

matory drugs may exert tumoricidal effects in the colon,⁴ thus accounting for the reduced risk of cancer of the colon with regular use of these drugs. Large scale therapeutic trials of non-steroidal anti-inflammatory drugs in established cancers of the colon and chemopreventive trials in high risk patients would therefore be appropriate since the risk of potential side effects in such cohorts would be justified. Initial reports of such studies are encouraging.⁵

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Near patient testing

Needs quality control

EDITOR,—Elizabeth Rink and colleagues assessed the clinical and economic impact of introducing near patient testing (performing diagnostic tests in general practice surgeries) for common biochemical and bacteriological investigations.¹ In any analysis of this type, however, it is essential that the precision and accuracy of the results obtained are considered. Even when users are fully trained and careful quality control procedures are followed the accuracy of the results obtained is unlikely to match that from a hospital laboratory. In practice, in many cases the calibration and use of machines will probably be suboptimal, particularly when the machines are used infrequently.

With regard to the measurement of cholesterol concentration, which increased by the greatest amount in the authors' study, previous studies in general practice have shown a bias of up to 8% and imprecision of as much as 7.5%; even frequent users are unlikely to achieve recommended performance standards.³ This could lead to a substantial number of patients being subjected to further needless investigation or being prescribed cholesterol lowering treatment unnecessarily and could therefore contribute appreciably to the cost of introducing testing of this kind.

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Is not cost efficient

EDITOR,—Elizabeth Rink and colleagues show that near patient testing (performing diagnostic tests in general practice surgeries) is often not as cost efficient as it would seem to be.¹ As a director of pathology, I am well aware of the effects of near patient testing in the health service and the often

illusory savings that are claimed for it. Indeed, I would challenge the savings that the authors found for analysis of midstream urine specimens. The cost of analysis in the NHS arises from many components: collecting the sample, transporting it to the laboratory, the agar plate on which it is spread, the microscopic examination, any sensitivity test that is done, the medical laboratory scientific officer who performs the test, the overheads of the laboratory, the overheads of the hospital, and the costs of reporting the result.

When a dipstick test is substituted for laboratory analysis the only saving to the NHS as a whole is in the marginal cost of the agar plate. In my laboratory 10 urine samples are plated out on each agar plate. The approximate cost of one agar plate in this laboratory is about 10 pence. Thus there is a net saving of one penny for every midstream specimen of urine not sent to the laboratory.

We are obliged to charge general practitioners an average cost for the test, and thus for every test not performed we lose the difference between our saving and the cost we charge to fundholders. Unfortunately, as our costs still remain we need to recover this from other users of our laboratory, principally hospital based users.

When we used a dipstick test the cost to us was 15 pence a stick, so for a saving of one penny to the laboratory a general practitioner spends 15 pence on a stick.

A saving in real terms would be achieved if the number of urine samples sent to the laboratory was reduced sufficiently for us to reduce our staffing. This would require a coordinated effort by all general practitioners and hospital staff in our area such that the number sent could be cut by some 70-80%, which would be feasible if dipsticks were used.

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Post-tropical screening

Is of little value . . .

EDITOR,—Bernadette Carroll and colleagues report the results of screening 1029 asymptomatic people after their return from the tropics.¹ Although an abnormality was detected in about a quarter of the subjects, relatively few abnormalities were attributable to tropical travel. Parasites in stool samples were the most common abnormalities, but many of the findings, such as cysts of *Entamoeba histolytica* and of *Blastocystis hominis*, are of doubtful importance in asymptomatic people.

Screening of asymptomatic populations is often difficult to justify without favourable results of a cost-benefit analysis. This study did not address costs and benefits so it is impossible to answer the authors' question: "How useful is such screening?"

We do not encourage screening of asymptomatic travellers on their return from the tropics, and the data from this study do not change our view. Most protozoal and helminth infections in travellers will clear spontaneously with time if the person is not re-exposed to the organism, and these infections do not pose much of a threat either to the person or to public health. One of the few possible advantages of screening returning travellers is that it provides an opportunity to discuss the need for testing for HIV. Both short term and long term visitors to areas of the world where HIV is more prevalent than in Britain may have had new sexual partners when abroad but may not view themselves as at risk of HIV infection and other sexually

transmissible diseases. Unlike most infections brought back by asymptomatic travellers, HIV infection persists and does pose a risk both to the traveller and to others.

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- 1 Carroll B, Dow C, Snashall D, Marshall T, Chiodini PL. Post-tropical screening: how useful is it? *BMJ* 1993;307:541. (28 August.)

. . . unless the traveller feels unwell

EDITOR,—To judge by demand, many members of the medical profession as well as the general public assume that screening after visits to tropical countries is useful. I am not aware of any evidence on which this assumption could be based. The data presented by Bernadette Carroll and colleagues are therefore valuable, but the authors do not answer the question they pose, "How useful is post-tropical screening?" they are content to conclude that such screening can be carried out efficiently by an informed health professional, who need not be a doctor.¹ On the basis of the data presented, the answer to the question is almost certainly that such screening is not useful.

If the objective of screening is to detect potentially progressive disease before it has caused irreversible damage (for example, hypertension) or incurable spread (for example, carcinoma of the cervix) then seeking cysts of *Entamoeba histolytica* and *Giardia lamblia* in the stool cannot be justified. In most, and possibly all, of the authors' cases the patients would never have become ill; if any had done the diagnosis and treatment would have been comparatively straightforward. General practitioners should know the essential points to remember with regard to people who have returned from the tropics. Firstly, falciparum malaria presents within two months of return (usually from Africa) and screening for it is useless. Secondly, people who swim or wade in African lakes should be screened for schistosomiasis, if these two points were borne in mind the present trend towards overmedicalising travel might be reversed and detection of falciparum malaria, the only common life threatening consequence of travel, might be improved.

I believe, nevertheless, that a consultation is of some value when the people seen are the kinds of traveller screened by the authors—but less for its value to the returned travellers than for its value to those who will follow in their wake. The key to healthy travel is good preparation. Healthy practices relating to activities as diverse as road safety, preparation of food, avoidance of biting insects, and safe sex are of infinitely greater value than immunisation schedules and post-tropical screening. People responsible for advising others who are about to depart under the aegis of agencies such as Voluntary Service Overseas can gain valuable insights from talking to those who have just completed tours.

The main value of these consultations to returned travellers is to allay anxieties. By giving muddled signals to the public and the mass media, doctors must take a share of the blame for creating anxieties in the first place. Travellers should be encouraged to believe that, subject to the two exceptions mentioned, if they feel well they are well.

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