amphotericin B. Efficacy in sporotrichosis, paracoccidioidomycosis, and histoplasmosis is likely but still not proved: the drug has been effective in patients with candidal oesophagitis, peritonitis, and chronic mucocutaneous candidiasis.

Relapse rates with both iatroconazole and fluconazole are presently under study as the numbers of successfully treated patients increase. Before AIDS, treatment of cryptococcal meningitis failed in about a quarter of cases and many survivors were left with appreciable residual neurological damage.[6] This outcome with amphotericin B with or without flucytosine is not good enough, and toxicity is high. Among patients with AIDS the mortality from cryptococcal meningitis varies from 25-58% during the first episode despite treatment with amphotericin B,[7,8] and neurological sequelae such as blindness are not rare. In up to half of patients the disease may relapse when treatment is stopped. Life expectancy is shorter with cryptococcal disease than for other opportunistic infections in AIDS, and the quality of life for these terminally ill patients may be adversely affected by the toxicity of amphotericin B.

Either azole may be a good alternative, but important details on which subgroup of patients will fare best, which azole should be tried first, and what clinical features portend failure of treatment are as yet unstudied.

Similar questions bedevil the management of patients with invasive aspergillosis and candidiasis. Which agent is preferable in which clinical setting? Failure of treatment may be hard to determine: clearing the patient of the fungi may take weeks even with successful treatment (aspergillosis), or cultures may be continually negative even with worsening disease (hepatic candidiasis). Nor do we know which regimen is the best second line treatment. Decision making during treatment is difficult and made more so when the performance of an alternative agent is not clear. Developments in antigen serology may be helpful, but only meagre data are presently available on clinical events during treatment.

A new era in antifungal treatment has arrived, and we will have choices. The new agents will not always work and may sometimes prove inferior to current treatment. Careful clinical study of large numbers of patients with various mycoses treated with each of these new agents will provide some of the data required for good clinical decision making and for planning the comparative trials necessary to establish the place of each agent.

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Electrocardiographs in general practice

All GPs should own one and be able to use it

Just over half a century ago William Evans travelled with his technician from The London Hospital to conduct on Stanley Baldwin what must have been one of the earliest domiciliary consultations to use an electrocardiograph.[1] Cardiovascular disease now accounts for 8% of all consultations in general practice, and each year there will be 90-100 consultations for chest pain in a practice with a list size of 2500.[2,3] General practitioners have responded to ischaemic heart disease with prevention and screening, but crisis intervention will still be required. One key question is how much general practitioners should use electrocardiographs. They may be useful for detecting, recording, and identifying arrhythmias; detecting left ventricular hypertrophy; assessing longstanding ischaemic changes; and not least for confirming a clinical diagnosis of acute myocardial infarction. Furthermore, infarcts are almost always diagnosed at home, and to do this a general practitioner needs a portable electrocardiograph.

It is therefore disconcerting to learn from Drs Nicholas Bradley and Stephen Watkins in Devon (p 435) and Dr M C Colquhon in Hereford and Worcester (p 433) that about a third of general practitioners do not own an electrocardiograph. Colquhon also shows that only a quarter of general practitioners would and could record an electrocardiogram in a patient with suspected acute myocardial infarction during surgery hours, and only one in six would outside surgery hours. In other words, a substantial minority of general practitioners do not own electrocardiographs and a majority do not use them when faced with a patient with a suspected acute myocardial infarction. There is no information on whether ownership and usage correlate with proximity to district general hospitals or coronary care units, possession of higher qualifications, age, high referral rates, or use of a community hospital.

Realists might argue that electrocardiography may be normal in patients with early acute myocardial infarction and lead to an unacceptable delay in getting the patient to a place of relative safety. Furthermore, many general practitioners lack the skills of interpreting electrocardiograms—as do many hospital doctors.[4] Nihilists might explain general practitioners' reluctance to use electrocardiography by the lack of financial incentives, inappropriate and presumptuous straying into a specialist activity, and the bypassing of general practitioners implicit in developing mobile coronary care units and training ambulance drivers in resuscitation and defibrillation.[5] Furthermore, the average practitioner is likely to see only nine to 10 patients with acute myocardial infarction each year, and two or three of these patients may have died suddenly.[2]

On the other hand, a substantial scientific and pragmatic case may be made for owning and using an electrocardiograph. The machines are reasonably priced (at about £1200) and may attract subsidy from the British Heart Foundation or

voluntary subscription. Moreover, they are a tax allowable expense and have acceptably low revenue implications. Disturbances of cardiac rhythm are common in general practice,[6-8] and Shaper was able to show electrocardiographic evidence of ischaemic heart disease in 15% of a large sample of men aged 40-59.[9] Perhaps most tellingly, home care of patients with acute myocardial infarction cannot be contemplated without establishing the diagnosis. More recent entrants to general practice have some familiarity with electrocardiography; and there are specific courses in interpreting electrocardiograms and an increasing volume of educational material. There are also semiautomatic "intelligent" instruments with inbuilt interpretation and reporting. Though it is true that thrombolytic treatment has abolished the days of the leisurely diagnostic process based on serial electrocardiograms and measurements of enzyme concentrations, Gordon's group in Scotland achieved an impressive diagnostic accuracy based on electrocardiographic evidence before starting streptokinase treatment at home or in a general practitioner hospital.[10-13]

At Chequers in 1936 Evans's diagnosis produced immediate anxiolysis, and subsequent events proved his prognosis to be correct. The increase in ischaemic heart disease since then, coupled with our increased understanding of the pathophysiology of heart disease, should strengthen our resolve to improve the use of electrocardiography in general practice. All general practitioners should aspire to own and be able to use an electrocardiograph.

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Antenatal screening for syphilis

Must continue

Syphilis is now rare in Britain,[1] causing questions to be asked about continuing to test pregnant women for antibodies to treponemes.[2-5] But some are concerned about waning commitment to preventing this devastating but treatable disease,[6 7] and analogies have inevitably been drawn with screening for equally rare diseases such as phenylketonuria and neonatal hypothyroidism.[7 8]

Antenatal screening for syphilis has not only provided a service to individual mothers but has also played a crucial part in maintaining the decline of the disease. As most women become pregnant at least once the serological tests performed on them constitute a massive screening programme on them (and indirectly men) shortly after the maximum period of risk. By common consent virtually everyone identified in antenatal clinics and by the blood transfusion service as having syphilis is referred to sexually transmitted disease clinics. In addition to further investigation and treatment the clinics provide a service to trace contacts that is coordinated nationwide, whereby infected partners, children, siblings, and parents are identified and brought to treatment.

Standard screening for syphilis in the first trimester is still cost effective,[3-5] even when the medicolegal aspects and the strong possibility of recrudescence in the absence of continued vigilance are taken into account. Apart from the notable exception of male homosexuals and bisexuals there is no evidence of changes in behaviour among the sexually active population since the appearance of HIV. In fact, reported cases of most sexually transmissible diseases in heterosexuals continue to increase, especially in young people. Furthermore, local outbreaks of disease still occur—often unpredictably.[9]

Results of treatment in early pregnancy are excellent for both mother and fetus,[10-12] but cases continue to be missed.[8 9 13 14]

Failures in first trimester screening are important and arise because of late booking, failure of treatment, reinfection, omission of testing or treatment, laboratory error, or failure to retest patients at high risk in the third trimester.[8 13] Optimal treatment regimens for eradicating the treponemes in late pregnancy have not been determined even for penicillin,[15] and failure with second line erythromycin treatment is well recognised.[13] Moreover, the fetoplacental unit may already be too compromised for survival after treatment, or permanent functional damage may have been incurred.

Second and even third tests have been recommended as a routine or for high risk populations[5 6 9 13 16] but are unlikely to be implemented because of cost.[4 14] Repeat testing will not identify all infected subjects as some will still not have antibodies against the organism at delivery,[8 13] and concentrating on high risk subjects may not be effective.[17] The problem is that traditional criteria of risk may not accurately account for a particular outbreak, or if they do they may encompass only a minority core group. One example is the current outbreak in Connecticut and Philadelphia: a strong association was shown retrospectively with prostitution and use of cocaine, but most of those who were affected were neither prostitutes nor used cocaine.[18]

Finally, as in the case of AIDS, if prevention is done properly then precisely nothing happens.[19] Perhaps if we learnt to take pride in an achievement that has been laboriously and quietly attained we would recover the enthusiasm necessary for continued commitment to screening for syphilis.

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