Abstracts
Clinical and Pathological Reports

Clinical investigations are sometimes included under Reports of Research

Urinary System — Male and Female


A study of the gross and microscopic characteristics of 37 adenomas is utilized to interpret the pathogenesis, structure, classification and relationship of these lesions. Adenomas are seen to occur frequently in association with cysts, their incidence increasing with each succeeding decade past early middle life and somewhat approximating the age incidence of renal carcinoma. Adenomas are seen to occur more frequently in kidneys containing clinical cancer than in significant series of kidneys examined at necropsy. Reasons are presented for considering adenomas as malignant growths.—Authors’ summary (W. F. W.)


A female of 28 with some of the features of the tuberous sclerosis complex was found to have a liposarcoma of the kidney.—W. F. W.


Glandular type of metaplasia of the epithelium of the renal pelvis developing into a mucinous adenocarcinoma was found in a patient with kidney infection and stones. The changes evolved over a period of 14 years. Abnormal epithelium was implanted in the wound at the time when the local recurrence of a mucinous carcinoma appeared. Subsequent invasion into the peritoneal cavity with involvement of many organs occurred and death resulted in 6 months. The total course of the disease was 20 years. The unusual type of metaplasia has been reported once before, but this is the first instance of a mucinous carcinoma having its origin from kidney pelvis epithelium. —W. F. W.


The literature is reviewed and a case added.—W. F. W.


A Wilms’ tumor involving the entire kidney and ureter in a 75 year old man is reported.—W. F. W.


The literature is reviewed and a case added, bringing the total number of reported cases to 54. Hematuria is the first and frequently the only symptom. Pain and urinary frequency due to passage of blood clots may be present. The diagnosis has been made by the pathologist rather than by the clinician in all cases except one. Angiomas probably explain many instances of essential hematuria. The lesions frequently occur on the renal papillae and may be so minute as to be missed unless macroscopic serial sections are made and every suspicious area examined microscopically. Profuse hemorrhage may result from a microscopic lesion of the kidney.—W. F. W.


The case presented is the first recorded instance of a papilloma arising in the pelvis of an ectopic kidney. Review of the literature revealed only 22 instances of tumors in abnormally placed kidneys, 5 involving ectopic and 17 in ptotic kidneys. An analysis of the cases is presented. —W. F. W.


This report of 82 cases comprises a detailed study of renal tumor cases admitted to the New Haven Hospital during a 23 year period. Eleven tumors (13.4%) occurred during the first decade of life. Fifty-nine tumors (72%) were in males, 23 (28%) in females. In 53 cases the tumor was on the right side, in 29 cases on the left side. Classification is discussed briefly. The prognosis of malignant renal tumors is much more severe than is indicated by 5 year follow-up reports. In the present series 19.5% lived 5 years, 14.0% lived 10 years and 9.08% are alive without evidence of tumor. The problems are mani-
fold, embracing hereditary, congenital and acquired factors. Biological proof in addition to gross and microscopic examination for malignancy in a kidney tumor must be considered. Individual defense measures on the part of the host against the development of renal neoplasms are probably a natural response. It is doubtful whether the so-called controlled cases in this series had tumors which could withstand both the pathological and biological tests for malignancy. Their recovery can be explained in addition to surgery either on the basis of a non-malignant tumor as shown by biological tests, or on the basis of natural factors of defense. Since treatment by surgery and irradiation promises little, we can expect meager improvement in end results until some of these problems can be solved.—W. F. W.


Ten cases of tumor thrombosis of the inferior vena cava associated with malignant renal tumors are added to the 41 previously described in the literature. An analysis of these cases indicates: (a) Renal tumors are by far the most common growths associated with tumor thrombosis of the inferior vena cava. (b) The thrombus is usually an extension from the renal vein (42 cases from a total of 51). (c) Most of the patients (35) have had the tumor in the right kidney, probably due to the short renal vein on the right. (d) Males predominate (42). (e) Many patients (20) have extension of the thrombus into the right auricle. (f) Edema of one or both lower extremeties is a common finding in these cases. (g) Direct invasion of the inferior vena cava is an important cause of thrombi. (h) The direction of the thrombus is not entirely controlled by the flow of blood. (i) Patients with tumor thrombosis of the inferior vena cava rarely live more than 6 months after signs of obstruction have occurred.—W. F. W.


One hundred and seven autopsies showing infiltrating carcinoma of the bladder are reviewed, and the relation of the depth of penetration of the bladder wall to the incidence of metastases, lymphatic capillary invasion and perivesical fixation is noted. Designating each case with any of these evidences of tumor as inoperable, the potential curabilities were 100%, 86.6%, and 26% for tumors showing submucosal infiltration, muscular infiltration and perivesical infiltration, respectively. The cardinal sites of metastases were regional lymph nodes, liver, lungs and vertebral column, including sacrum and pelvis, in that order.—W. F. W.


A case is reported of generalized lymphosarcoma with infiltration of the kidneys in which the pyelograms resembled polycystic disease.—R. E. S.


Case report. The patient, an 11 year old boy, had survived the removal of a Wilm's tumor of the left kidney at the age of 3 months. His death was due to periarteritis nodosa; no evidence of recurrence of the previous tumor was found at autopsy.—E. B. B.


A urinalysis may be unreliable as an indicator of far advanced pathological conditions of the urinary tract in many cases. The author cites these among others: (1) infections that do not communicate with the pelvis of the kidney as do perinephritic abscess or a carbuncle of the kidney; (2) tumors that do not bleed continuously; (3) noninfected hydronephrosis; and (4) stones or kinking of the ureter obstructing flow of urine from one side. Of the patients illustrating these points, one was a woman of 62 years who had pain in the right kidney with previous episodes of hematuria. Although the urine was normal at the time of examination, she had an advanced papillary carcinoma of the kidney. Another woman, 30 years old, discovered a large mass in the left upper quadrant of the abdomen during the fourth month of pregnancy. Urinalysis was negative, but during an exploratory laparotomy a large carcinoma of the kidney was found.—W. B. A.


Case report.—S. H. D.
and the literature reviewed. The cause of the condition is unknown. Grossly, the lesions appear as grayish-yellow or yellow-brown, flat-surfaced plaques varying in number, size and distribution. They are occasionally raised 1 to 2 mm. above the level of the mucosa and have abrupt or slightly overhanging edges. A zone of hyperemia frequently surrounds the lesions. The centers of the large plaques often appear umbilicated and may be ulcerated. Histologically the principal cellular elements are large oval or polyhedral cells, frequently closely aggregated and found in the submucosa. The majority of patients are women past 30 years who have had repeated episodes of cystitis. All age extremes have been reported in both sexes. Urinary frequency and hematuria are the prominent symptoms. Treatment is not standardized but fairly good results have followed fulguration. —W. F. W.


A technic for the direct and open radiation of invasive bladder carcinoma is described. It is suggested only in the most desperate types of bladder tumor. The author admits that the small number of treated cases and the short follow up periods do not permit any final evaluation of the method, but believes the procedure worthy of consideration in certain bladder carcinomas. —W. F. W.


A case is reported and the histopathology discussed. The importance of a painstaking history and of accurate interpretation of the cystoscopic findings is emphasized. In the entire series of 46 cases of ectopic endometriosis of the bladder reported in the literature, the correct diagnosis was made only twice from biopsy studies. This low figure may be due in part to inadequate removal of tissue. —W. F. W.


Two hundred and forty-five patients with carcinoma of the bladder, operated on during the years from July 1, 1940 to July 1, 1945, form the basis for this report. Accurate follow-up records exist for 188 (76.7%), but for 57 (23.3%) they are incomplete. The average age was 62.9 years. Sixty-five (26.8%) were females; 180 (73.2%) were males. An average of 12.4 months elapsed between the first symptoms and the actual diagnosis. Hematuria was the outstanding or initial symptom in 230 cases (94%), and 229 patients (93%) were treated by transurethral resection. Along with this, radon seed implantation and deep x-ray therapy were used in certain cases. Cases are selected for radium implantation on the basis of evidence of infiltration seen at preliminary cystoscopy. Deep x-ray therapy is employed only in those showing infiltration where something in the way of extra help is felt necessary. Segmental resection was done 15 times. Total cystectomy with uretero-sigmoidal transplantation was done 3 times. The pathology is briefly summarized. The operative mortality for total cystectomy was 33.3%, for segmental resection 6.6%, and for transurethral resection 0.4%. Of the 189 cases on whom definite information is available 37.5% are known dead from all causes, whereas 32.2% died as a result of their disease. The results of treatment are tabulated and the author concludes that transurethral resection with or without radon seed implantation, as the case requires, offers an excellent chance for cure in the less invasive types of bladder tumors.

Transurethral operation to be properly effective must remove all or as much as possible of the tumor tissue without danger to the patient and must include thorough fulguration of the base of the tumor. This method of approach gives a great many cures without the attendant morbidity of cystotomy. In the incurable type of tumor, it offers palliation without the discomfort, both mental and physical, which attends permanent cystotomy. More radical segmental resections and an increased number of total cystectomies will give a higher percentage of cures in the more invasive types of malignant bladder tumors. —W. F. W.


One hundred and seven cases of infiltrating carcinomas of the bladder studied at autopsy are divided into 3 groups: (1) those in which penetration was limited to the submucosa, (2) those in which penetration extended into the muscularis, and (3) those in which perivesical infiltration was present. The potential curability in each group was determined by the presence of regional or distant metastases, perivesical capillary lymphatic invasion only, or perivesical fixation of the mass. In the first group, potential curability was 100%, in the second group 86.6% and in the third only 26%. Eighty-nine of the cases fell in the third group. The diagnosis of a tumor which has invaded the perivesical tissues can be made in a high percentage of cases in the male by recto-abdominal palpation under anesthesia. Recognition of the extent of infiltration preoperatively aids in the selection of the most efficacious therapeutic procedure. —W. A. B.


A boy aged 5 had, projecting into the bladder, a polyoid tumor covered by transitional epithelium without any evidence of malignancy. —E. L. K.


A discussion is presented of a case treated by surgery. —M. H. P.

Primary melano-epithelioma of the female urethra is an extremely rare disease (1 in 230,000 females). Three cases encountered at the Mayo Clinic in the last 37 years are reported, making a total of 14 cases described in the literature in approximately 50 years. It is a disease of the aged. As is true of this lesion in other locations, the prognosis is poor. The most common symptoms are a serosanguineous vaginal discharge and a dark-colored tumor. Treatment by electrocautery excision supplemented with roentgen and radium therapy has not been very effective.—W. F. W.


These tumors are either (a) villous growths resembling papilloma of the bladder, found most often in the posterior urethra and covered with transitional epithelium, or (b) sessile warts of the anterior urethra covered by squamous epithelium. Three examples of each type are described.—E. L. K.

Oral Cavity and Upper Respiratory Tract


A conclusive diagnosis of laryngeal papilloma in children and primary carcinoma of the trachea can only be made by direct examination and biopsy. Repeated endolaryngeal excision is the treatment of choice for a papilloma. Fisher recommends electrocoagulation of the carcinoma of the trachea through a bronchoscope with the tumor under direct vision and such treatment should be followed by irradiation with roentgen rays. A more general use of the bronchoscope in patients with unexplained hemoptysis would probably reveal a larger number of rare osteomas of the trachea. Some recent literature of adenomas of the bronchus is reviewed with no definite conclusions. The greatest problem in successfully treating carcinoma of the bronchus is the inability to make a diagnosis sufficiently early. The greatest value of irradiation therapy of these tumors is in its palliative effect. A bronchoscopic examination is of limited value for mediastinal tumors. The diagnosis of benign tumors of the esophagus cannot always be made by esophagoscopic examination. Difficulty is encountered in the esophagoscopic differentiation between intramural and extramural tumors and the extraoesophageal tumors pressing and deforming the esophagus. To eliminate blind spots, gastroscopic procedures on patients in the sitting posture is preferable for the study of cancer in the upper third of the stomach.—C. R. N.


Of 119 patients who have been followed, 57 (47.9%) gave evidence of neoplastic involvement of the lymph nodes, and 62 (52.1%) had no evidence of ganglion involvement.—R. J.


A full description of a case plus photomicrographs is given. The possible neoplastic nature of the affection is discussed.—E. L. K.


The odontogenic tumors are classified into three groups: epithelial, mesenchymal, and mixed. The dentinoma, a pure mesenchymal tumor, is composed of connective tissue in which denticles or islands of irregularly formed dentin are present. The odontogenic mixed tumors consist of epithelial and mesodermal elements which are in combination in various proportions and arrangements. Three types are recognized: soft, soft and calcified, and calcified. The soft type has been differentiated from the solid adamantoblastoma.

There is evidence of the inductive influences of one tissue in another in the odontogenic mixed tumors. It is noted that epithelium in these tumors seems to stimulate dentin formation, but that the presence of epithelium is not necessary for the production of dentin. Also, dentin is formed in the presence of epithelial cells not differentiated into ameloblasts. Neoplastic adamantine tissue and enamel-forming ameloblasts have been distinguished. The presence of these two types accounts, in part, for the formation of the soft and calcified odontogenic mixed tumors.—Author’s summary. (J. G. K.)


Case report of a compound composite odontoma (osteofibroma of dentigerous origin) of the nasopharynx is given.—C. R. N.


Description of 3 cases of choanal polyps which were removed surgically by the Caldwell-Luc operation.—C. R. N.
Cancer Research


Cancer and hemangioma of the larynx are among the subjects discussed in this review of 1945 literature on otolaryngology.—M. H. P.


First true leiomyoma of the upper part of the larynx in the American literature is reported. Tumor was removed and recovery was uneventful.—C. R. N.


On the basis of 8 reported cases, plus other personal experiences, the author concludes that fibrosarcoma of the larynx should be treated surgically and that complete removal is necessary. The majority of these tumors can be removed without sacrifice of the larynx. Although sarcoma of larynx is rare it should be considered as a possible diagnosis.—C. R. N.

INTRATHORACIC TUMORS


Observations on 47 cases of primary bronchogenic carcinoma reveal 41 were males, 6 were females and 91% were between 40 and 69 years of age. The average duration of life for 38 of the known dead from the onset of symptoms to fatal termination was 17.3 months. A majority of patients sought medical care immediately after the onset of symptoms or soon afterwards yet there was an average time lapse of 8.2 months between the patient's first visit to a doctor and the correct diagnosis. The authors believe that many patients with primary bronchogenic carcinoma are already beyond the curable stage by the time the initial symptoms appear. It is urged that efforts be directed toward discovery of the disease while the time the initial symptoms appear. It is urged that efforts be directed toward discovery of the disease while it is still in a preclinical stage by utilizing the tuberculosis case-finding technics and by routine annual chest x-rays of all persons over 40.—M. E. H.


Case report. Postmortem examination showed a chronic bilateral adhesive pleurisy and a large papillary adenocarcinoma of the left lung which microscopically resembled prostate tissue.—M. E. H.


The operative mortality rate associated with resection of lung tissue has been reduced to such a point that no hesitancy should be felt in recommending this form of treatment. The more common resectable pulmonary lesions are presented and diagnosis discussed. Figures presented from a study of the literature revealed 93.7% of 443 collected cases of primary lung tumors were malignant and 6.3% benign. Carcinoma occurred in 407 and sarcoma in 8 of the malignant cases. Among the 28 benign lesions, 23 were bronchial adenomas, and one each of hematoma, fibroma, myxochondroma, teratoma and neurofibroma.—M. E. H.


The clinical diagnosis was malignant adenoma of the bronchus; the pathological study favored a diagnosis of malignant mixed tumor of the right lower lobe of the lung with invasion of hilar lymph nodes, mediastinum and inferior vena cava.—M. E. H.


Discussion of the problem.—W. A. B.


Reports are given of fibrosarcoma in the pulmonary parenchyma diagnosed roentgenologically as metastases of an osteogenic chondrosarcoma of the tibia.—S. H. D.


The technic of this operation upon which the cure for lung cancer often depends is described in detail.—J. L. M.


Included in this paper are case reports of a neurogenic tumor of the mediastinum, and of a carcinoma of the esophagus. Operative technic is diagrammatically presented.—J. L. M.

Heart


A case report. The authors conclude that the tumor arose from pericardial elements included in the atrial wall during cardiac development.—J. G. K.

Gastrointestinal Tract

Diagnostic and Therapeutic Considerations of Gastrointestinal Bleeding. Jones, C. M. [Harvard Med. Sch.,
A general discussion concerning bleeding from the esophagus, stomach, and intestine, as caused by various types of lesions including tumors. Physicians are warned that obvious sources of bleeding may not provide a true explanation for hemorrhagic episodes; e.g., hemorrhoids or anal fissures may be incorrectly accepted as the cause of rectal bleeding actually due to carcinoma. Thorough diagnostic measures, postponed in part until after the hemorrhage, are urged. Cancer should always be suspected in the presence of colonic bleeding. Gastrointestinal hemorrhage is usually due to peptic ulcer, but sometimes also can be caused by cancer of the stomach, and by carcinoma or leiomyosarcoma of the duodenum. Esophageal bleeding is due either to varices or cancer in most cases.—M. H. P.


A general discussion of the use of x-ray for differential diagnosis in patients with gastrointestinal bleeding is given. It is no longer believed necessary to postpone roentgenography for 2 weeks or more after hemorrhage; the author has examined patients even during bleeding, although not during shock. Fluoroscopy and a single spot film may be sufficient to demonstrate a large cancer. However, blood clots may produce a picture similar to polypoid tumors, and questionable cases should be excluded by re-examination. Repeated hemorrhage without other clinical symptoms is often found in gastric leiomyomas, fibromas, neurofibromas, and their malignant variants, with similar and characteristic x-ray appearance. Examination should not stop at the duodenal cap, but should be continued even if only one source of bleeding has been found. The author reports finding a bleeding fibrosarcoma in the third portion of the duodenum in a patient who had a large duodenal ulcer that at first was considered sufficient to explain the hemorrhage.—M. H. P.


Physicians are blamed for much of the long delay commonly noted in gastric cancer cases before diagnosis is established. An analysis of the records of 188 cases of this disease reveals that 70% were hopeless when first seen by the surgeon; in 127 cases the patient was responsible for an average delay of 9 months, and in 72 cases the blame for an average delay of 17 months rested on the physician. Epigastric pain or burning, epigastric distress or fullness, and indigestion were the first symptoms in 70% of the patients. In persons over 45 years old, these symptoms should not be treated casually, but should provoke a searching investigation for cancer. X-ray examinations should be repeated at short intervals if the symptoms persist; in the present series, the first x-ray examination failed to establish the diagnosis in 24% of the cases. Where a diagnosis of gastric ulcer has been made, the chance of malignancy may be 10-14%, and patients should be given the benefit of surgery if possible rather than medical therapy. A therapeutic trial of medical treatment is especially condemned for differential diagnosis between ulcer and cancer.—M. H. P.


Case report.—S. H. D.


Case report.—R. E. S.


Results of surgical treatment in 5 cases of malignant tumors of the duodenum are described. The tumors include carcinomas of the first, second and third segments, spindle cell sarcoma of the third segment, and round cell sarcoma involving most of the duodenum. The operations are described in detail.

General conclusions are not yet possible in regard to the surgery of primary malignant neoplasms of the duodenum. Pancreatoduodenectomy is the most radical procedure, but good results have been achieved with more conservative procedures. The authors stress that as in any surgical attack upon neoplasms, each patient presents individual problems which must be evaluated if the surgeon is to carry out the best operation for that patient.—J. L. M.


According to the operative records of the Mayo Clinic, benign neoplasms of the intestine are uncommon, their frequency being about one-half that of carcinoma. Yet at necropsy they have been observed twice as frequently. The most common are adenomas and myomas, with other forms occurring less often. The case reported is of a submucous lipoma of the upper jejunum causing intestinal obstruction in a 55 year old woman.—E. B. B.


Primary carcinoma of the small intestine comprises a small percentage of the neoplasms of the gastrointestinal tract, and is rarely recognized preoperatively. It may occur as any one of the following types: single or multiple polyp that has undergone malignant degeneration; annu-
lar constriction lesion; or carcinoid or argentaffine tumor. A case is presented of a 61 year old white female who had a carcinoma of the small intestine with metastasis in the regional lymph nodes. The epithelium was suggestive of gastric rather than intestinal mucosa, and it was thought that this tumor may have originated in a Meckel's diverticulum.—E. B. B.


At autopsy on a 63 year old male, 7 tumors in the ileum and 1 in the ascending colon were found; the last-named had formed a metastasis in a lymph gland. The nature of carcinoid tumors and the origin of the Kulchitsky cell are discussed.—E. L. K.


The studies reported were made on 23 patients with carcinoma in some portion of the colon. The age variation (38 to 72) of the 21 patients who had carcinoma of the proximal portion of the colon and the sex (10 women and 11 men) appeared to have no bearing on the degree or frequency of anemia.

The type of anemia that occurs with cancer of the proximal portion of the colon was observed to be the same as that produced by a deficient supply of iron for elaboration of hemoglobin. The abnormal demands made upon the iron supply of the body were noted to be increased in instances where the growth was situated in the proximal segment, and the absorption of dietary iron appeared to be more retarded than it was when the growth was situated in the distal portion of the colon. In all cases of cancer of the right half of the colon the concentration of serum iron was low. If severe anemia was present, a marked decrease in the concentration of serum iron was observed. The anemia could apparently be arrested, with sufficient amount and was absorbed. Recovery from the anemia following removal of the cancer was demonstrated to be dependent upon adequate absorption of iron. Administration and adsorption of iron following resection of the involved segment of colon resulted in a return of a normal concentration of serum iron and hemoglobin. Anemia accompanying carcinoma of the distal portion of the colon has been observed in 2 instances to be similar to that observed in conjunction with carcinoma of the proximal portion of the colon.—J. L. M.


A plan of management of lesions of the colon is presented which emphasizes an orderly sequence of events in diagnosis, standardized preoperative and postoperative regimen and an operative technic, which has resulted in a mortality rate of 4% and a minimal morbidity rate. Five case histories are presented. Preoperative and postoperative instructions are given in detail.—J. L. M.


A description of an operation which the author has performed in 21 consecutive cases without mortality.—E. L. K.


This is a resume of 978 cancers of the colon and rectum examined and treated by the writer. Of these, 286 were removed by radical surgical procedures. There were 108 primary metastases in this group. (Primary metastases are defined as those that are discovered at operation or on examination of the removed specimen; and secondary metastases, those that appear at a later date). In the remainder of the 978 which were inoperable there were 189 primary metastases. Secondary metastases occurred in 5 years in 65 cases which had been subjected to operation. The greatest number of secondary metastases occurred in the age group between the 40th and 49th year. Metastases in the operative wound occurred in 22 cases.—W. A. B.


General discussion.—W. A. B.

**LIVER**


Benign tumors of the gall bladder or bile ducts are rare. In the case reported, the tumor on excision proved to be a benign papilloma. There was local recurrence in less than a year. The disturbance of liver function caused by its presence resulted in a fatal termination.—M. E. H.


A report of a case, in a man who also had epidermoid carcinoma of the bladder with cervical metastases, adenocarcinoma of the rectum and prostate, and biliary cirrhosis of the liver.—M. H. P.


Three cases are presented including 2 patients with carcinoma of the colon and 1 with lymphoscarcoma.—S. H. D.
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Cancer Res 1948;8:90-96.

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