Correspondence

Letters to the Editor should not exceed 500 words.

Chemotherapy of Tuberculosis

SIR,—Dr. D. A. Mitchison's Marc Daniels Lecture published in the *B.M.J.* of 22 May (p. 1333) was excellent, but it raises a problem which has seemingly not yet been faced by those responsible for the treatment of tuberculosis. Pompe's[1] observations suggested that the treatment of lupus vulgaris with isoniazid (I.N.H.) increased the risk of neoplasia arising as a complication of the lupus from 0.5 to 4.5%. Juhász, Baló, and Kendrey[2] were stimulated to test I.N.H. for carcinogenicity in mice by a report by Hein and Stefani[3] of adenomatous hyperplasia of the bronchial epithelium in a patient treated with the drug. Of 45 mice which lived for more than 7½ months from the start of treatment, 7 developed adenomatous tumours of the lungs and a further 7 various types of leukaemia or reticulosis. No tumours arose in 50 control mice. These findings have been confirmed by many other workers and similar results have been obtained by the administration to mice of various other hydrazines (see Roe and Lancaster[4] for review). No tumours have been induced in species other than the mouse by I.N.H. itself,[5 6] but a chemically related substance, *N*-isopropyl-α-(2-methyl hydrazine)-*p*-toluamide hydrochloride has been shown to be carcinogenic in both rats and mice.[7]

At present there is no evidence that the administration of I.N.H. to patients with pulmonary tuberculosis increases the risk of their developing cancer. On the other hand, by no means every tuberculous patient who dies is examined at necropsy, and no systematic comparison has been made of the incidence of cancer between tuberculous patients treated with I.N.H. and tuberculous patients treated by other means. At present a prospective study of this kind would be impossible since virtually all patients with tuberculosis receive I.N.H. Another point is that the absence so far of any association between treatment with I.N.H. and cancer could be explained if the minimum period required for the induction of cancer by I.N.H. in man exceeded the 13 years since I.N.H. was introduced.

Two other factors should be considered. Firstly, when I.N.H. is prescribed it is nearly always given in high dosage for prolonged periods. Under these circumstances the activity of even a weak carcinogen is liable to become manifest. Secondly, the drug is so effective that there might well be circumstances in which its use would be justified even if it were known to be carcinogenic.

No study so far published either confirms or allays the fear that I.N.H. may constitute a cancer risk. It would seem, therefore, to be a matter of considerable urgency to ascertain by epidemiological methods whether I.N.H. therapy predisposes to cancer, either in the lungs or elsewhere.—We are, etc.,

F. J. C. ROE.
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Early Diagnosis of Cervical Cancer

SIR,—Your leading article (22 May, p. 1327) discusses again this familiar current topic. In response to your leading article on this same subject (5 December, 1964, p. 1409) I expressed the view (19 December, 1964, p. 1591) that the stumbling-block responsible for failure to expand a diagnostic screening cytology service was £ s. d., and commented on the appropriateness of the comparison of the present screening campaign with a "hush-hush crusade" (*Daily Mail*, 16 November 1964). This still holds good.

It must have come as a surprise to many pathologists to read that there are 25 local medical committees with adequate cytology services available in their areas. Could these local medical committees please be listed so that pathologists, like myself, providing inadequate services could approach them to benefit from their experience, with particular

ST. LUKE'S HOSPITALS BRADFORD | **GYNAECOLOGICAL CYTOLOGY REQUEST FORM** | LAB. REF. No.

IMPORTANT

VAGINAL CYTOLOGY SHOULD BE USED ONLY AS A DIAGNOSTIC AID. THE ULCERATED SURFACE OF A CLINICALLY OBVIOUS CARCINOMA MAY YIELD UNSATISFACTORY SMEARS.
ITS USE IS PRIMARILY FOR THE DETECTION OF EARLY SQUAMOUS CERVICAL CARCINOMA. IT MAY FAIL TO DETECT ADENOCARCINOMA OF THE UTERUS AND IT DOES NOT REPLACE DIAGNOSTIC CURETTAGE IN IRREGULAR OR ABNORMAL UTERINE BLEEDING WHEN MALIGNANCY IS CONSIDERED TO BE A POSSIBILITY.

HOSPITAL/CLINIC WARD CONSULTANT

SURNAME HOSPITAL No.

CHRISTIAN NAME AGE

CLINICAL FINDINGS (PLEASE INDICATE BY TICK AS FOLLOWS):—

WRITE FIRMLY USING BALL POINT PEN

FIRST APPEARANCE / REPEAT / FOLLOW-UP

PRESENTING SYMPTOM:

CERVIX:

NORMAL / ERODED / SUSPICIOUS / MALIGNANT

MENSTRUAL CYCLE OR BLEEDING:

REGULAR / IRREGULAR / MENOPAUSAL / POST-MENOPAUSAL

L.M.P.

OTHER FINDINGS OR COMMENT

DATE ..... SIGNATURE .....

SLIDE GRADING		Ayre	Pool
0	UNSATISFACTORY SMEAR		
1	NORMAL CELLS ONLY		
2	ATYPICAL DUE TO INFECTION		
	ATYPICAL DUE TO METAPLASIA		
3	ABNORMAL BUT NOT OBVIOUSLY MALIGNANT		
4	CELLS SUGGESTING MALIGNANCY		
5	CELLS CONCLUSIVELY MALIGNANT		
"OESTRONE" GRADING			
A	INCREASED		
B	NORMAL		
C	SLIGHT REDUCTION		
D	IMPAIRED		
E	GROSSLY IMPAIRED		
BLOOD			
Neutrophils	Normal		
	Slight Increase		
	Purulent		
TRICHOMONADS			
Monilia Albicans	Cells with Hyphae		
	Cells only		

COMMENT:

DATE ..... PATHOLOGIST

COLLECTION OF MATERIAL

NOTE

PREPARE ONE SMEAR FROM CERVIX, MARK THIS SLIDE 'A' USING LEAD PENCIL, AND TWO FROM VAGINAL POOL. AFTER SMEARING PLACE SLIDE IMMEDIATELY, WHILE STILL MOIST, IN FIXATIVE.

SMEARS MUST NOT BE ALLOWED TO DRY BEFORE FIXATION

SL 408/5