

For the future there are prospects of control of protein synthesis. To predict early success at a level capable of clinical application would be unwise, though to be entirely pessimistic would be to belie the whole history of this field.

The interference by antibiotics with the synthesis of nucleic acid or protein provides the molecular biologist with a tool, which has enabled him to discover more about their probable mode of action. On the other hand the capacity of populations of pathogenic micro-organisms to become resistant to antibiotics has brought a practical challenge to the molecular geneticist, and one complicated by the discovery that drug resistance can sometimes be transmitted to non-resistant cells by infection. Thus epidemiology, therapeutics, and molecular biology are already in contact with each other.

Molecular biology is sometimes equated with the study of D.N.A., R.N.A., and their role in protein synthesis. It is as well to be reminded that proteins, once synthesized, may have functions in the cell that can be analysed by biophysical, biochemical, and electron-microscopic study. The study of the contractile proteins in muscle cells, discussed in one paper in the *British Medical Bulletin*, is a model of what can be achieved. It seems likely that a similar *Bulletin* published 20 years from now would no longer be dominated by the nucleic acids and protein synthesis. Protein function and the polysaccharides should by then be claiming a larger share of the limelight.

Dermatitis from Lichens

The number of substances known to be capable of inducing allergic sensitization is already vast and receives new additions almost daily through the ingenuity of the industrial chemists. But occasionally a new recruit to the list of offenders is identified in some apparently innocuous and unsuspected object in man's natural environment. Such are the plants known as lichens.

Lichens are very widely distributed outside cities and must be familiar to most people who ever visit the countryside. They consist of a fungus and an alga in symbiosis, and form conspicuous patches of orange, yellow, green, grey, and other colours on roofs, walls, and trees. Forestry workers are most frequently in contact with them, but factory workers, carpenters, gardeners, and housewives may handle lichen-covered logs and branches. Thus casual exposure can occur in many different circumstances. M. L. Spillman¹ in France appears to have been the first to recognize, in 1921, that lichens may cause dermatitis. Occasional further cases of lichen dermatitis have been reported among woodcutters in Switzerland² and in France. M. P. Le Coulant and G. Lopes^{3, 4} thoroughly investigated this problem in forestry workers in the Bordeaux region. The significance of these reports was not generally appreciated, and there can be few dermatologists who seriously consider lichens as a cause of unexplained dermatitis.

¹ Spillman, M. L., *Bull. Soc. franç. Derm. Syph.*, 1921, 28, 33.

² Tenchio, F., *Dermatologica (Basel)*, 1948, 97, 72.

³ Le Coulant, M. P., and Lopes, G., *J. Méd. Bordeaux*, 1956, 133, 245.

⁴ ——— *Arch. Mal. prof.*, 1960, 21, 374.

⁵ Champion, R. H., *Brit. J. Derm.*, 1965, 77, 285.

⁶ Mitchell, J. C., *Arch. Derm.*, 1965, 92, 142.

⁷ ——— and Champion, R. H., *Bryologist*, 1965, 68, 116.

⁸ *Brit. med. J.*, 1965, 2, 1322.

Almost simultaneously R. H. Champion⁵ in Cambridge and J. C. Mitchell^{6, 7} in British Columbia recognized further examples of lichen dermatitis. The Canadian patients were both forestry workers, but the English patient was a housewife who had related her dermatitis to contact with wood dust on her husband's clothes. In all these cases patch-tests with lichen were positive, not only with the offending species but with related species in the same genus and other genera in the same order. Mitchell's work has established that the sensitizing agent was usnic acid. The species so far incriminated belong to the genera *Lecanora*, *Parmelia*, *Physcia*, and *Xanthoria*. The clinical picture is that of a recurrent acute or chronic dermatitis of the face and neck, hands, and forearms. The dried and powdery lichen may pass the shirt neckband and provoke an extension of the dermatitis around the belt-line and on the genitalia.

Since the species of lichen that have caused dermatitis grow in many parts of the world, these plants must take their place on the list of suspects when patients with contact dermatitis are found to have handled either green or dried wood. It is essential that the diagnosis be confirmed by patch-testing with the lichen itself or with usnic acid. Many people exposed to lichens in Europe will also be in contact with pine, spruce, larch, or common ivy, which may all occasionally cause dermatitis. Rarely the common species of elm may also do so, but the leaves rather than the timber are responsible. A so-called diagnosis based solely on circumstantial evidence is therefore of little value.

Allergic contact dermatitis is an increasingly important hazard of modern life, whether at home or at work.⁸ A detailed, skilfully taken clinical history will often allow the large range of possible offending substances to be reduced to a limited number of suspects. These can then be investigated by specific patch-tests, for patch-tests properly carried out and critically interpreted are a helpful procedure in reaching an accurate diagnosis. Success in identifying the offending substance can be achieved, unless by chance, only with a knowledge of the sensitizing potential of each component of the patient's occupational and domestic environment, and this is often very difficult to obtain.

Readmission Rates in Schizophrenia

Patients with schizophrenia are nowadays kept in hospital for a shorter time on the average than they used to be. Treatment outside is proving successful in some cases, and this week Drs. A. Esterson, D. G. Cooper, and R. D. Laing report in the *B.M.J.* (page 1462) their results with 42 young patients, 20 being admitted to hospital for the first time. They were treated by "family and milieu therapy" on discharge from hospital, and only seven of the 42 patients (17%) were readmitted during the year after discharge. The prognosis in a group of this kind would be expected to be better than average, and similar readmission rates have been reported for other series, in which the patients did not have the benefit of such special treatment. Consequently, some confirmation would be welcome of the authors' plea that their results provide "a prima facie case for radical revision" of the treatment of schizophrenic patients. However, one general consequence of the shorter average stay of schizophrenics in hospital is that they are being readmitted after