observations on pre-operative as well as post-operative faecal-fat output.—I am, etc.,

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REFERENCE

- ¹ Tovey, F. I., *Lancet*, 1961, 1, 619.

Blastic Crisis in Granulocytic Leukaemia

SIR,—I was most interested in the paper by Dr. F. Hammouda and his colleagues in your issue of 16 May (p. 1275). I have been carrying out a study on myeloproliferative disorders, including a group of myeloid-leukaemia patients.

One patient in a terminal acute blastic phase showed similar changes to those described. The alkaline-phosphatase score rose from 0 to 175. Chromosome studies on peripheral blood without the addition of phytohaemagglutinin produced divisions with a varied modal number (from 45 to 51). Most divisions had 46/47 chromosomes with the persistence of the Ph¹ chromosome but no duplication. Cultures were incubated for up to 110 hours, and it was found that at 72 hours and 110 hours there were considerably more divisions and a higher proportion of abnormal karyotypes.—I am, etc.,

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New Light on Sarcoidosis

SIR,—In the leading article "New Light on Sarcoidosis" (28 March, p. 791) the statement is made, "The important question whether the Kveim test becomes positive in infections with mycobacteria other than B.C.G. is the subject of conflicting reports." This statement implies incorrectly that the Kveim test has been shown to become positive in B.C.G.-treated persons. The article by Dr. P. D'Arcy Hart and his colleagues (28 March, p. 795) does not support this concept inasmuch as the positivity or negativity of the Kveim reaction in these patients prior to vaccination was unknown. This study merely confirms that persons with positive Kveim tests exhibit anergic or hyperergic cutaneous reactivity with all skin antigens whether they be patients with sarcoidosis or not. Whether hyporeactivity is a cause or result of sarcoidosis is unknown, and any other conclusion from this study must be purely speculative.—I am, etc.,

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M. A. EVERETT.

Spontaneous Intra-abdominal Haemorrhage

SIR,—Squadron Leader P. H. Drake's letter (9 May, p. 1255) prompts the following case-report of spontaneous intra-abdominal haemorrhage.

An unmarried woman aged 25 was admitted to hospital suffering from muscular dystrophy and arthrodesis of the left ankle performed on 27

March 1964. One month after operation, while convalescing in hospital, she felt unwell and complained of nausea and increasing lower abdominal pain. On direct questioning she admitted to feeling shivery and having perspired. Symptoms persisted throughout the next 48 hours. There was no previous history of abdominal symptoms. Menses regular (5/28), L.M.P. 2 weeks previously. No vaginal discharge. She was known to be extremely introverted and very conscious of her skeletal disability. Mild acrocyanosis was known to be present in both calves.

On examination she was pale and anxious. Temperature 101° F. (38.3° C.). Pulse 100/min. There was diffuse lower abdominal tenderness which became more marked in the right side on the second day. Rectal examination revealed marked tenderness of the cervix uteri and a fullness in the pouch of Douglas. The vaginal introitus was intact. A diagnosis of pelvic appendicitis was made. At operation, through an oblique right muscle cutting incision, there was 2½ pints (1.4 l.) of blood and clot in the peritoneal cavity. This appeared to have come from a small tear in the posterior layer of the broad ligament on the left side. The only other abnormal finding was the presence of an unusually thickened mesovarium on both sides, in which the leash of blood-vessels was prominent. The left ovary was the seat of a small physiological cyst which had not ruptured. The appendix lay subcaecally and appeared grossly normal. Blood was evacuated from the abdominal cavity, the tear in the broad ligament oversewn, and routine appendectomy performed.

Post-operatively the patient developed a mild intestinal obstruction which settled with enemata. Pathological report on the appendix mentioned submucosal fibrosis and appearances consistent with subacute appendicitis.

The cause of the tear in the broad ligament in this case was not convincingly demonstrated. At the time of operation it was decided that it represented the site of a cyst which had ruptured and given rise to intra-peritoneal haemorrhage. Squadron Leader Drake talks of "general softening and hyperaemia of the area produced by pregnancy" in connexion with the aetiology of his case. The unusual thickening and vascularity of the mesovarium found in this case suggests that similar factors were responsible, though the stimulus present was not pregnancy but ovulation.—I am, etc.,

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Phenylbutazone and Leukaemia

SIR,—Two recent communications (21 March, Drs. H. J. Woodliff and L. Dougan, p. 744, and Drs. T. M. Chalmers and D. D. McCarthy, p. 747) purport to show an association between phenylbutazone therapy and leukaemia, and both may well be right; but to prove this association it must be shown that patients with rheumatoid arthritis, receiving phenylbutazone, develop leukaemia with significantly greater frequency than patients with rheumatoid arthritis not receiving phenylbutazone. This latter control group is necessary because Abbatt and Lea¹ have shown that leukaemia is associated with the "rheumatic diseases." Many of their patients probably had phenylbutazone therapy; nevertheless, the recent finding of a high incidence of "rheumatoid factors" in the sera of patients with myeloid leukaemia^{2,3} makes the association between (myeloid)

leukaemia and rheumatoid arthritis very likely. Any alleged connexion between phenylbutazone and leukaemia should therefore take into account the fact that all hitherto reported associations have been in subjects with rheumatoid arthritis.

Woodliff and Dougan state, "Before accepting a relationship of cause and effect between the drug and the disease, it is necessary to show that leukaemia occurs in treated patients in a significantly greater proportion than in the general population." In this I believe they are mistaken. It is not the general population that they should use as controls, but patients with rheumatoid arthritis who have not been treated with phenylbutazone; only then will the relationship, or lack of it, become apparent.—I am, etc.,

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REFERENCES

- ¹ Abbatt, J. D., and Lea, A. J., *Lancet*, 1958, 2, 880.
² Caplan, H. I., *Ann. intern. Med.*, 1963, 59, 449.
³ Innis, M. D., *Lancet*, 1963, 2, 947.

Diagnosis of Hepatic Amoebiasis

SIR,—The letters on the diagnosis of hepatic amoebiasis are timely. The diagnosis is frequently missed, especially in our own people returning from tropical service. The infection is generally low-grade in nature, the result of frequent small infections and a moderate degree of immunity. The history is important; there has been a gradually increasing lassitude, lowered threshold for headaches, abdominal flatulence—mainly in the lower bowel and offensive. Tolerance to alcohol is markedly decreased, both for intake and after-effects.

Another useful help in diagnosis is the texture of the facial skin. It is muddy and waxy. Pain is felt over the liver when driving long distances or on sudden exercise, such as squash. The methods of eliciting liver pain have been well described. In addition, if the thorax is punched posteriorly at the hepatic level it is virtually painless on the left, and is resented on the right.—I am, etc.,

Andover, Hants. LESLEY M. B. DAWSON.

Trichuriasis

SIR,—In your issue of 11 April (p. 957) under the title of "To-day's Drugs" you comment that *Trichuris (Trichocephalus) trichiura* is generally considered to be of negligible pathological significance. It has, I think, been adequately shown by ourselves and others that massive infections with this worm can cause intractable dysentery, particularly in children. Sigmoidoscopy will reveal, under a sea of mucus, a colon looking like a field a waving grass. An egg-count on the ordinary wet faecal smear (which contains about 3 milligrams of faeces) of more than 20 ova should lead to suspicion.

Despite its side-effects dithiazanine should be used to reduce the worm population to reasonable proportions. Apart from the public-health aspects, light infections are probably better disregarded.—I am, etc.,

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