

wise possessed this ability. In *Salmonella choleraesuis*, but not in *Hemophilus influenzae*, smooth strains were much more potent than rough for the production of hemorrhage in tumors. No tumor hemorrhages were produced by streptococci or (with few exceptions) other gram-positive bacteria, or by protozoan flagellates. Apparently the hemorrhagic factor of the gram-negative bacteria is bound in the complex O antigen. The mode of action of "Coley's toxin" is discussed.—M. H. P.

Number of Peyer's Patches in Mice Belonging to High and Low Mammary Tumor Strains. KELL-SALL, M. A. [Roscoe B. Jackson Memorial Lab., Bar Harbor, Me.] *Proc. Soc. Exper. Biol. Med.*, **61**:423-424. 1946.

Mice used in this study were of both sexes, varying in age from 4 weeks to 1.5 years. The animals were starved for two days prior to death, killed with ether, and the small intestine as well as the cecum removed, fixed in 10% formalin solution for 2 days, and then thoroughly washed. This procedure enabled the patches to be easily seen macroscopically. The 5 different strains used included C57 black, having a low average of 6.3 Peyer's patches and in which spontaneous mammary tumors are very rare, strain C, Swiss mice and dba, with an intermediate number of patches averaging 8 to 9. These latter strains have a higher incidence of spontaneous tumors (up to 85% in dba breeding females). Finally C3H mice were also

studied and were found to have the highest number of patches (mean being 10.7); the incidence of mammary cancer in this strain is about 95%. The correlation between the number of Peyer's patches and the incidence of spontaneous mammary tumors is significant.—M. B.

The Experimental Production of Extraskelatal Bone-Forming Neoplasms in the Rat. DUNNING, W. F., and CURTIS, M. R. [Wayne Univ. Coll. of Med. and Detroit Inst. of Cancer Research, Detroit, Mich.] *Radiology*, **44**:64-76. 1945.

Bone-containing neoplasms having no connection with the skeleton were experimentally produced in rats. In one group of 7,500 neoplasms induced in rats' liver by *cysticercus fasciolaris*, 49 were bone-forming tumors. The tumors varied from benign to highly malignant growths and showed extreme variability. Sixty-six bone-forming neoplasms were observed in 2,351 tumors induced by subcutaneous injection of paraffin containing 3,4-benzpyrene. Three concentrations of benzpyrene were used: 1.0, 0.25, and 0.1% giving rise to tumors in the proportion of 1, 7, and 20% respectively. The most favorable incitant of heteroplastic bone-forming neoplasms was 0.1%, the weakest concentration used.

It was noted that the osteosarcoma induced had a greater average daily increase in diameter than the bone-containing neoplasms which were primarily fibrosarcomas.—R. E. S.

Clinical and Pathological Reports

Clinical investigations are sometimes included under Reports of Research

DIAGNOSIS—GENERAL

The Significance of Tumor Cells in Serous Effusions. HONIGMAN, A. H. [Sch. of Med., Univ. of Md., and Univ. Hosp., Baltimore, Md.] *Surg., Gynec. & Obst.*, **81**:295-301. 1945.

An examination for malignant cells was made of 172 samples of fluid aspirated from 142 patients, and the results are tabulated and discussed. Malignant cells were found in nearly 60% of the fluids from patients with confirmed carcinoma.—J. G. K.

The Vaginal and Endometrial Smear as a Diagnostic Procedure in Cancer of the Uterus. PAPANICOLAOU, G. N. [New York Hosp., New York, N. Y.] *N. Y. State J. M.*, **45**:1336-1338. 1945.

The author believes that although this method is still incompletely explored and should not be expected to compare in accuracy and dependability with the long tested and well standardized methods of biopsy and curettage, its clinical test in various laboratories has proved its validity as a source of reliable information. It presents some distinctive and advantageous features, which are enumerated. Two case histories are reported.—J. L. M.

II. The Value of the Vaginal Smear in the Diagnosis of Uterine Cancer. A Report of 1015 Cases. MEIGS, J. V., GRAHAM, R. M., FREMONT-SMITH, M., JANZEN, L. T., and NELSON, C. B. [Vincent Memorial Hosp., and Harvard Med. Sch., Boston, Mass.] *Surg. Gynec. & Obst.*, **81**:337-345. 1945.

The authors conclude that the vaginal smear technic is an accurate method of diagnosis of cancer of the uterus and that its most important contribution may be in the field of cancer control, since large numbers of women may be screened and those with positive smears studied further by biopsy.—J. G. K.

THERAPY—GENERAL

Results in the Treatment of Skin Cancer. GOLDMAN, L. B. [Queens Gen. Hosp., Jamaica, N. Y.] *N. Y. State J. M.*, **45**:2186-2189. 1945.

The two varieties of skin cancer, basal and squamous, are presented with illustrations before and after treatment. The author points out that any skin ulceration, small as it may be, if persistent, should be suspected of malignancy unless repeated biopsies are negative. Three methods of treatment, irradiation, electrocoagulation, and surgery, are utilized in skin cancer. The results, however, depend not so much upon the choice of a modality as upon its proper use. The common skin lesions should be treated with irradiation rather than with surgery or electrocoagulation. Surgery is indicated in skin carcinomas of the extremities, being of special advantage in cases of ulcerations that do not heal under ordinary care.—J. L. M.

Hormone Treatment of Cancer. DODDS, E. C., ET AL. [Discussion at Med. Soc. of London, Dec. 10, 1945] *Lancet*, **249**:817-818. 1945.

E. C. DODDS said that a small proportion of breast cancers are undoubtedly benefited by estrogen. TERENCE MILLIN

had found that 90% of 200 cases of prostatic cancer were benefited by estrogen. Most of those that failed to respond had apically situated tumors. This series does not extend beyond 3 years; no case can be regarded as cured until after 10 years. Stilbestrol is more efficacious than orchidectomy. Bone metastases may recur in spite of continued treatment. Estrogen therapy should be the final rather than the initial treatment, since its benefits tend to be reduced after 2 or 3 years. Treatment is recommended in three stages: (1) total prostatectomy, (2) transurethral resection plus orchidectomy, and (3) stilbestrol therapy—with a wait for symptoms to recur before starting the next phase of treatment.—E. L. K.

Contact Roentgen Therapy in Cancer of the Bladder. GOIN, L. S., and HOFFMAN, E. F. [Los Angeles, Calif.] *Am. J. Roentgenol.*, 54:392-394. 1945.

During a period of 5 years, 31 cases of cancer of the bladder have been treated by suprapubic cystotomy, fulguration of the tumor mass, and direct irradiation of the tumor base, one or two reopenings of the bladder being done for repeated treatment when necessary. Contact (Philips) equipment was employed with a target skin distance of 22 mm. and radiation of half value layer 1 mm. Al; about 5,000 r is the usual single dose, of which most of the patients had two a week apart. Treatment was limited to tumors not more than 3 cm. in diameter, involving the trigone or the bladder neck. There were no deaths, no serious hemorrhage, and no bladder perforation or fistula formation. Nine patients are living with no evidence of disease, 10 more still have cancer. The results compare favorably with those from radon or radium implantation and are better than those from external irradiation only. It is pointed out that for higher voltage x-rays such large doses would probably not be tolerated.—E. H. Q.

Salient Factors in the Treatment of Hodgkin's Disease and Lymphosarcoma with Roentgen Rays. DESJARDINS, A. U. [Mayo Clin., Rochester, Minn.] *Am. J. Roentgenol.*, 54:707-722. 1945.

The number, size, and position of radiation fields must be carefully planned to cover all demonstrable lesions. The quality of radiation is not important provided an adequate depth dose can be administered. Instead of treating different fields in sequence, it is recommended that each field be treated completely before another is started. Treatment for each field usually requires 2 days; the patient should receive daily irradiation until the series is complete. A second series about 3 weeks later is advised. If enlarged nodes contain a large proportion of connective tissue, or old calcified deposits, or are infected, they do not respond as well to therapy. The clinical condition of the patient is also a factor; in acute cases, rapid regression may be followed by rapid recurrence, while in chronic cases long remissions may be obtained.—E. H. Q.

Report on Radium Therapy for 1943. FRICKE, R. E. *Proc. Staff Meet., Mayo Clin.*, 19:549-552. 1944.

A statistical analysis of the results of radium therapy at the Mayo Clinic for 1943 is presented. Of 742 patients, who had been treated with radium for malignant disease months or years ago and who returned in 1943, the malignant disease of 61.3% was arrested or "cured," the condi-

tion of 35.1% was improved and only 3.6% had not been helped. Of the 193 patients who had been treated previously for benign conditions and who returned in 1943, 76.2% had definitely improved, while 19.7% were cured and only 4.1% had not been helped. The only new form of treatment instituted during 1943 was the use of radon ointment for the treatment of intractable irradiation ulcers. Twenty patients treated with radium 5 to 9 years ago, 12 treated from 10 to 19 years ago and 1 more than 20 years ago for known malignant disease were given careful examination with failure to elicit any residual malignant lesion or any recurrence.—J. L. M.

Discussion on Treatment of Carcinoma of the Larynx. DAVIS, E. D. D., *et al.* [*Proc. Roy. Soc. Med.*], 38:353-362. 1945.

E. D. D. DAVIS reviewed 40 cases of early intrinsic cancer of the larynx treated by laryngofissure. Of the 40 patients, 15 could not be traced, and in 7 only exploratory operations were done. In the remaining 18, 9 have had no recurrence in 5 years or more, 5 have had recurrence after 2 years, 4 have had earlier recurrence. Preliminary biopsy was not always considered necessary. Laryngofissure could safely be performed without tracheotomy and there was no operative mortality.

LIONEL COLLEDGE stated that surgery offers appropriate treatment for all forms of intrinsic cancer of the larynx, provided gross extension beyond the larynx has not occurred. Biopsy should be performed in all cases. Of his patients, 25 with laryngofissure or partial laryngectomy showed 18 survivals for 10 years or more; of 75 subjected to laryngectomy, 45 survived 10 years or more. He considered radiotherapy an alternative and not a supplement to excision. He did not advocate trial irradiation, nor the use of radiation in all cases, followed by operation on failures. Each case must be decided on its own merits. If radiotherapy is used it should be telerradium, not radium implantation.

M. LEDERMAN discussed radiotherapeutic methods of treating intrinsic cancer of the larynx, recommending external radiation by x-rays or telerradium in preference to the Finzi-Harmer operation for early cases. Decision between surgery and irradiation has to be made according to the general condition of the patient, the histology, site, and extent of the tumor, the purpose of the treatment. Trial irradiation is justified in certain cases.

In comparing results of surgery and radiotherapy certain facts should be noted: (1) Surgical skill and technic in the performance of the various laryngeal operations for cancer have reached their peak, whereas radiotherapeutic technic is still in process of development. (2) Statistics from surgical sources are selected, since only cases operated on are reported. (3) The radiotherapist has usually to base his results on material discarded by the surgeon. A true comparison of results is possible only when the material is comparable. (4) There is no statistical method of showing such advantages of radiotherapy, as conservation of the larynx and absence of an operative mortality.

Figures from various radiotherapy centers were quoted, including 56 cases treated by telurium at the Royal Cancer Hospital between 1933 and 1944. Of 23 patients with tumors classified as operable, 18 were alive and well, 8 for 5 years or more. Of 19 with tumors classified as inoperable, only 1 survived for 5 years. Fourteen had recurrence after previous treatment; of these, 5 are alive, 1 for more than 5 years.—M. L.

Treatment of Carcinoma of the Prostate Gland with Special Reference to Stilbestrol and Castration. PIERSON, L. E. [Sioux City, Iowa] *J. Iowa M. Soc.*, 35:357-359. 1945.

A brief review.—M. E. H.

RADIATION

Some New Facts Concerning the Prognosis and Treatment of Carcinoma of Cervix by Radiation. DONALDSON, M. *Proc. Roy. Soc. Med.*, 39:10-15. 1945.

In the radiotherapeutic treatment of advanced carcinoma of the cervix it has been observed that a considerable percentage of patients do poorly even with supposedly adequate irradiation, while a certain number, apparently in the same stage of disease, recover with much less treatment. Spear and Glücksmann have shown that, with the Stockholm technic and its modifications, the most "radio-curable" growths are the well differentiated and not the undifferentiated ones. Classification of both types according to stage of diseases shows that differentiated cells predominate in early, and undifferentiated in later stages. In 346 tumors Glücksmann found that 15% of the anaplastic parakeratotic growths showed 5 year survival, as contrasted to 32% in anaplastic squamous growths. The difference was most evident in stage 3 cases, when the survival ratio was 2:1.

A study of preradiation sections is important in deciding whether a tumor should be "radio-curable"; a quantitative comparison of pre- and postradiation sections enables an exact prognosis to be made in a given case. The method is as follows: Sections are always taken from the growing edge of the tumor. Biopsies are performed before irradiation is started, and at least twice during treatment, and percentage counts made of the following 4 cell types, (a) resting—not differentiating and not dividing but retaining the power to divide, (b) mitotic, and (c) differentiating—with eosinophilic cytoplasm and a distinct cell wall. The alteration may proceed to parakeratosis or to true keratinization. Either process renders the cell nonviable. (d) Degenerating cells represent the last type counted, these showing various forms of nuclear disintegration. Quantitative histological charts are then made by plotting these counts against time on a graph at a convenient scale.

In a series of 150 cases of uterine cancer followed up for 24 months the prognosis given on histological grounds was in agreement with the clinical finding in 111 instances. In 25 cases the histological and clinical findings were not in agreement; in 14 cases there was no report.

In an attempt to improve results with undifferentiated tumors the author has tried a modified technic using the same quantity of radium and number of hours but giving a continuous instead of an interrupted treatment. It is

too early for any statement as to clinical results but the histological picture suggests a definite improvement.—M. L.

Direct Irradiation of Cancer of the Stomach and Other Viscera (Exposed Temporarily at Operation). FAIRCHILD, G. C., and SHORTER, A. [Mt. Vernon Hosp., Northwood, Middlesex, England] *Lancet*, 249:522-526. 1945.

Gastric cancer is the commonest form of cancer, and curative surgery gives only 1 to 4% of 5 year survivals while palliative treatment adds only 4 months to the patient's life. The reason for the poor results of treatment are late diagnosis, incomplete surgery, and the failure of the usual methods of irradiation, *i.e.*, external irradiation, contact therapy with the Chaoul tube, radon seed implantation, and intracavitary irradiation. Direct irradiation at high intensity after preliminary temporary exposure of the gastric neoplasm has the following advantages: (1) The size, position, and extent of the neoplasm can be accurately assessed and a biopsy performed. Any operation necessary for the relief of obstruction can be undertaken at this time. (2) The tumor can be accurately treated without irradiating large volumes of normal tissue. (3) The skin is undamaged by irradiation and subsequent external irradiation can be applied if necessary.

Before operation, special attention is given to accurate diagnosis and localization of the tumor, and every care taken to build up the patient's general condition and to combat sepsis. At operation the incision is planned according to the site of the disease and the patient rests on a special trolley designed so that the radiation treatment can be given without moving him off the apparatus. After exploration and consultation among surgeon, radiotherapist, pathologist, and anaesthetist, if the decision to employ direct irradiation is made, the patient is moved to the radiotherapy room, the treatment given, and the patient returned to the theater for closure of the wound.

For the radiotherapeutic treatment two specially modified 250 kv. Metropolitan-Vickers constantly evacuated tubes are used. Two technics have been employed. In the first, a single dose of 500 to 1,200 r is given to the lesion through a parietal opening, followed 10 to 14 days later by external radiation to make up the deficiency in original dosage owing to depth. Field sizes vary from a 10×8 cm. rectangle to a 13 cm. diameter circle; focal skin distance is from 21.7 cm. to 40 cm.; H.V.L. 1.7 mm. to 2.05 mm. Cu and the surface lesion intensity varies from 288 to 2,000 r/min. In the second technic, using 2 tubes simultaneously each at 21.7 cm. focal skin distance and a 13 cm. diameter circular field, a surface dose of 1,350 r is given in order to realize a minimal dose of 1,300 r throughout the tumor.

The postradiation reactions have been slight, certainly less than those noted after external irradiation. Over a period of 18 months 15 cases of all types of visceral cancer have been treated, 6 purely palliatively. Nine cases are recorded in detail; stomach, 6; abdominal esophagus, 1; pancreas, 1; colon, 1. Three of these patients are alive, 1 for more than a year. The remaining 6 patients died, 2 after 1 year survival.—M. L.

Radon Ointment Treatment of Irradiation Ulcers. FRICKE, R. E., and WILLIAMS, M. M. D. [Mayo Clin., and Mayo Foundation, Rochester, Minn.] *Radiology*, **45**:156-161. 1945.

Two cases of radiation ulcer treated by radon ointment responded with gratifying results. Theories as to the mode of action of the ointment are that it is the action of the radiations on the tissue itself, the action of the radiations on the petrolatum, simultaneous action of irradiation and petrolatum, or the action of disintegration products of radon on tissue. The radon has no effect on malignant lesions which, if present, must be treated separately. In the discussion, E. Uhlmann reported use of the method for 16 years, and L. S. Goin and L. C. Kinney mentioned 19 cases in which it was employed. Uhlmann stated that his experiments show that vaseline or petrolatum as such has nothing to do with the effect, and is used because it is inert and absorbs large amounts of radon.—R. E. S.

Treatment of Carcinoma of Prostate by Irradiation. MUNGER, A. [Lincoln Gen. Hosp., Lincoln, Neb.] *Radiology*, **45**:31-39. 1945.

A discussion, and summary of 27 cases. Castration of patients with prostatic carcinoma is now generally recognized as the most effective method of treatment. Surgical castration removes the testicular carcinogenic factor, but there are extragonadal depots of androgen production that this does not touch. Female hormone (estrogen) depresses androgenic activity and is also effective in treatment. However, Munger has obtained best results with prostatic resection followed by testicular and regional irradiation and coincident estrogen therapy. Stabilization has been more lasting than with any other method of treatment.—R. E. S.

The Therapeutic Use of Radioactive Phosphorus. WARREN, S. [Harvard Cancer Commission, New England Deaconess Hosp., and Harvard Med. Sch., Boston, Mass.] *Am. J. M. Sc.*, **209**:701-711. 1945.

Eighty-one cases of leukemia, myeloma, Hodgkin's disease, and polycythemia vera were treated with radioactive phosphorus. About one-third of the treated cases showed temporary improvement.—J. G. K.

SKIN AND SUBCUTANEOUS TISSUES

Disseminated Congenital Osteomas of the Skin with Subsequent Development of Myositis Ossificans. Report of a Case in an Infant. VERO, F., MACHACEK, G. F., and BARTLETT, F. H. [Vanderbilt Clin., and Babies' Hosp., Columbia Univ., Coll. of Physicians & Surgeons, New York, N. Y.] *J. A. M. A.*, **129**:728-734. 1945.

The osteomas (bony nevi) in the case reported were considered as true or primary congenital tumors of the skin. Originating presumably from the dispersion and displacement of embryonal tissue cells, they were seen on the scrotum, trunk, and left leg.—M. E. H.

An Axillary Tumor. McCLINTON, J. B. [Timmins, Canada] *Canad. M. A. J.*, **53**:372-373. 1945.

Report of a benign pedunculated fibrolipoma of 13 years' duration, which has undergone ulceration and infection.—M. E. H.

? Kaposi's Angiosarcoma. HUNT, E. *Proc. Roy. Soc. Med.*, **39**:91. 1945.

Description of a case.—E. L. K.

NERVOUS SYSTEM

Brain Tumor in State Hospital Patients. A Study of Eight Cases in One Hundred and Twenty Consecutive Autopsies. CRUMPACKER, E. L. [Eastern State Hosp., Williamsburg, and Med. Coll. of Virginia, Richmond, Va.] *Virginia M. Monthly*, **72**:407-419. 1945.

In 2 patients the growths were small meningiomas. Among the other 6, the tumors were of considerable size; 2 tumors were meningiomas, (1 fibrous and 1 cellular); 3 were glioblastomas, (1 of which was atypical, with calcification); metastatic cancer was the neuropathological diagnosis in the sixth case. An attempt is made to correlate the lesions present with the symptoms observed and the neuropathological findings.—M. E. H.

Multiple Meningioma and Meningiomas Associated with Other Brain Tumors. ARIETI, S. [New York State Psychiatric Inst. and Hosp., New York, and Pilgrim State Hosp., Brentwood, N. Y.] *J. Neuropath. & Exper. Neurol.*, **3**:255-270. 1944.

The occurrence of primary multiple tumors of the brain is not of exceptional rarity. The present communication deals with a case of multiple meningioma associated with intracranial aneurysm, and 2 cases in which meningioma was associated with glioma. Theories concerning the origin of meningiomas in particular and of brain tumors in general are discussed.—A. Cnl.

Intraspinal Lipoma. EHNI, G. J., and PUGH, D. G. *Proc. Staff Meet., Mayo Clin.*, **19**:513-515. 1944.

This is the only case, according to the authors, of lipoma of the spinal cord in which the true nature of the tumor was suspected before operation or necropsy.—J. L. M.

Multiple Intraspinal Lesions: Report of Case. EHNI, G. J. *Proc. Staff Meet., Mayo Clin.*, **19**:489-491. 1944.

A case is presented in which part of the clinical picture was caused by a neurofibroma at the level of the conus medullaris and the remainder, including the chief complaint—pain, was caused by a protrusion of the fourth intervertebral disk. Myelography demonstrated the existence of the two lesions.—J. L. M.

Spinal Cord Tumors in Children: A Study of Three Cases of Ependymoma. NISENSEN, A., and PATTERSON, G. H. [Children's Hosp., Los Angeles, Calif.] *J. Pediat.*, **27**:315-323. 1945.

Three cases are presented. Pain and stiffness of the back were prominent symptoms in all three. Operations were performed on all. Two were found to be inoperable; in the one case where surgical removal was possible and was followed by adequate x-ray therapy, the boy is still alive and asymptomatic after 3½ years.—M. E. H.

A Case of Neuroepithelioma in a Toe. ENGELBRETH-HOLM, J. [Cancer Research Lab. of Danish Anti-Cancer League, Copenhagen, Denmark] *Acta path. et microbiol. Scandinav.*, **17**:494-505. 1940.

A case report, with photomicrographs.—M. H. P.

Disseminated Oligodendroglioma. BLUMENFELD, C. M., and GARDNER, W. J. [Cleveland Clin. and Western Reserve Univ., Cleveland, Ohio] *Arch. Neurol. & Psychiat.*, **54**: 274-279. 1945.

One case is reported and 11 cases from the literature are reviewed. In the present case an oligodendroglioma in the cerebral ventricles had been present for at least 14 years, but data from the other reported cases show that the tumor may be neither as localized nor as slow-growing as is usually supposed.—M. E. H.

Cerebrale und viscerale Xanthomatose mit Diabetes insipidus. [Cerebral and Visceral Xanthomatosis with Diabetes Insipidus.] TEILUM, G. Report to Danish Path. Soc., Nov. 24, 1941; from abstr. in *Acta path. et microbiol. Scandinav.*, **19**:318. 1942.

A report of a case of cholesterol granulomatosis (xanthomatosis) in a man who showed initial symptoms of diabetes insipidus and loss of libido at 35 years of age, and who died at 42. Postmortem findings are described.—M. H. P.

EYE

Transcranial Removal of Intraorbital Tumors. LOVE, J. G., and BENEDICT, W. L. [Mayo Clin., Rochester, Minn.] *J. A. M. A.*, **129**:777-784. 1945.

Figures from the records of the Mayo Clinic show that in the years 1907 to 1944 inclusive there were 2,985 patients who had tumors of the eye or adnexa or both, of whom 738 (24.7%) had tumors of the orbit. Many of the primary tumors of the eye and orbit were in various stages of development. Operations were performed on a total of 395 by the method best designed to meet the demands of the situation. The transcranial method was employed between Nov. 6, 1933 and Nov. 14, 1944, and involved 35 patients (22 female and 13 male) with an average age of 27.5 years; of these patients 34 recovered, and 1 died 2 days after the operation. The pathologic character of the lesions varied, meningiomas being the commonest type. The main objective of surgical treatment of intraorbital tumors is to conserve vision and to have as nearly normal function of the eye as possible. The transcranial approach to such tumors through the roof of the orbit gives maximal exposure and direct visualization of the structures within the posterior part of the orbit. It permits at the same time the removal of any intracranial extension of the tumor.—M. E. H.

BREAST

Healing of Pathological Fractures Through Metastases from Carcinoma of the Breast. BANCROFT, F. W., and BEAL, J. M. [New York, N. Y.] *Am. J. Surg.*, **69**:236-237. 1945.

A case report.—W. A. B.

Bilateral Nummiform Fibromyomas of the Nipples with Unilateral Fibromyoma and Papilloma Mamillae. CUNNINGHAM, J. J., COHEN, S. E., and CUNNINGHAM, J. R. [Binghamton City Hosp., Binghamton, N. Y.] *Am. J. Surg.*, **69**:155-159. 1945.

The types of tumors occurring in the nipple are classified, and a case reported in which the fibromyomas of

the nipples were coincident with uterine fibroids.—W. A. B.

Cancer of the Breast. GARLAND, J. G. [Milwaukee County Hosp., Milwaukee, Wis.] *Am. J. Surg.*, **69**:17-24. 1945.

The analysis of 122 cases of breast cancer seen at the Milwaukee County Hospital is presented. Eighty patients had a primary mastectomy; 48% were living 3 years after operations, and 36% were living without recurrence at 5 years. When axillary nodes were involved, there were only 22% 5 year cures.—W. A. B.

Paget's Disease of the Nipple. KAUFMAN, J. [New York Med. Coll., Flower and Fifth Avenue Hosp., New York, N. Y.] *Am. J. Surg.*, **69**:221-223. 1945.

A survey of the literature is presented which tends to support the theory that Paget's disease is a malignant process, necessitating radical mastectomy for cure.—W. A. B.

FEMALE GENITAL TRACT

Theca Cell Tumors of the Ovary: A Clinical and Pathologic Study of Twenty-Three Cases (Including Thirteen New Cases) with a Review. BANNER, E. A., and DOCKERTY, M. B. [Mayo Foundation, and Mayo Clin., Rochester, Minn.] *Surg., Gynec. & Obst.*, **81**:234-242. 1945.

Clinical pathological discussion.—J. G. K.

Syndrome of Ovarian Tumor Associated with Ascites and Pleural Effusion. (Meigs' Syndrome.) TOWNSEND, S. R. [Montreal, Canada] *Canad. M. A. J.*, **53**: 245-247. 1945.

A case report. The final diagnosis in this case was multilocular papillary cystadenocarcinoma. Carcinomatous transformation was present, but there was no evidence of metastasis. Removal of the tumor terminated the disease. The type of tumor described is an exception to the common type of ovarian tumor associated with Meigs' syndrome.—M. E. H.

Primary Melanosarcoma of the Vagina (Case Report). BRONBERG, Y. M., and BREZEZINSKI, A. [Rothschild Hadassah Univ. Hosp., Jerusalem, Palestine] *J. Obst. & Gynaec. Brit. Emp.*, **51**:147. 1944.

A description of a case, the ninth in the literature, in a woman aged 68. The tumor lay in the anterior part of the vaginal mucosa and metastasized to the posterior wall. Combined x-ray and radium treatment was without effect. Pulmonary and osseous metastases developed.—E. L. K.

Abnormal Genital Bleeding in Women Past Forty. Its Clinical Significance. URDAN, B. E., and KIEGER, J. A. [Marquette Univ., Milwaukee, Wis.] *Wisconsin, M. J.*, **44**:873-877. 1945.

A group of 350 women 40 years or more of age, complaining of some abnormality in vaginal bleeding, was studied. Half the group were patients who had been seen on the gynecological service of the Milwaukee County Hospital; the other half had been seen in private practice (B. E. U.). It was concluded that women over 50 warrant special attention since 74.2% of such patients surveyed in the County Hospital series harbored a malignant growth.—M. E. H.