Two observations are worthy of special remark. All the patients who did well showed improvement within seven days of starting propranolol. Two patients (Nos. 4 and 12) who improved relapsed again within a few days of stopping propranolol; and No. 4 improved when propranolol was resumed, relapsed when it was stopped, and recovered again on its further resumption. But he was having 300 mg a day of chlorpromazine as well. The case therefore is not proved, but it deserves further study.


Septicaemia on the Increase

The immense main auditorium of the Palacio de Congresos in Madrid was the scene on November 4-5 of an international symposium on septicaemia, organized by Antibioticos S.A.

Outstanding among papers on individual subjects was that by E. L. Quinn of Detroit on bacterial endocarditis. His experience had been that Streptococcus viridans infections, which had formerly accounted for 80-85% of cases, were now found in only 40%, their place having been taken by generally more resistant infections. Not all of these were even bacterial, Candida spp. being one exception, and many were self-introduced by heroin addicts.

Five main sessions were devoted to themes concerned with modes of origin of bloodstream infections: operative surgery and obstetrics, urology, the neonatal period, respiratory tract infections, and Gram-negative shock. It was evident from the treatment of the last subject that there may be much more to its treatment than the urgent administration of an antibiotic such as gentamicin calculated to kill enterobacteria in the blood. Such a patient may need several intravenous “lines” to monitor the blood pressure in the remotest depths of his circulation and to administer fluids, a catheter in his bladder to monitor urine output, and even a tube in his trachea to assist respiration.

Maxwell Finland of Boston, who chaired this session, was an author of a classical paper1 15 years ago to the effect that bloodstream infections had actually increased in frequency during the antibiotic era and were much more often caused by Gram-negative organisms. This change has not only continued but apparently accelerated since then, at least in the U.S.A.; during the 1960s the frequency of Gram-negative bacteraemia per 1,000 admissions rose from 0.7 to 2.5 in Cincinnati,2 from 0.7 to 4.0 in Palo Alto,3 and from 4.9 to 6.1 in Minneapolis.4 Such findings were repeatedly re-echoed and extended on this occasion; speakers at most sessions produced lists of causative organisms headed by Esch. coli, Proteus, Klebsiella, and Pseudomonas, and including some formerly almost unheard-of genera, among which Serratia usually figured prominently. (Needless to say Gram-positive infections, staphylococcal, streptococcal and other, also still occur.) It may well be asked why serious generalized infections by such organisms as these should apparently be increasingly common. These bacteria owe much to their antibiotic multi-resistance, and the selective effect of indiscriminate antibiotic treatment is often to blame for giving them their chance. But the main cause lies deeper, and paradoxically enough is inherent in various therapeutic advances. The intravenous tubes now so commonly used are a convenient portal of entry for these infections. Immuno-suppressive drugs, without which organ transplants are impossible, also inevitably depress resistance to infection. So also do cytotoxic drugs given in leukaemia and cancer. So may corticosteroids given for a variety of reasons. More adventurous surgery must also take a share of the blame. Another important factor is age; more and more old people are receiving radical treatment which used formerly not to be attempted, and their resistance to infection is poor.

These difficulties must be accepted, but there is perhaps one direction in which remedial action should be possible. Most of these infections are acquired in hospital, and are due to identifiable resident strains of drug-resistant bacteria which continue to attack patient after patient for months. When catheters and cystoscopes were being “disinfected” by ineffective methods this kind of infection was inevitable, but now that sterilization is generally efficient such obvious routes for the implantation of bacteria in patients are excluded. Though much has been done, is there not room for further study of the habitat and distribution of these bacteria in hospital wards and of their means of access to the patient? This should be a simple problem of environmental hygiene, capable of amelioration if not full solution by physical and chemical methods of disinfection. Total elimination would be defeated by intestinal carriers, but there should be a long and hazardous path for the bacteria to tread between the anus of one patient and the wound of another. We are told that bacteria are endlessly adaptable and have outsmarted us in many ways, but surely they cannot withstand well-planned outright war in a simple extracorporeal environment?

1 Finland, M., Jones, W. F. Jr., and Barnes, M. W., Journal of the American Medical Association, 1959, 170, 2,188.

Nail Growth

Few people realize how slowly nails grow. There have been a number of serious attempts to record accurately the rate of nail growth, but undoubtedly the longest period of observation has been that of Bean on his own left thumb nail: his latest report1 records 30 years of continuous observation.

Like other observers Bean has noted a gradual slowing with age. Whereas in the early days it took 116 days for the nail to grow from cuticle to tip (a distance of 1-45 cm) it now takes 148 days—a reduction in growth rate from 0·125 mm a day to 0·1 mm a day 30 years later. Unlike other observers, he has noted no seasonal change in growth rate, but this he attributes to living in a centrally-heated atmosphere during the winter and in air conditioning during the summer, so there have been no extremes of heat or cold. His detailed chart shows a number of occasions when the rate of growth has been reduced materially for a short period. One of these was in association with an attack of mumps, and two others appear to be related to a visit to England and Europe in 1964 and to Ireland, Scotland, and England in 1971.

Infections and especially measles in children2 slow the rate of nail growth. In extreme cases the slowing results in the formation of a depression on the surface of all nails, which becomes visible at the cuticle several days after the illness and then moves forward at the normal rate. Slowing may also occur...