THE BRITISH JOURNAL OF CANCER

(The official journal of the British Empire Cancer Campaign)
Made and printed in Great Britain for
H. K. Lewis & Co. Ltd., by
Adlard & Son, Ltd., Bartholomew Press, Dorking.

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THE BRITISH JOURNAL OF CANCER
(The official journal of the British Empire Cancer Campaign)

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LONDON
H. K. LEWIS & CO. LTD.
136 GOWER STREET, W.C.1

Published Quarterly
Annual Subscription, post free, Three Guineas
Single copies, One Pound net
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.

Forwarding Papers and Correspondence.—Papers should be forwarded to Professor R. W. Scarff, The Middlesex Hospital, London, W.1.

Subscriptions and business correspondence are received by the publishers, Messrs. H. K. Lewis & Co. Ltd., 136, Gower Street, W.C.1.

Date of Publication.—The Journal is published quarterly in March, June, September and December.

Rapidity of Publication.—All papers accepted for publication will be printed, so far as is possible, in the next following issue of the Journal, if received before the first day of the month preceding publication. Long papers, or papers with illustrations, may, however be delayed if not received earlier.

Reprints.—25 reprints will be supplied free to authors who are registered as personal subscribers to the Journal. Additional copies must be ordered from the Publishers before the issue is printed. Prices on application.
SURVEY OF PAPERS

Bonser and Thomas report an investigation into the relation between the numbers of recorded deaths from lung cancer and the numbers of cases diagnosed clinically in Leeds. They find that the positive error in certification of cancer of the lung is small (3.5 per cent) and that, in fact, a larger number of cases which are diagnosed clinically fail to appear among the death certificates (p. 1).

Sturdy presents an 11-year follow-up study of a large series of cases of cancer of the mouth (p. 13).

Phillips has studied 230 cases of untreated carcinoma of the breast. Of these cases, 84 were regarded as operable, and their survival is compared with 84 matched treated cases (p. 20).

Kreyberg and Iversen report an investigation into the fate of a group of patients whose lymph node biopsies were reported as in varying degree suspicious of malignancy, and discuss the benefits of adopting a conservative attitude in such cases (p. 26).

Fletcher and Stewart have investigated the frequency with which tumour cells can be identified in the blood of cancer patients. In cases of gastro-intestinal cancer they find that tumour cells can more often be found in portal blood than in samples from the hepatic vein (p. 34).

Mackenzie discusses the value of silver impregnation in the diagnosis of tumours of lymphoid tissue based on an examination of the reticulin content and pattern of a large series of examples of this group of neoplasms (p. 38).

Bulbrook, Franks and Greenwood report the changes which occur in the excretion of oestrogens, 17-oxosteroids and 17-oxogenic steroids within the first two years of treatment of men with prostatic cancer by castration or by the administration of synthetic oestrogens. They also attempt to correlate the clinical effects of such treatment with the changes in hormone excretion in eight patients (p. 45).

Franks finds that testosterone stimulates and oestrogens cause atrophy of the epithelium of organ cultures of mouse ventral prostate, though the effect varies in degree with the age of the animal from which the tissues are taken (p. 59).

Hewitt and Wilson, using a quantitative method for the transplantation of mouse leukaemia cells in CBA mice, find that an average of 2 cells is required to transplant leukaemia to half a group of injected mice. When cell suspensions are transplanted from mice soon after exposure to whole-body radiation the number of cells necessary for transplantation is larger and is a function of the radiation dose (p. 69).

Salaman gives an account of the tumours, often apparently of salivary gland or mammary origin, which developed when mice less than 17 hours old were inoculated with a cell-free filtrate of a homogenate of leukaemic tissue from a mouse of another strain (p. 76).

Roe has compared the production of skin tumours in three groups of mice treated once with DMBA, once with DMBA and then 18 times with croton oil, or 18 times with croton oil and then once with DMBA. Only the group which received DMBA before croton oil developed malignant tumours on the treated site (p. 87).
Roe reports the development of skin tumours in mice painted with DMBA once followed by oil of sweet orange weekly. Mice treated with DMBA only, or oil of orange only, developed no tumours during the same period (p. 92).

Baldwin, Cunningham and Partridge have investigated the carcinogenic action of tricycloquinazoline by subcutaneous injection in rats, and by skin painting in mice. The tumour incidence is low in rats with a long induction period; in mice it is high with a shorter induction period. The lesions produced by subcutaneous injection are likened to those observed following the embedding of certain plastic substances. (p. 94).

Pullinger has investigated the effect on mammary tumour incidence in C3Hf/He mice of ovariectomy followed by substituted oestrone, and by oestrone and progesterone. The contribution of endogenous oestrogen attributable to the adrenal cortex or other source appears to be negligible in its effect on mammary epithelium (p. 99).

Marchant has compared the induction of skin tumours by methylcholanthrene in intact and castrated mice of both sexes. She finds that the mean time of appearance of papillomas is significantly earlier in intact animals than in castrates, and that the mean number of tumours per mouse is greater in intact animals (p. 106).

Ghosh reports finding tumours, with stromal and epithelial differentiation, inside the cardiac lumina of ten per cent of mice bearing either transplanted or spontaneous mammary carcinomas (p. 115).

Meek and Hewer give an account of the adenocarcinomas of the duodenum which developed in two mice given repeated subcutaneous injections of herring-sperm deoxyribonucleic acid (p. 121).

Lyons has assayed fractions isolated from petrol engine and diesel engine exhaust samples for the presence of polycyclic aromatic hydrocarbons by repetitive adsorption chromatography on alumina and silica gel, followed by ultra-violet absorption and spectrographic analysis of the eluates. Some of the compounds identified are carcinogenic (p. 126).

Spriggs and Lajtha find that the uptake of $^{14}$C labelled glycine by the cells of pleural and peritoneal fluid exudates is correlated with the degree of cytoplasmic basophilia and is independent of whether the cells are malignant or not (p. 132).

Fiala and Fiala have investigated the nature of the permanent damage to the liver cell during carcinogenesis by correlating the metabolic and structural changes revealed by differential centrifugation. They find that the respiratory damage is due to the reduction in the amount of mitochondria per cell, the mitochondria and ergastoplasm-bound RNA being regulated by a common factor which in the liver is influenced by the carcinogen (p. 136).