for only when every child born is the result of a planned conception will it become clear whether there is a population problem at all.


Choice of Penicillins for Gonorrhoea

When considering the choice of penicillins to be administered there will always be some doctors and patients who are opposed to the treatment of uncomplicated gonorrhoea by injectable penicillin, and therefore it is right to review the efficacy of alternative oral treatment. Because so many patients default from surveillance immediately after treatment has relieved their symptoms, it is essential that effective oral treatment should be given in a single dose and that the cure rate be high.

Recently P. A. Kvale and colleagues reported that they had treated 510 United States naval ratings diagnosed as having gonorrhoea with various regimens of single-dose oral penicillins. They gave a single dose of ampicillin 3.5 g to 68 patients, but there was a 29% failure rate in the 41 followed up. When probenecid 1.0 g was given to 373 patients one hour before the same dosage of ampicillin and then a further 0.5 g in 6, 12, and 18 hours, the failure rate was only 4% in the 202 followed up. On the other hand they found that oral phenoxy methyl penicillin, with dosage up to 7.5 g even with probenecid, gave failure rates ranging from 25 to 65% in the follow-up of 64 of the 69 patients treated. It is to be noted that in their ampicillin-probenecid regimen, though the patient takes the initial probenecid in the clinic, three further 0.5 g doses have to be taken later, and to this extent it cannot be regarded as single-dose therapy.

Most venereologists in the United Kingdom do not favour penicillin by mouth for gonorrhoea, and in this context a recent survey by the British Co-operative Clinical Group is of interest. A questionnaire was completed by 101 venereologists working in 206 clinics. Penicillin alone in various regimens was used in 79% and penicillin reinforced by other drugs in 20% of clinics. Ampicillin was reported to be used for males in five clinics and for females in 14 clinics. A majority of venereologists were not in favour of a moratorium on the use of penicillin with the idea of trying to reverse the decline in the sensitivity of the gonococcus to it.

When attempting to control gonorrhoea in a community every effort should certainly be made to prevent the development of resistant strains. The work of G. A. Olsen and G. Lombolt in Greenland represented a successful effort of this type. In 1963 they found in certain areas that there were as many as 86% (average 56%) of partially resistant strains of gonococci, and the clinical failure rate with the penicillin regimen used was 26%. Between 1964 and 1968 they treated over 800 patients with 5 megaunits of benzyl penicillin given in 0.5% lignocaine boosted by a single dose of probenecid 1.0 g (given 15 to 30 minutes before the injection). The cure rate was 99%, and in the remaining 1% re-infection was the probable cause of the disease. By 1968 the percentage of partly resistant strains of gonococci had fallen to 19%. Since then experience with this regimen in Britain has been equally satisfactory clinically.

Thus treatment with injectable penicillin, preferably boosted by a single dose of probenecid, remains the most effective one-attendance therapy for gonorrhoea in this country, and oral ampicillin, which is more expensive and marginally less effective, must take second place.

It should be noted that in this brief discussion of the treatment of gonorrhoea with penicillin such alternative drugs as sulphamethoxazole-trimethoprim and kanamycin have not been considered, though they may be particularly indicated for patients with penicillin hypersensitivity or when early syphilis is suspected.

Risks of Suddenly Stopping Anticoagulants

Sudden cessation of treatment with heparin or warfarin, or its reversal with the antidotes protamine or vitamin K, may be needed if a patient treated with an anticoagulant drug begins to bleed. Several reports have suggested that there is an increased risk of thrombosis or embolism if treatment is suddenly interrupted because of haemorrhage.1-3 The evidence on which these reports are based is open to criticism, but many physicians believe that there is a hypercoagulable "rebound" after stopping treatment and prefer to taper the dose off over several weeks.

Recent work suggests that the risks of stopping anticoagulant therapy suddenly may have been overstated. L. Michaels compared the incidence of thromboembolism in a group of 74 patients who had a sudden cessation of anticoagulant treatment because of haemorrhage with the experience of 166 others whose treatment had been stopped by choice. In 49 of the second group of patients, treatment had been tapered off, while it had been stopped abruptly in the remaining 117. Clearly groups chosen in this way would not necessarily be comparable with one another, and Michaels endeavoured to overcome this objection by dividing his patients into three categories based on the estimated risk of recurrence. Using these criteria, he showed that the two groups of patients were sufficiently similar to allow comparison to be made. There was no difference in the risk of thromboembolism in the two groups either in total number of events or in their week-by-week incidence in the 16 weeks of follow-up after treatment was stopped. The risks of stopping treatment because of haemorrhage appeared to be no greater than if treatment was stopped electively.

There appears to be no need to hasten to restart anticoagulation (because of an assumed hazard of a hypercoagulable rebound) in a patient who has bled. The decision whether to restart treatment should be determined by balancing the risk of recurrent haemorrhage against the risk of recurrent thromboembolism. If the patient has a condition with a high risk of thromboembolism which will continue to operate after the drug has been stopped, it would be wise to restart anticoagulants as soon as it is safe to do so after
Adrenaline into Melanin

Patients suffering from glaucoma simplex are commonly treated with topical adrenaline in strong concentration provided their eyes have wide chamber angles and are in no danger of developing angle closure as a result of mild mydriasis. A side effect of the treatment is the appearance of discrete, black, round patches about the size of a pinhead on the conjunctiva, particularly of the lower lid and lower fornix. Pigmentation takes place during the first 16 months of therapy and has been reported to affect 44% of cases. The correlation between the topical administration of adrenaline compounds and pigmented conjunctival deposits was first reported by A. Löwenstein in 1927. Microscopical studies show that these deposits consist of melanin. This is produced by the oxidation of adrenaline after it has entered pre-existing conjunctival pockets or cysts. The material is acellular.

Melanin is the generic name for a group of widely distributed naturally occurring substances responsible for the varying shades of brown-black pigmentation found in plants and animals. It consists of pigments of high molecular weight derived from the oxidation of phenols. Adrenaline is a phenol which under the influence of phenol oxidases is oxidized to the unstable substance adrenochrome and finally produces melanin.

The patient may notice the black spots, or the physician may mistake them for a conjunctival melanoma, or irritation in the eye may draw attention to them, when they may be mistaken for foreign bodies and attempts made to remove them. Jet-black punctate pigmentation of the conjunctiva should always lead the observer to exclude topical adrenaline as a cause. They are not in any way related to neoplasms of the conjunctiva nor are they a contraindication to a continuation of adrenaline therapy. Fortunately they are not disfiguring, as they tend to be hidden by the lids, and their discovery by the careful examiner is something of an anticlimax in that they are entirely benign as well as symptomless, calling for no treatment.


Swollen Figures

For over 10 years the average mortality of males in England and Wales has shown no improvement. In fact it has got slightly worse. The standardized ratio in 1960 was 92% of the baseline figure for 1950-2, while in 1969 it had gone up to 94. Females fare rather better, the average death rate (standardized) declining over the decade from 87 to 84% of the 1950-2 rate. The same disparity between the sexes is to be seen in Scotland, but there the rate for males did also fall somewhat.

The detailed mortality statistics for 1969 have recently appeared from the Registrars General for England and Wales and for Scotland. Both volumes provide an identical table by which valid comparisons can be made between the death rates for certain diseases in the three parts of the United Kingdom and the Irish Republic. We learn from the figures that for all deaths the standardized mortality ratio for males was lowest in the Irish Republic in 1969, followed by England and Wales, then Northern Ireland, and finally Scotland. But for females England and Wales had the best figure and the Irish Republic the worst, with Northern Ireland and Scotland in between.

Lung cancer was a much commoner cause of death in England and Wales and Scotland than in either part of Ireland, but the reverse is true of respiratory tuberculosis. The well-known rarity of suicide as a recorded cause of death in the Irish Republic is shown by its mortality ratio of 28 for men and 17 for women compared with 105 and 106 in England and Wales. Scotland had a surprising death rate from meningococcal infection: among males the mortality ratio was 214, compared with 93 in England and Wales and much lower figures still in Ireland. Rheumatic fever was a far more prevalent cause of death in both parts of Ireland than in England and Wales and Scotland.

These volumes are indispensable sources of information on causes of death. But unfortunately they have caught the inflationary disease of our times. The one for England and Wales costs over three times what its predecessor did in 1960 and the one for Scotland (with some changes in scope) two and a half times. Both are three or four times as bulky and the amount of blank space in and around their tables has multiplied by at least as much. If computerization can give us neither economy of cost in our budgets nor economy of space in our libraries, we may look for greater accuracy. Yet in vain. The England and Wales volume offers eight pages of corrections to last year’s report, the Scottish volume a sheet of corrections for its own pages. Nor do we even get speed in England and Wales, for its report appears at a longer interval (16½ months) after the year to which it refers than did the 1960 volume (13 months). Scotland may be congratulated on showing some improvement in this respect. But a re-examination of the type of statistics these reports provide and the means allotted to producing them might be as helpful to the Registrars General as to their readers.