this; but rather that a man who reports one accident will report another, while another man would treat both himself and report neither to the doctor.

The accident-prone are illness-prone.—The figures given do not prove the above contention, but rather confirm my view that there are doctor-conscious patients who report every bruise or cold and self-reliant patients who do not trouble the doctor over trivialities.

Sex ratio of patients.—A cardinal factor affecting the reporting of accidents is the need for a certificate. Since Dr. McGregor does not confine his figures to insured persons, and since there is a much higher proportion of men insured than women, Dr. McGregor's conclusion regarding the sex ratio of accidents is invalidated.

Change in sex ratio of accidents over 45 years of age.—May this not be apparent rather than real? I would suggest that many women under 45 have young children, and consequently ignore their minor accidents so that they can carry on their domestic responsibilities, whereas women over 45 have reached a stage in life where their duties are less onerous and they can indulge in the luxury of a little fuss, sympathy, and a trip to the doctor.—I am, etc.,

Wantage.

D. Leigh.

## Malaria Prophylaxis

SIR,—In view of the present interest in the new antimalarials, I am sending you a record of two families here who have been taking pyrimethamine ("daraprim") 25 mg. weekly during the malaria transmission season, which has been more severe than usual owing to exceptionally heavy rains. Malaria here is almost entirely malignant subtertian variety.

One family, that of the writer, who personally supervised the administration of the drug, consists of three English adults and three children under 4 years (non-immunes) and four Sudanese servants (immunes). All the adults, including the servants, have had pyrimethamine 25 mg. regularly once a week. The children have had half a tablet (12½ mg.) once a week. Four weeks after taking pyrimethamine, W. P., aged 2½ years, English (never had malaria), became irritable and feverish, temperature 99.4° F. (37.4° C.) (axillary), blood film: positive malignant tertian malaria. Cured by taking mepacrine ("atebrin") ½ tablet twice a day for five days.

After three months of continuous pyrimethamine prophylaxis, the following also had malaria: M. P., age 30, English (never had malaria), complained of severe headache. Temperature 100° F. (37.8° C.). Blood film: positive malignant tertian malaria. Cured with mepacrine (1 tablet three times a day) for five days; S. S., age 18, English (never had malaria), complained of cold for three days and severe headache. Temperature 99.4° F. Blood film: positive malignant tertian malaria. Cured with mepacrine (one tablet three times a day) for five days; R. P., age 10 months, English (never had malaria), cross and irritable for two days. Temperature 99.6° F. (37.55° C.) Blood film: positive malignant tertian malaria. Cured with four intramuscular injections of quinine; J. P., age 35, English (had malignant tertian malaria once before in 1946). Temperature 102° F. (38.9° C.) Headache. Blood film not taken. Cured with camoquin (three tablets on first day and two on second day); A. N., Sudanese (Nuba), age about 34. Complained of cold and headaches for two days. Temperature 99.8° F. 99.4° F. (37.4° C.). Blood film: positive malignant tertian malaria. Cured by four intramuscular injections of quinine; K. K., Sudanese (Nuba), age about 21, complained of pain in back and chest. Temperature 101° F. (38.3° C.). Blood film: positive malignant tertian malaria. Cured by four intramuscular injections of quinine; O. I., Sudanese (Darfuri), age about 26, complained of diarrhoea for two days. Temperature 99.2° F. (37.3° C.). Blood film: positive malignant tertian malaria. Now having mepacrine (one tablet three times a day); H. W., Sudanese (Darfuri), age about 55 years, complained of fever. Temperature 100° F. (37.8° C.). Blood film: positive malignant tertian malaria. Cured by four intramuscular injections of quinine.

The other family consists of two English adults and three children under 5 years. The adults have been taking pyrimethamine 25 mg. weekly, and two of the children half a tablet (12½ mg.) weekly, since their arrival from England in July, 1953. E. H., age 34, English. Temperature 99.6° F. (37.55° C.). Com-

plained of diarrhoea. Blood film: positive malignant tertian malaria. After taking mepacrine 1 tablet three times a day for five days, a second blood film was positive. She was then given four intramuscular injections of quinine; R. H., age 38, English (has had malaria before). Temperature 99.8° F. (37.7° C.). Complained of headache and lack of concentration. Blood film: positive malignant tertian malaria. Cured with camoquin three tablets on the first day, followed by two tablets on the second day; A. H., age 5, English (never had malaria before). Cross and irritable and mild diarrhoea. Temperature 99.4° F. (37.4° C.). Blood film positive malignant tertian malaria. Cured with mepacrine ½ tablet twice a day for five days; C. H., age 3, English (never had malaria). Temperature 99.8° F. (37.7° C.). Blood film: positive malignant tertian malaria. Cured with camoquin one tablet followed by one tablet on the following day; C. H., age 9 months, English, did not take pyrimethamine until a month ago when she had malaria, which was cured with four intramuscular injections of quinine. After that she had ½ tablet weekly for two weeks. Following this she again had diarrhoea. Temperature 99.4° F. (37.4° C.) (axillary). Blood film: positive malignant tertian malaria. Cured by intramuscular quinine.

Only one person in these households has not had malaria since taking pyrimethamine: E. P., age 4 (E. P. had a typical attack of malaria four months ago before taking pyrimethamine. Temperature 102° F. (38.9° C.) (axillary) with delirium). All the attacks have been mild and all the cases ambulant. One patient (E. H.) failed to respond to mepacrine therapy and had to have quinine. The two infants had quinine as they could not take mepacrine. Three Sudanese servants expressed a preference for quinine injections. Proguanil has been used prophylactically by a few English and Greek families resident in this area during the post-war period. The number of local Sudanese families taking the drug is probably less than 1%.

Although it appears to mitigate the attack, pyrimethamine in the dosage given appears to be quite inadequate in preventing attacks of malignant tertian malaria in Dueim.—I am, etc.,

Dueim, Sudan.

MARY G. PHILLIPS.

## **Partial Hepatectomy**

SIR,—I read the very refreshing article by Sir Heneage Ogilvie on partial hepatectomy (Journal, November 21, 1953, p. 1136) with great interest, and I was particularly impressed by his description of a simple but extremely effective technique which I have never seen in use nor previously heard described. Apart from the subject of biopsy little has been published about partial hepatectomy either in connexion with malignant disease or otherwise. In this connexion the following case, with whose treatment I assisted Professor Mercer several years ago, is of interest.

A man, aged 64, complained of pain, sickness, severe borborygmi, flatulence, and diarrhoea for two and a half years. On examination he demonstrated the features of subacute small bowel obstruction and visible peristalsis was noted. Barium meal examination, with follow-through, showed an incomplete hold-up at the lower end of the ileum. Laparotomy revealed an almost complete obstruction at the lower end of the ileum of the string stricture type. The tumour was solitary, there was a little free fluid, but there was a superficial nodule approximately the size of a pigeon's egg on the lower part of the anterior surface of the right lobe of the liver. Resection and anastomosis of the affected portion of the bowel and its mesentery was carried out. The pathological report stated that the tumour was a carcinoid. In view of the accessibility of the only detected metastasis it was decided to excise the nodule from the liver. This operation was accordingly successfully performed 20 days later. The tumour was excised by diathermy and the cut liver edges exposed The pathologist reported malignant carcinoid. by deep sutures. The patient was discharged 16 days later and his doctor has written to say that he remained in good health, and fit for work, for over three years. Subsequently liver enlargement became evident and he eventually died three and a half years after operation.

Although the long-term result, in this case, was unsuccessful, the patient at least enjoyed a further three years of active life, and one can only speculate that probably he would not even have enjoyed this period if the liver nodule had not been removed.—I am, etc.,

Kirkcaldy.

WM. DRUMMOND.