton Sailer


The author discusses the difficulty in the diagnosis of this unusual type of gastric carcinoma and its atypical symptomatology. Two cases are presented, diagnosed by x-ray and confirmed at operation. The treatment was palliative in both instances.

Seaton Sailer


This is a general discussion of the diagnosis and treatment of lymphosarcoma of the stomach with the report of one case studied at autopsy.

This disease is difficult to distinguish preoperatively from gastric carcinoma but should be suspected in a patient with gastric symptoms, an almost normal blood picture with a history of hemorrhage and recovery, and roentgen demonstration of a smooth, flat tumor, or one with a deeply indented relief.

Drawings, roentgenograms, photographs, and two photomicrographs are included.

Benjamin R. Shore

Case of Gastric Schwannoma, E. E. Manson. Sobre un caso de Schwannoma gástrico, Bol. y trab. de la Soc. de cir. de Buenos Aires 20: 823–833, 1936.

A forty-year-old woman, unmarried, complained of gastric burning and pyrosis occurring intermittently over a period of eighteen years, but present almost continuously for five years. Pain was irregular in character and was relieved temporarily by food. A sudden massive hematemesis followed by prostration and pallor brought her under surgical observation. Roentgenograms showed only slight rigidity along the lesser gastric curvature. Following another episode of hematemesis the patient was operated upon and a firm tumor, some 3 cm. in diameter, was removed from the lesser curvature with a portion of the stomach 10 cm. from the cardia. Histologically the tumor showed the structure of a schwannoma with small areas of palisading and mucus formation with small pseudocysts. No follow-up is recorded. A brief discussion on the histology of these tumors is given and the case of an eighteen-year-old male with a typical schwannoma of the external popliteal nerve is recorded.

Seaton Sailer


A fifty-nine-year-old female with a five-year history of frequent epigastric pain, occasional vomiting, and gradual enlargement of the abdomen was suspected of having an ovarian cyst. A partly solid, partly cystic pedunculated tumor which when empty measured 27 × 12 cm. was removed with a small portion of the lesser curvature of the stomach, to which it was attached. Histologically the tumor showed interlacing fasciculi with some suggestion of nuclear palisading typical of a schwannoma. In
addition some of the cells resembled neuroblasts with bizarre nuclear forms. In the absence of certain characteristics of the neuroblasts, however, and in view of the existence of many nerve-like fibers in the periphery of the tumor, the authors believe it to be a schwannoma of the epithelioid nevus type.

Two gross photographs and four excellent photomicrographs illustrate the report.

In a discussion of this case, Caeiro (Bol. y trab. Soc. de cir. de Buenos Aires 20: 809, 1936) presents 2 more cases of intragastric schwannoma. The first was localized in the middle third of the lesser curvature, was sessile in character, and showed a large crater in the center. The second occupied the left third of the greater curvature and also contained a large central crater. Resection of the tumor and a portion of the stomach wall was performed in both cases. A number of roentgenograms and photographs but no photomicrographs are included in the printed discussion.

[For still another case, see preceding abstract.]

Carcinoma of the Ileocecal Valve, G. Palacios. Carcinoma de la válvula ileo-cecal,

A forty-five-year-old male with a history of alternating bouts of diarrhea and constipation for a year and a half had a large movable mass in the right iliac fossa. At operation a carcinoma of the ileocecal valve was removed. A photograph of the specimen accompanies the report.


Between 1915 and 1935 Wakeley operated upon 131 patients with carcinoma of the large bowel, with a mortality of 16 per cent. Sixty of his cases involved the sigmoid colon, 30 the cecum, 18 the transverse colon, 10 the splenic flexure, 6 the descending colon, 4 the ascending colon, 3 the hepatic flexure. He advocates the two-stage operation and describes the technic. Roentgenograms, drawings to illustrate the operative procedures, and references are included.


This paper is based on a study of the material of the Erlangen surgical clinic by Westhues according to the methods outlined in his monograph (Die pathologisch-anatomischen Grundlagen der Chirurgie des Rectum-Carcinoms, Leipzig, G. Thieme, 1934, reviewed in Am. J. Cancer 22: 128, 1934). Westhues' conclusions as to the slow local growth of rectal tumors, their polypoid origin, and the limits of extirpation are repeated here.


A general discussion, including a description of the technic of radium implantation in inoperable cases.


Radium therapy in rectal carcinoma is of two types: aggressive treatment with a view to cure, either alone or as a preoperative measure; palliative treatment of inoperable tumors.

Radical treatment was carried out in 101 of the authors' series of 132 cases. In 12 of these this consisted in the implantation of radon seeds or radium element needles with or without the aid of surgical diathermy. In the remainder direct application of the radium to the growth was obtained by the use of 2 rubber-covered brass tubes containing equal amounts of radon or radium sulphate, strapped together to form a small plaque which was inserted through the endoscope. In some cases the growth was destroyed by fulguration immediately preceding this latter form of therapy.

Conservative treatment consisted in external irradiation with radium at a distance, or with roentgen rays. Teleradium was employed over the lymph nodes of the groins:
heavily filtered tubes were placed in the center of annular growths, and additional vaginal applications were employed for female patients.

In 57 of the series colostomy was performed. This procedure not only relieves obstruction when this is present, but allows exploration of the viscera for evidence of metastasis, affording information which may alter the whole therapeutic plan. In addition, the field of treatment can be kept much cleaner after colostomy, and a larger dosage of radium can be employed because ensuing stricture will not be so disturbing.

The results of treatment are not given, having been recorded elsewhere (Am. J. Roentgenol. 32: 635, 1934; 34: 766, 1935. Abst. in Am. J. Cancer 24: 711, 1935; 27: 391, 1935). [In the earlier of these papers the figures are given for 481 patients treated by radium preoperatively, postoperatively, or without operation. Of 458 traced patients, 39, or 8.51 per cent, were well after five years and an additional 20, or 4.37 per cent, after ten years. The later paper is a preliminary report on a smaller series, and the results recorded are all for less than five years.]

References are appended.


A woman thirty-three years of age had a resection of the rectum with a permanent colostomy for carcinoma. Three years later she became pregnant but scar tissue prevented dilatation of the cervix during labor. Cesarean section was carried out and the patient was well six months after discharge. It is urged that in all resections of the rectum before the menopause, sterilization be carried out. Four illustrations are included.

Edward Herbert, Jr.


A man of seventy-four had a melanotic tumor of the posterior wall of the rectum. A growth, the nature of which is not stated, had been removed a year earlier. The tumor was excised and recurred promptly. The microscopic diagnosis was melanotic sarcoma. No follow-up record is given. There are no illustrations and no histologic details.


A report of an appendiceal carcinoid found at operation. It was a small orange-colored growth obliterating the lumen of the appendix and causing obstruction, with consequent perforation of the tip. No illustrations are included.


Report of an appendiceal carcinoid in a girl of nineteen, involving the entire length of the appendix. Photomicrographs are reproduced.

THE BILIARY TRACT


This is a general review of the pathology and diagnosis of solitary adenomas of the liver, based on a review of the literature and the study of two cases.

One patient, a twenty-four-year-old woman, was operated on through a kidney incision for a tumor of the right flank. The kidney on this side was normal when it was exposed but an intraperitoneal mass could be palpated. The incision was closed and the peritoneal cavity was opened through an upper right rectus incision. A solitary, well encapsulated, slightly lobulated mass, about 10 cm. in diameter, was found attached
to the lower edge of the liver in close relation to the suspensory ligament. This tumor was removed with a wedge-shaped piece of liver. The patient made an uneventful postoperative recovery. Histologic study of the specimen showed it to be a typical adenoma of the liver.

The second case reported is that of a thirty-one-year-old woman who died of a ruptured ectopic pregnancy. Autopsy disclosed two well encapsulated liver adenomas, the larger of which measured $10 \times 8 \times 8$ cm.

It is concluded from the study of these two cases that there are no definite symptoms or laboratory methods by which adenomas of the liver can be diagnosed, but that this condition should be considered in the differential diagnosis of upper abdominal masses in and about the liver region.

Several drawings, photographs of gross specimens, and photomicrographs illustrate the article.

Benjamin R. Shore


Two cases are reported in men sixty-one and fifty-six years of age respectively. The first developed painless jaundice and died of a duodenal hemorrhage. Autopsy showed an infiltrative type of carcinoma originating in the common bile duct with a gallstone impacted in the narrowed lumen. Painless jaundice also occurred in the second patient, who died with cholelithiasis. Autopsy showed a very small nodular tumor of the common duct but no stones. Five illustrations and several references are included.

Edward Herbert, Jr.


The authors discuss cancer of the gallbladder, considering frequency, age, symptomatology, clinical forms, sites of metastases, prognosis, and treatment. The case of a forty-five-year-old woman in whom the disease was undiagnosed during life is recorded with autopsy findings.

Seaton Sailer


Of two patients who had undergone cholecystectomy for papillary tumors of the bladder, diagnosed as fibro-epithelioma, one developed cancer of the common bile duct within a year; the other was without evidence of disease after eighteen months. The author warns that the prognosis in papilloma of the gallbladder should be guarded, since there is always the possibility of malignant change, as in similar tumors of the urinary bladder and the larynx.

PERITONEAL AND RETROPERITONEAL TUMORS


In 2 of the 3 cases recorded here the pseudomyxoma was of appendiceal origin; in the third it followed rupture of an ovarian cyst associated with a mucocele of the appendix. References are included.


Two cases are reported in women nineteen and thirty-four years of age in which retroperitoneal pelvic dermoid cysts were removed incompletely. In each case there was a recurrence within a year necessitating a second, more radical operation. In
ABSTRACTS

each case there was anuria due to pressure on the bladder. Both patients made uneventful recoveries. Stress is laid on the necessity for radical operation with removal of the coccyx or part of the sacrum in these cases. There are no illustrations.

Edward Herbert, Jr.

SUPRARENAL TUMORS


A case of adrenal cortical tumor is recorded in a man of thirty-three, which caused endocrine disturbances in the direction of feminization manifested by gynecomastia and lactation. The tumor was adherent to the left suprarenal but careful dissection showed it to be distinct from the gland and to arise from retroperitoneal tissue, probably in an adrenal rest. Metastases were present in the lungs.

Four similar cases have been recorded and references to these are given. Only one of the patients survived. In this case (Holl: Deutsche Ztschr. f. Chir. 226: 277, 1930. Abst. in Am. J. Cancer 15: 461, 1931) removal of the tumor was followed by remasculinization and complete cure.


Autopsy report of a tumor of the adrenal cortex with diffuse pericardial metastases.

Seaton Sailer

THE FEMALE GENITAL TRACT


In a group of 308 cervical carcinomas there were 32.8 per cent five-year cures. Of the series, 193 were treated with radium alone, and in this group five-year cures numbered 37.3 per cent. The remaining 115 cases were treated by operation, x-rays, or a combination of treatments, with 25.2 per cent five-year cures.

Edward Herbert, Jr.


The author reports the following absolute five-year survival rates for carcinoma of the cervix treated by radium at the London County Council Radium Center for Carcinoma of the Uterus:

Stage 1......................... 5 out of 10 = 50%
Stage 2......................... 8 out of 42 = 19%
Stage 3......................... 8 out of 55 = 14%
Stage 4......................... 3 out of 61 = 5%
Total......................... 24 out of 168 = 14.3%


A presentation of some of the principles underlying radiation therapy with special attention to dosage, distribution, and biological response.

This paper is based on 498 cases of carcinoma of the cervix treated by radiotherapy alone (roentgen rays or radium, or both) at the Paris Cancer Institute during the years 1921–1931. All but 6 of the patients were followed up systematically. At the end of five years, 133 were apparently cured, and of these 10 succumbed to late recurrent or metastatic growths. The proportion (2 per cent of all treated patients; 7.5 per cent of verified five-year cures) is similar to that recorded by others, but the authors consider that allowance must be made for the high proportion of Group IV cases in their series. There were no substantial differences in the proportions of late recurrences in Groups I to III. The longest delayed recurrence was in a patient who died after twelve years. Some of the surviving patients, therefore, may yet develop recurrences. Pelvic recurrences are apparently the most common (7 cases). Multiple osseous deposits were found in one instance. Treatment of late recurrences is ineffective; at the best it produces temporary palliation. The period of survival after recognition of a recurrence is variable and may extend to three years.

Details of the clinical history and treatment are given for each case of recurrence and the results are summarized in five tables. A bibliography is appended. L. FoulDS


A woman twenty-one years of age was treated for a chancre of the cervix. She was considered clinically well after eighteen months of treatment. Two and a half years after she was first seen a large advanced carcinoma of the cervix was discovered. Microscopic examination showed it to be a squamous carcinoma. Radium therapy was instituted but no results are recorded. Edward Herbert, Jr.

Two Cases of Malignant Mucus-Secreting Cystadenoma of the Cervix Uteri, M. A. Griffin. Mucus-secreting cystadenomas of the cervix uteri were found in two multiparous women aged thirty-four and forty-two. They were inoperable and the patients died twelve and seven months respectively after the onset of symptoms. There was extensive invasion of adjacent tissues and metastasis to regional lymph nodes. It seems that an originally simple mucus-secreting cystadenoma became malignant. Photomicrographs and references are included. L. FoulDS


A woman fifty-nine years of age complained of abdominal pain and distention. At operation a tumor weighing 6500 gm. was found in the uterus and was removed. Histologically it was a lipomyoma. No similar tumor of this size could be found in the literature. Two photomicrographs and four references are included. Edward Herbert, Jr.


In 17 cases of submucous fibromyoma the diagnosis was established by hysteroscopy with iodipin as a contrast medium. A supravaginal hysterectomy was performed subsequently and in no case was there evidence of infection or irritation. This method is advocated as a safe and reliable aid in the diagnosis of such tumors. Five roentgenograms and 5 photographs of the corresponding gross specimens are included. Edward Herbert, Jr.

This a general discussion with illustrative cases taken from the author's experience. It is concluded that the influence of fibroids on pregnancy depends entirely on the location of the tumor. EDWARD HERBERT, JR.


A woman twenty-six years of age had severe menorrhagia for six months. The cervix was normal, the breasts showed no colostrum, and the Aschheim-Zondek test was negative. The uterus was symmetrically enlarged to the size of a six months' pregnancy. At operation the uterus felt softer than is usual for a fibromyoma and it was opened for exploration. A fibromyoma was found and a hysterectomy was done. Abraham considers this to be a useful procedure when there is any doubt as to the diagnosis. There are no illustrations. EDWARD HERBERT, JR.


A woman thirty-two years of age with a large pelvic tumor gave birth to a seven-pound child at term. Delivery and post-natal course were normal. Three months later a supravaginal hysterectomy was performed. The tumor previously thought to be ovarian in origin was found to be a fibromyoma weighing 14 pounds. Recovery was uneventful. Two photographs are included. EDWARD HERBERT, JR.


Report of a case without unusual features. EDWARD HERBERT, JR.


In a clinical, roentgen, and electrocardiographic study of the hearts of 172 patients with uterine fibroids, 16.4 per cent were found to have evidence of organic heart disease, and 23.7 per cent showed functional changes. No evidence could be found for a direct effect of the tumors on the heart, and it is believed that the conception of the "myoma heart" is not tenable. Functional disturbances, however, can be traced to the presence of the tumor, either through blood loss or through nervous impulses or the psychic effect. There are no illustrations. EDWARD HERBERT, JR.


Report of a case without unusual features. EDWARD HERBERT, JR.


A chorionepithelioma was discovered nine months after a normal delivery in a woman thirty-two years of age. The Aschheim-Zondek test was positive. A panhysterectomy was done and a metastatic growth near the urethra was excised. No other evidence of tumor spread was found. After operation the Aschheim-Zondek test was negative. No follow-up is given. Two photographs and 3 photomicrographs are included. EDWARD HERBERT, JR.

A woman who was believed to be pregnant suddenly showed signs of intraperitoneal hemorrhage. A laparotomy was performed and several tumor nodules were found on the enlarged uterus, from one of which there was severe bleeding. A panhysterectomy was done and examination of the specimen showed a chorionepithelioma which had eroded a large vessel. Two years later the patient was in good health without sign of recurrence or metastasis. There are no illustrations.

Edward Herbert, Jr.


A woman fifty-five years of age whose last pregnancy was ten years previously was curetted because of prolonged uterine bleeding. A hydatid mole was found. The Aschheim-Zondek test remained positive for several weeks and a panhysterectomy was done. No chorionepithelioma was found, but there were remnants of chorionic tissue in the uterus and in the wall of the left tube. There are no illustrations but several references are given.

Edward Herbert, Jr.


Following a review of the literature on fibromyomas of the fallopian tubes, and a general discussion of the subject, the case is reported of a woman thirty-four years of age who complained of increasingly severe dysmenorrhea. After medical treatment had failed, an operation was performed in the belief that she was suffering from a chronic adnexal inflammation. A tumor 4 cm. in diameter was found in the right tube. It proved to be a fibromyoma. Recovery was uneventful. Four photomicrographs and several references are included.

Edward Herbert, Jr.


A brief description is given of the various types of ovarian tumors, following which a series of 146 cases is analyzed. The greatest number of cases occurred in the third decade. In the series there were 80 pseudomucinous cysts, 16 parovarian cysts, 22 papillary cystadenomas, 19 dermoid cysts, 2 mixed tumors, 4 fibromas, 2 carcinomas, and 1 sarcoma. Ascites was present in 8 cases. All of the patients were operated on, with an operative mortality of 8.9 per cent. A short summary of each case is included. There are no illustrations.

Edward Herbert, Jr.


The authors present the results of irradiation in 64 cases of ovarian tumors, of which 59 were carcinomas. In most of the patients some surgical procedure had been carried out, but in none was it believed that cure by this method alone was probable. In many the primary tumor was not removed. Thirty-one of the patients were treated by irradiation five years before the time of the report, and 11 of these, or 35 per cent, survived over five years. One of the 6 still living, however, had a persistent mass in the cul de sac. In many cases palliation was obtained, and in only a few with advanced disease was there no benefit.


A thirty-one-year-old woman was awakened from sleep by a sharp pain in the right lower abdominal quadrant followed by nausea and vomiting. At operation a large tumor containing a perforation about 5 mm. in diameter was discovered in the right ovary with considerable bleeding into the peritoneal cavity. The tumor was removed.
and examined histologically. Its center was cystic and contained scanty exudate and degenerating tissue. The surrounding zone of tissue was composed of packets of cells resembling those forming a corpus luteum, supported by a delicate vascular stroma. The remaining portions of the ovary showed cystic dilatation and small hemorrhagic zones. The histologic diagnosis was carcinoma of a corpus luteum. There is a brief general discussion of ovarian neoplasms. Three photomicrographs illustrate the report.

Seaton Sailer


Two cases are reported. The first patient was a woman twenty-eight years of age who had never menstruated and showed a hypogenitalism and lack of secondary sexual characteristics. She complained of abdominal pain, and a large right ovarian tumor was found and removed. The second patient was a woman thirty-two years of age with a normal menstrual history and normal physical development, who also complained of abdominal pain. A left ovarian tumor was found and excised. The tumors were identical histologically and corresponded to the group of dysgerminomas described by R. Meyer (Klin. Wehnschr. 9: 2237, 1930. Abst. in Am. J. Cancer 15: 1810, 1931). No hormonal tests were carried out and no follow-up is given. A photograph and 4 photomicrographs are included.

Edward Herbert, Jr.


A girl fourteen years of age who complained of pain and swelling of the abdomen was found to have a large pelvic tumor. It was removed and proved to be a granulosa-cell tumor, probably benign. Five photographs and 5 photomicrographs are included.

Edward Herbert, Jr.


The author reviews the literature on cystic teratomata of the ovaries, including 56 references. His patient was a woman of twenty-eight, complaining of lower abdominal pain, loss of weight, and nervousness. The cervix was eroded and ulcerated and the uterus was displaced to the left by a soft round mass which was diagnosed as an ovarian cyst. At operation it was discovered that both ovaries were replaced by cystic tumors, which were removed. On microscopic examination these were found to contain squamous epithelium, sebaceous and sweat glands, fat and connective tissues, minute cysts lined with cuboidal epithelium, and cartilage. Photographs of the tumors and a photomicrograph are included.


Report of an ovarian tumor in a woman of sixty-four. It was made up solely of thyroid tissue and fibrous stroma and contained none of the other elements commonly seen in teratomatous cysts. Photomicrographs and references are included.


A woman thirty-five years of age who was in shock showed signs of an abdominal hemorrhage. At operation a twisted dermoid cyst of the right ovary was found and removed. There was also a ruptured tubal pregnancy on the left, and a perforation of the anterior wall caused by an attempt at abortion. The patient made a complete recovery. A photograph and 7 photomicrographs are included.

Edward Herbert, Jr.

Fourteen cases of urethral carcinoma in women were previously reported from the University Gynecological Clinic in Berlin (v. Mikulicz-Radecki: Zentralbl. f. Gynak. 55: 2922, 1931. Abst. in Am. J. Cancer 16: abst. p. 443, 1932). In the present communication 7 additional cases are reported. They were treated by radium needles arranged radially in a metal disc, through the center of which passed an indwelling catheter. Of the total 21 patients, 10 died from five to sixteen months after treatment, one of heart failure, the others of recurrences or metastases. Two cases were lost, one after being free of recurrence for three years and a half. One patient was alive with a recurrence and 2 were still under treatment. One patient was well seven and a half months after treatment, and the other 5 were well from five to nine years. These results compare favorably with those obtained by other groups. Four drawings and several references are included.


A woman sixty-seven years of age had a tumor of the urethral meatus about 1 cm. in diameter. It was removed and microscopic examination showed it to be an undifferentiated squamous carcinoma. No follow-up is given. Four drawings and 5 photomicrographs are included.


A woman fifty-eight years of age, who was syphilitic, had Bowen’s disease of the vulva of thirty-two years’ duration. Treatment was refused and eight months later a squamous epithelioma developed which was removed surgically. No follow-up is given. There are no illustrations.


A woman sixty-one years of age had lesions of the vulva which on biopsy proved to be leukoplakia. One area in the center of the leukoplakic region was erythematous and microscopically was typical of erythroplasia. The coexistence of these two lesions appears from the literature not to be common. The authors consider it significant that the patient had a positive blood Wassermann reaction. There are no illustrations.


This is a report of an enormous fibroma of the vulva which had grown over a period of two years in a woman of forty-eight. The tumor weighed 1800 gm., had a pedicle 2 cm. in diameter, and when the patient stood erect reached to her knees. It was removed, and recovery was uneventful. Three photographs illustrate the report.


A general discussion, containing no original material.


Since 1910 there have been 82 well studied cases of sarcoma of the kidney in persons over twenty-one years of age, reported in the literature. To this group the author adds
ABSTRACTS

9 new cases from the Massachusetts General Hospital and 2 from the private practice of Dr. George Gilbert Smith in Boston.

The tumors in this combined series were equally divided between the sexes and also between the two sides of the body; in one case there was bilateral involvement. There were included 23 spindle-cell sarcomas, 12 fibrosarcomas, 16 unclassified sarcomas, 6 leiomyosarcomas, 4 mixed-cell tumors, 2 Wilms tumors, 11 embryonal mixed tumors, 2 embryonal myosarcomas, and 1 each of embryonal adenocarcinoma, embryonal adenosarcoma, lipoleiomyosarcoma, lipomyosarcoma, liposarcoma, fibromyxosarcoma, myosarcoma, rhabdomyosarcoma, reticul-cell sarcoma, round cell sarcoma, teratoma, and osteoblastoma.

Of the 78 patients submitted to nephrectomy, 30 are known to have died, 19 of these postoperatively. In 23 cases there is no follow-up record. Of the 55 patients for whom the end-result is known, 21 are living [presumably well], but only 3 have lived five years after operation. Of the 3 patients who have passed the five-year mark, there is some doubt about the diagnosis in one and little chance of a permanent cure in another, as the record stated that not all of the tumor was removed at operation. The third patient is well after seven years. Four patients have recurrences.

From this group of cases it appears that sarcoma of the kidney is a highly malignant tumor regardless of its histologic type.

There are no illustrations. A résumé of the cases from the literature, as well as the ones reported here, is given in tabular form and there is a bibliography.

Benjamin R. Shore


Following a general discussion of the clinical aspects of hypernephromas a single case is reported in a man thirty-two years of age. It was unusual only in that the appearance of enlarged cervical nodes, biopsy of which gave the diagnosis, was the first indication of the presence of the tumor. Three roentgenograms, 2 photomicrographs, and several references are included.

Edward Herbert, Jr.


A fifty-one-year-old man gave a history of hematuria four years earlier and of nephrectomy for tumor the next year. No histologic details were available, however. Eight months following the operation a red spot appeared over the dorsum of the left foot, followed by a tumor which had gradually increased in size till it measured some 6–8 cm. in diameter. The overlying skin was pigmented and contained many thin-walled veins. An ample systolic pulsation was perceptible over the tumor and plantar surface of the foot. The dorsalis pedis and posterior tibial arteries gave exaggerated pulsation, and compression of the former caused cessation of pulsation in the tumor. Roentgenograms showed osteoporosis of all the bones of the foot. A Syme amputation was done and the tumor was found to have its origin in the second metatarsal bone, which was completely destroyed. The central portion of the growth was traversed by the dorsalis pedis artery, the caliber of which was about twice the normal size. The endothelium was intact. Thorotrast injections clearly outlined the continuity of the tumor blood vessels with those of the arteries of the foot. Microscopic examination of the tumor showed it to be a typical clear-cell hypernephroma. Six months following operation the patient had recurrence of the tumor in the amputation stump and in the right foot.

The authors discuss briefly the behavior and diagnosis of hypernephroma, noting that in 50 per cent of the cases a skeletal metastasis will be the first manifestation of a symptomless hypernephroma; 35 per cent of these tumors showing skeletal metastasis
will pulsate and give easily audible systolic murmurs. Many of the metastases are solitary and offer a good prognosis if extirpated, providing the primary source has previously been removed.

Seaton Sailer


A woman twenty-two years of age complained of pain in the right flank. Clinically the diagnosis was abscess of the kidney, and a right nephrectomy was done. Occupying a position between the two poles of the kidney was a tumor some 8 cm. in diameter which showed widespread necrosis. It proved to be a fibromyxoma. No other unquestionable case of this type of tumor of the kidney was to be found in the literature. A photograph, 2 photomicrographs and references are included.

Edward Herbert, Jr.


Three cases of carcinoma of the bladder are reported in men sixty-eight, sixty-five, and forty-nine years of age. The first patient had a recurrence six months after operation and died. The other two were well, one a year and the other eight months after operation. Five drawings of the operative technic are included.

Edward Herbert, Jr.


A woman forty-three years of age complained of dysuria and bladder pain which were accentuated during menstruation. Cystoscopic examination showed a tumor between the ureteral orifices, extending into the vagina near the cervix. The tumor was removed and the patient made an uneventful recovery. The histologic diagnosis was endometriosis. Two photographs, 5 photomicrographs, and several references are included.

Edward Herbert, Jr.


This is a general discussion of the diagnosis, pathology, and treatment of primary carcinoma of the male urethra based on a review of the literature and the study of one original case.

The patient was a sixty-six-year-old man, a Jew, with a primary carcinoma about 4 cm. from the external meatus. Amputation of the penis with bilateral inguinal dissection was performed, with a fatal outcome from sepsis and bronchopneumonia five months later. Histologic study of the primary lesion showed it to be a transitional-cell epithelioma.

Two drawings and three photomicrographs illustrate the article.

Benjamin R. Shore


The first of the two patients described here was a man of sixty-six with a squamous carcinoma of the penis without enlargement of lymph nodes; the tumor was excised. The second patient, aged thirty-three, had a relatively undifferentiated type of epidermoid carcinoma and there were secondary deposits in the regional nodes. In biopsy material, the primary and secondary tumors had the same structure. Treatment was by irradiation, but both cases are too recent to allow a decision as to its success.

L. Foulds

A man fifty-eight years of age who had contracted syphilis twenty years previously, and had been inadequately treated, developed a tumor of the penis. Biopsy showed it to be a squamous epithelium. One photograph is included. Edward Herbert, Jr.

Carcinoma of the Penis in a Young Man, S. Ahmad. Indian M. Gaz. 72: 612-613, 1937.

Brief report of a squamous-cell carcinoma of the penis in a twenty-two-year-old Hindu. Amputation was performed a few months before publication.


Large numbers of embryonic buds or blastocysts were found in human testicular tumors; they were almost identical with the ova of primates and with the human blastocysts hitherto described.


Embryonic buds, like those in primary tumors in the testis (see preceding abstract), were found also in emboli in the spermatic vessels in one case of embryoma. The dissemination of these polyvalent buds accounts for the occurrence of multiple tissues in some secondary deposits of embryoma of the testis. L. Foulds


The clinical aspects of testicular tumors are described in detail and a plea is made for earlier diagnosis. This need is brought out by the fact that, of a series of 35 cases which were seen, 30 had clinical evidence of metastases. For the remaining 5, in which orchidectomy was performed, no late results are recorded. Edward Herbert, Jr.


After a general discussion of testicular seminomas a case is reported. A man thirty-four years of age complained of left lumbar pain. The left testicle was found to be enlarged and was removed. Histological examination showed seminoma. Radiotherapy was given and a year later the patient was in good health. There are no illustrations. Edward Herbert, Jr.

THE NERVOUS SYSTEM


A general discussion presented before the State Medical Association, originally illustrated by lantern slides, which are not, however, reproduced here.


Human intracranial tumor tissue, removed at operation, was cultivated in vitro. Migration was observed in 4 out of 9 meningiomas, 1 out of 4 perineural
fibroblastomata, 2 out of 3 hemangioblastomata, 2 out of 9 astrocytomata, 2 out of 3 glioblastomata, 2 out of 5 pituitary adenomata, and in the one medulloblastoma examined. The cells migrating from glial tumors can for the most part be confidently identified with the neoplastic cells of the explant, the glioblastomata alone offering some difficulty. With other types of tumor the identification of the migrating cells is difficult, and it is concluded that many hundreds of intracranial tumors must be cultured before any finality is reached as to the nature of the neoplastic cells of all types.

The paper is generously illustrated and a bibliography is appended.  
L. Foulde The paper is generously illustrated and a bibliography is appended.


The application of Dudgeon and Patrick's wet film technic to the urgent diagnosis of intracranial tumors is described in detail. The method is easy and rapid. The preparations are permanent and for some purposes they are superior to sections. The method is especially valuable for material obtained by brain puncture and after applying it to more than 60 intracranial tumors the authors consider that it yields a correct diagnosis in a higher proportion of cases than the supravital technic. The results are illustrated by 6 photomicrographs, of which 2 are in color. L. Foulde


Pilcher reports 5 cases which suggest that, in the presence of obscure headache or visual disturbance, the possibility of brain tumor should not be forgotten.

(1) A woman of forty-one was seen from time to time over a period of ten years. During this interval she suffered from right-sided headaches; nocturnal convulsive seizures occurred in the last three years, and dreamy states during the last twelve months. A small calcified mass in the skull was observed in the roentgenogram and this gradually increased in size over the ten-year period. It proved to be an osteoma of the right temporal bone. Symptoms disappeared following removal.

(2) A woman of thirty-nine had severe right-sided headaches following a blow on the head. Roentgenograms of the skull showed a large irregular area of calcification extending from the mid-line out over the right hemisphere. In order to determine the extent of this, a small trephine opening was made in the frontal region and a solid bony mass was found in the dura. At a second operation a wide flat plaque of bone was removed bit by bit. The patient recovered promptly, the headaches disappeared, and the blood pressure, formerly high, fell to 140 mm.

(3) A six-year-old boy became completely blind following a fall on the head, though subsequent events indicated that the fall was the result rather than the cause of visual disturbance. He suffered also from severe headaches and was slightly ataxic. Ventriculography was decided upon but the ventricular needle, inserted in the left occipital lobe, entered a large cystic tumor, from which 100 c.c. of fluid were evacuated. After repeated evacuations further exploration was undertaken and a papilloma of the choroid plexus was partially removed. Improvement followed except for vision, and at a second operation a radical excision of the remaining tumor was done. Two subsequent operations, one ten months and the second thirteen months later, were done for recurrences, the last followed by irradiation. At the time of the report, ten months after the last operation, the child was free of symptoms except for the blindness.

(4) A woman of thirty-two gave a twelve-year history of left-sided jacksonian convulsions, left hemiparesis, and hemihypesthesia. The Wassermann reaction was positive but in spite of antisyphilitic treatment the symptoms persisted for seven years, then ceased for an interval of four years, and after this recurred. The left arm and leg became weak, and headaches and vomiting occurred. Roentgenograms of the skull were negative. Operation revealed a cystic spongioblastoma polare. Recovery was rapid and a year and a half later the patient was free from symptoms.

(5) The fifth case was one of aneurysm of the right internal carotid.
Two cases are reported of cerebral tumors the first symptoms of which were attacks of jacksonian epilepsy. There was nothing unusual in either case.

Edward Herbert, Jr.

A cerebral tumor, probably an astrocytoma, in a patient aged thirty-four has remained stationary for a year, during which intensive deep x-ray therapy has been applied. Final cure is not expected.

L. Foulds

A man forty-eight years old had attacks of vomiting, loss of weight, and headache, associated with dimness of vision and giddiness. The blood was normal, the Wassermann reaction negative, and x-ray studies of the gastro-intestinal tract revealed nothing of interest. The patient became very uncooperative, the mental condition suggesting toxic insanity or dementia praecox. Eventually he passed into a coma and died.

At autopsy the cerebellum was found to contain in its right lobe a cyst lined with a network of capillary blood vessels. Cystic areas were also present in the cerebrum. The mediastinum contained a mass and there was a nodule in the right lung. The microscopic diagnosis was malignant hemangioblastoma of the cerebellum with metastasis in the cerebrum, lung, and mediastinum. Photomicrographs are included.

Indian M. Gaz.

A report of a case in which the only symptom was progressive failure of vision. Removal of a suprasellar meningioma was followed by complete recovery of vision in the left eye and partial recovery in the right eye.

This paper is one of a series on modern treatment in general practice. It contains a description of the operative technic for the removal of pituitary tumors.

An eighteen-year-old boy gave a history of continuous headache, starting at the age of nine and lasting one year, with loss of vision in the left eye. The symptoms abated and disappeared in the ensuing five years only to recur with loss of vision in the right eye. Examination showed arrested physical development and evidence of increased intracranial pressure. Roentgenograms of the skull revealed complete destruction of the sella turcica. The authors discuss the differential diagnosis, pathologic anatomy, symptoms, prognosis, and treatment of these craniopharyngiomas. There are nine illustrations.

Seaton Sailer

A boy aged nine had a rapidly developing tumor of the neck. The biopsy diagnosis was neurofibromatosis. After an unstated interval, the tumor was removed but recurred within a month; the histologic diagnosis of the operative specimen was neurogenic sarcoma. There were no characteristic tumors in the skin but tiny nodules were present.
and a biopsy specimen showed proliferation of the perineurium. Typical pigmentation, hypertrophy of part of the cranial vault, and a defect in the occipital bone were also present.  

L. Foulds


A girl aged thirteen had cutaneous lesions characteristic of Recklinghausen's disease and others which closely resembled glomus tumors, but as some of the latter were present in situations where, it is believed, the glomus does not occur normally, they are described as "glomoid."  

L. Foulds


Three cases of osteogenic sarcoma in Chinese men are recorded. The first patient was a monk twenty-five years old complaining of swelling of the knee joint with limitation of motion. A roentgen diagnosis of osteogenic sarcoma was made and in spite of evidence of pulmonary metastases the leg was amputated. Death occurred six months later. The diagnosis was confirmed pathologically and the tumor was found to have infiltrated the adjacent soft parts.

The second patient was a man of twenty-three with a swelling in the upper part of the left leg, which had appeared after a strain. The mass had been aspirated and thereafter had increased rapidly in size. It was believed to be an osteogenic sarcoma and amputation was performed. Pathologic examination showed it to be of the osteolytic type. Eight months later the patient was alive but was said to suffer occasional local discomfort and mild pains.

The third case, like the first, was of the sclerosing type. The patient was a man of twenty-four with a tumor of the upper end of the left humerus for which a shoulder girdle amputation was done. At the time of the report he was receiving roentgen therapy, a form of treatment not available in the other cases.

References are appended. There are no illustrations.


A report of a small-spindle-cell sarcoma of the knee joint in a man of thirty years. A hip joint disarticulation was done but at the time of the report the patient was still in the hospital.


Thirteen cases of fibrous osteoma of the jaws are reported and the pathology of two other recorded cases is discussed.

The new bone in these tumors was formed by the process of fibrous or membranous ossification, cartilage being seen in a minute trace in only one case. In 12 cases the tumor consisted largely of fibrous tissue in varying degrees of maturation, and ossification was proceeding slowly. There was also myxomatous tissue present in 3 cases and occasional small islands rich in giant cells were observed in 2.

In general these tumors are slow-growing and when starting in childhood tend to become stationary in adult life. In no instance has malignant degeneration been observed. Blood calcium and phosphorus were determined in 4 cases and found to be normal. The lesion appears to be a true neoplasm and not a form of osteitis fibrosa, hyperostosis or chronic inflammation. The treatment consists in complete operative removal when the lesion is small and circumscribed, but in cases of diffuse involvement of the bone the operation should, as a rule, be limited to partial removal in order to
avoid defects in the jaws and extensive disfigurement. Roentgen therapy was found to retard the growth of the unresected portion of tumor for long periods in two cases.

The article is well illustrated with photographs, roentgenograms, and photomicrographs. There is a bibliography.  

A general discussion of giant-cell tumors of bone with 6 case reports.

Report of a case illustrated by a photomicrograph.

A tumor which had been present for ten years was removed from the tibia of a man twenty-four years of age. It was found to be a hemangio-endothelioma with large cystic spaces throughout, as well as some areas showing bone formation. A detailed description of the histology is given. Eight photomicrographs are included.

A man aged fifty-six had tumors of the iliac crest and one rib and Bence-Jones protein was present in the urine. He died about eighteen months after the onset of symptoms. The tumors had the histologic features of malignant plasmocytoma. The clinical features and the classification of myelomas are discussed and the present tumor is assigned to the group of plasma-cell myelosarcomas.

**Contribution to the Knowledge of Kahler's Disease (Multiple Myeloma)**, R. Dassen, A. Fisher, and P. C. Rospide. Contribución al conocimiento de la enfermedad de Kahler (mielomas múltiples), Semana méd. 1: 1527-1535, 1936.  
A general description of the clinical picture of multiple myeloma is given and illustrated by the report of a typical example in a man thirty-three years of age. Five illustrations and several references are included.

Following a review of the literature, 5 cases of joint chondromatosis are reported. In men of twenty-four and sixty-three the elbow was involved; a woman of forty-seven and a man of forty-five had involvement of one knee, while a man of thirty with severe rheumatoid arthritis had cartilaginous bodies in both hip joints, one knee, and one elbow. In no case was there a history of trauma. In all the cases except the last operation was performed with removal of the cartilaginous bodies, which varied in number from 18 to 286. All of these patients made uneventful recoveries. von Puky believes that chondromatosis is a true neoplastic condition. Seven roentgenograms, six photomicrographs and an extensive bibliography are included. In addition, the cases from the literature are summarized in tabular form.

**THE LEUKEMIAS AND HODGKIN'S DISEASE**

The author reviews the cases of acute leukemia with spontaneous remissions reported in the literature, and the recorded cures. Few of the latter can be accepted, however,
because of insufficient data either to establish the diagnosis or justify the impression of a cure. No original material is recorded. Forty-five references are appended.


From the results obtained in a severe case of lymphatic leukemia with widespread skin infiltration and two cases of mycosis fungoides, it is concluded that radiotherapy given to the whole body causes marked improvement in leukemia, not only in the skin lesions but in the blood picture and general condition, while in mycosis fungoides its beneficial effects are only transient and it tends to depress the blood-forming organs more than it benefits the skin manifestations.


Six cases of myeloid leukemia treated by roentgen irradiation of the spleen are recorded. The patients were all Indian males, of whom one was fifteen years of age and the rest between thirty and forty. The boy had the disease in an acute form and died six weeks after admission, but even in this case the blood picture showed temporary improvement after irradiation. One of the other patients, a man of thirty, also died in spite of a good response to the early treatments. In the remaining cases there was continuous improvement. Only the immediate results are recorded, however. Illustrations in black and white and in color are included. Three references are appended.


A man aged thirty-seven noticed a slight swelling on his face. Two days later he vomited and felt ill. The swelling increased and resembled an alveolar or parodontal abscess. Blood counts revealed myeloid leukemia and death occurred, of bronchopneumonia, nine days after the onset of symptoms.


A twenty-three-year-old woman suffering from chronic myelogenous leukemia received x-ray therapy for a period of over three years, during which time she gave birth to two normal healthy infants. A splenectomy was then performed and she showed great general improvement for almost four months, after which the white blood count was again elevated. The patient died within the next five months with evidence of a cerebral hemorrhage despite continuation of radiation therapy.


A twenty-four-year-old unmarried man with a greatly enlarged spleen and the blood picture of chronic myelogenous leukemia developed priapism fifteen days after x-ray radiation of the spleen. Following continuation of the treatment with amelioration of the blood picture and the general condition, the priapism disappeared after twenty-five days. The authors discuss briefly cases reported in the literature, pathogenesis, and prognosis.


The case described here is the fifth recorded instance of acute eosinophilic leukemia. The patient was a Chinese police officer thirty-three years of age, who twenty days before admission complained of toothache. The tooth was extracted, following which
the patient complained of a sore throat. This yielded to treatment but he became weak and listless and lost appetite. Fifteen days after the onset of the illness purpuric spots appeared all over the body, and a few days later the white blood count was found to be 158,000 with numerous myeloblasts. Examination revealed in addition to the purpuric spots general slight enlargement of the superficial lymph nodes with greater enlargement of the submental and submaxillary nodes; slight cyanosis of the mucous membranes and nail beds; bilateral leukemic retinitis; hypertrophy of the gingivae with superficial ulceration in some areas, particularly marked in the region of the tooth extraction; slight ulceration over the uvula and pharynx; enlargement of the liver and spleen. The blood count on admission showed 118,000 white cells with 75 per cent eosinophils; the following day the white cells numbered 254,000 with 82 per cent eosinophils, and the count two days later, three days before death, was 265,500 with 81 per cent eosinophils. The number of immature forms was much greater than in the previously recorded cases. Autopsy was not obtained.

References to the reported cases of both acute and chronic eosinophilic leukemia are appended. Two of the reports of acute cases have been abstracted in the American Journal of Cancer (McCowen and Parker: 17: 582, 1933; Stephens: 25: 717, 1935). One color plate shows various types of blood cells present.


Case reports, with blood counts, of two girls aged two and one-half years and two years and one month respectively, who succumbed to monocytic leukemia.

L. FOULDS

**Subacute Aleukemic Myelosis**, M. LÓPEZ PONDAL. Un caso de mielosis aleucémica subaguda, Semana méd. 1: 1104–1105, 1936.

A man forty-one years of age with the clinical picture of a subacute leukemia had a white count of 1400, with 73 per cent polymorphonuclears, and 2 per cent myelocytes. He died soon after he was seen and no autopsy was performed. It was believed that the case was one of aleukemic leukemia.

EDWARD HERBERT, JR.


This article is an excellent summary of the present knowledge of Hodgkin's disease, though it contains no new material. Eight illustrations and a lengthy bibliography are included.

EDWARD HERBERT, JR.

**Lymphogranulomatosis (Hodgkin's Disease) and Pregnancy**, N. PALACIOS COSTA AND M. V. FALSA. Linfogranulomatosis (enfermedad de Hodgkin) y embarazo, Semana méd. 1: 652–654, 1936.

A woman twenty-two years of age developed typical Hodgkin's disease during pregnancy. The disease ran an extremely rapid course, appearing during the fifth month and causing her death one week after a premature birth in the sixth month. No autopsy was performed.

EDWARD HERBERT, JR.


A twelve-year-old boy was admitted to the hospital with a history of periodic attacks of fever over a period of eighteen or nineteen months. Subsequent bouts of fever were associated with enlargement of the spleen and of the lymph nodes, which subsided in the free intervals. The child was anemic, treatment had little effect, and death ensued. Autopsy was not permitted but a lymph node was excised for examination. Histologic study revealed the lesions of Hodgkin's disease.
The earlier blood counts were not especially noteworthy but with the progress of the disease the mononuclear count increased, rising to 57 per cent.

Photomicrographs of the excised node and the blood mononuclears are reproduced.


The author reports the case of a seventeen-year-old girl from whom he removed a tumor of the anterior mediastinum with a fatal outcome. The growth was well encapsulated and measured 15 × 12 × 10 cm. Histologic study showed it to have the typical structure of Hodgkin's disease. Autopsy failed to disclose any other evidence of Hodgkin's disease. Photographs of the gross specimen and two photomicrographs illustrate the report.

**STATISTICS**


To a brief historical review the author adds some statistics from the King George Hospital, Vizagapatam, Madras, India. The total number of cancer cases seen over a four-year period was 335. Among these were 52 cancers of the palate, all in patients who gave a history of smoking with the lighted end of the cigar in the mouth; 52 of the penis, all among uncircumcised Hindus; 50 of the tongue, and 46 of the breast.


This is a detailed statistical study of cancer mortality in the city of Rosario, Argentina, from 1872 to 1935. It shows the same increase of mortality that has been observed elsewhere. A plea is made for more concentrated efforts in the direction of a cancer hospital in the city.


In the period 1926 to 1935 there were seen in the Elim Hospital in the Northern Transvaal 84 cases of malignant tumor among 12,373 native patients, 53 carcinomas and 31 sarcomas, sarcomas of the lower extremity (14 cases) and carcinoma of the uterus (11 cases) predominating.

Statistics are also given for the Swiss Mission Hospital at Chikhumbane, a rural community in Portuguese East Africa. Here in the four years 1928–31 there were seen 40 carcinomas, 10 sarcomas, and 5 mixed salivary gland tumors among 5,790 patients. This series was of interest for the large number of cases of cancer of the liver (14), which bears out Berman's statement (South African J M Sc 12, 1935. Abst. in Am. J. Cancer 27: 214, 1936) that hepatic carcinoma is much more frequent among the Portuguese natives than among those of the Union of South Africa. Carcinoma of the bladder also showed a high incidence in this group, 15 cases.

At the Swiss Mission Hospital in the town of Lourenco Marques, also in Portuguese East Africa, there were seen in 1934–1935, 23 carcinomas (13 of the uterus, 9 of the liver, and 1 of the breast) and 2 sarcomas.

Even with allowances for unavoidable inaccuracies the author believes cancer to be decidedly less frequent among the natives than among Europeans in South Africa. He proceeds to analyze his statistics on the basis of localization of the cancer. References are appended.
early cases. Concomitantly it is shown that in the same period there was an increase in the number of patients who first went to a physician in panel practice. This failure in diagnosis is to be explained by the fact that panel doctors were negligent in their examinations, especially in failing to perform a pelvic examination.

Edward Herbert, Jr.


For the campaign against cancer in the Union of South Africa the author makes the usual suggestions: propaganda among the medical profession, with encouragement of periodic examinations, legislation to make the disease notifiable, establishment of diagnostic and treatment centers, and education of the public.