EDITORIAL.

Scope of the Journal.—For the publication of original communications concerning the causes, distribution, symptoms, pathology and treatment of malignant diseases and allied conditions. Papers upon clinical, bacteriological, biochemical, pharmacological, physiological, radiological, serological, and other subjects therefore would be acceptable when related to this subject.

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SURVEY OF PAPERS

BODDINGTON, COWDELL and SPRIGGS have reviewed 10,000 cervical smears from 8522 patients and have tried to correlate the cytological abnormalities found with the associated histological changes and with subsequent developments.

They find that epithelial instability (basal cell hyperplasia, "carcinoma in situ" and related lesions) usually disappears without any treatment more extensive than biopsy, but may become irreversible, in which case invasive carcinoma sooner or later develops without any cytological warning (p. 151).

MARTINS reports an adenocarcinoma of the uterus in a year old child (p. 165).

HOLLAND, ACEVEDO and CLARK find that the mean arsenic content of the bronchial mucosa and submucosa of lung cancer victims is significantly higher than the mean value found in controls (p. 169).

BAISERGA, PUTONG, TYLER and WARTMAN, using Ehrlich ascites tumour cells and CxAF₃ mice, report experiments planned to establish a quantitative relationship between the number of embryonic tumour cells and the incidence of lung metastases. At the same time they investigated other factors said to affect the incidence of blood-borne metastases such as the sex of the animal, simultaneous injection of killed tumour cells, pre-treatment with viable tumour cells, as well as the activity of the reticulo-endothelial system (p. 173).

HEWITT and WILSON report experiments undertaken with the object of examining various factors which could affect proper interpretation of their previously described survival curve for CBA mouse leukaemia cells irradiated in vivo in mice of the substrain of origin (p. 186).

F. BIELSCHOWSKY and M. BIELSCHOWSKY find that the tumours that develop in pituitary dwarf mice after treatment with 2-amino-fluorene differ in their distribution from that seen in their normal sized litter mates similarly treated (p. 195).

PEARSON describes the histological and cytological changes in serially irradiated tumours in RIII inbred mice and discusses the significance of the changes in relation to radiosensitivity, cell degeneration and invasive properties (p. 200).

ISRAEL and ELLIS have administered methylthiouracil to mice on normal and low iodine diets. They describe the hyperplastic changes which resulted in the thyroids of the mice and emphasise the extreme difficulty in producing thyroid neoplasms in mice, even under the most intense stimulation (p. 206).

GHAIDALLY gives an account of the tumours which resulted from repeated applications of 9:10 dimethyl-1:2 benzanthracene to the skin of a hedgehog. The growths were essentially similar to those seen in the skin of man and laboratory rodents (p. 212).

LOUIS finds that the fluorescein-globulin affinities of normal, hyperplastic and neoplastic cells of the virus induced Shope papilloma are identical to those of chemically induced and naturally occurring neoplasms (p. 216).

BELCHER and SIMPSON, using ⁵¹Cr- and ⁵⁹Fe-techniques, have investigated the acute haemolytic episode which occurs in rats of the August strain 10-15 days after implantation of a transplantable mammary adenocarcinoma and also in normal animals transfused with blood from tumour-bearing litter-mate donors (p. 224).

MILLER has shown that thymus tissue from genetically susceptible mice can undergo malignant transformation in a foreign but tolerant host, and that a number of such malignant thymuses can be made to regress completely following the inoculation of activated immunologically competent cells (p. 244).

MODY gives an account of the development of ovarian tumours in inbred virgin IF mice following limited skin applications of carcinogenic hydrocarbons (p. 256).

PULLINGER and IVERSEN record and analyse quantitatively, for subsequent comparisons, reference data in respect of age, number of litters and mammary carcinoma incidence in two strains of mice. No conclusion as to the effect of litter number and/or the effect of age upon the incidence of mammary tumours can be drawn (p. 267).
Pullinger describes tests of two strains of mouse for the presence or absence of mammary tumour agent (p. 279).

Young and Frazer have examined histologically over 200 hypophysectomised mice for the presence of residual fragments of pituitary, and have attempted to correlate the presence or absence of such fragments with post-operative changes in the animals' body weight, testis weight, seminal vesicle and adrenal weight, and with the mamnogenic growth response after treatment with oestrone and progesterone (p. 285).

Davies and Wilmshurst find that the charred residue of commercial starch "destructively distilled" at atmospheric pressure and at a temperature of 370-390°C. contains 0·2 μg. of benzopyrene per 100 g. "char" (p. 295).

Stein-Werblowsky has applied benzopyrene to the cervix uteri of rats in the dioestrus and oestrus phases. More tumours, including some malignant growths, developed in the animals painted in the dioestrus phase (p. 300).

Drayton describes experiments in which the effect of incubation on the biological activity of three fowl tumour viruses, as determined by bioassay methods, is studied in relation to virus constituents liberated (p. 306).

Allison and Armstrong have followed the progress of infection with polyoma virus of mouse cells in tissue culture. The first change detectable after infection is the appearance of abnormal DNA-containing foci in the nuclei. Later the cells become detached from the coverslips and the nuclei of some are almost filled with the DNA-containing material. They conclude that polyoma virus contains DNA and multiplies in the nuclei of susceptible cells (p. 313).

Montemurro has studied the effect of nitrofurazone on the testes, seminal vesicles and prostate of normal rats and rats bearing the Walker carcinoma 256. He finds that the atrophic changes in the seminal vesicle, and to a lesser degree in the prostate that are associated with the growth of this tumour in rats can be largely prevented by the intraperitoneal administration of nitrofurazone (p. 319).

Clark and Goodlad have studied the effect of the Walker 256 carcinoma on the tissues of host rats receiving diets varying in protein and calorie content. They found tumour growth to be independent of the various dietary treatments employed, and also observed an increase in the protein, RNA and DNA content of the liver of tumour-bearing rats, under all dietary conditions (p. 327).

O'Gorman gives a method for demonstrating the cytotoxic action of murine iso-antisera in vitro, and describes the effect of iso-antibody on normal leucocytes and several tumours. He discusses the bearing of his findings on the role of circulating antibody in the homograft reaction (p. 335).

Mirvish and Gillman have examined the volume and composition of the bile of rats fed butter yellow. They propose a mechanism involving alterations in the rate of 12-hydroxylation to explain the abnormalities found, and discuss the possible significance of hydroxylation in general for the understanding of cancer (p. 346).

Csaba, Horváth and Ács have investigated the effect of heparin and its components on the survival of mice bearing the Ehrlich ascites tumour. They find that glucuronic acid, or glucosamine and glucuronic acid, if administered in protracted doses, shorten the life of tumour-bearing mice (p. 362).

Csaba, Ács, Horváth and Kapa conclude, from in vitro and in vivo experiments, that tumours require heparinoid substances for their growth, and describe new possibilities for the inhibition of tumour growth (p. 367).

Lemon, Mueller, Looney, Chisen and Kelman have studied the citric acid concentration in blood from bone marrow, arterial and venous sites in healthy volunteers, arthritics and patients with various types of cancer. They find venous citric acid concentrations greater than twice the S.D. from the mean for each sex ("hypercitricaemia") in 4·2 per cent of healthy volunteers, in 4·6 per cent of all patients with benign diseases, in 11·1 per cent of patients with pre-malignant tumours, and in 23·6 per cent of cancer patients (p. 376).