Abstracts

1. The first reported case of sarcoidosis in an East African, by P. I. LOBO. E. Afr. med. J. 1972, 40, 37-49.

The author presents a well-documented example of cutaneous sarcoidosis and generalized adenopathy, including enlargement of the hilar glands. The patient was an African man aged 45, who gave no history of exposure to known aetiological factors. The skin lesions consisted of papular, nodular, and plaque-like masses distributed over the face, dorsa of the hands, forearms and legs. Histological examination of the skin and liver was highly suggestive of sarcoidosis, and full investigation excluded other possible causes, including leprosy. The Kveim test (using a weak antigen, the only product available) was negative, but the author remarks that some 20% of patients with sarcoidosis fail to react to this antigen. Response to corticosteroids was typical and satisfactory.

S. G. Browne

2. Otorhinologic aspects of leprosy, by R. E. PICKARD and J. A. BURNAM. J. Florida med Ass. 1971, 58, (16), 27-29.

In the last 5 years, the authors have seen at their ear, nose and throat clinic in Miami 16 patients with leprosy; of these, 14 were immigrants from Cuba. On clinical and bacteriological grounds, the disease was considered to be active in 8 of them. The authors found a correlation between the bacteriological findings in the skin and those in the nasal mucous membrane, but none between the clinical findings in the ears and nose and the presence of *Myco. leprae*. [No indication is given of the morphology of the organisms. Clinically detectable damage does not depend on the continuing presence of viable *Myco. leprae*, and *vice versa*.]

S. G. Browne

3. Dapsone induced psychosis—a case report, by D. M. SAHU. *Indian J. Derm.* 1972, 17, 47-48.

The patient, an Indian male of 32 suffering from tuberculoid leprosy, began treatment with 25 mg of dapsone daily for 6 days a week. Some time after this dose had been doubled, he complained of insomnia and irritability; his talk was uncoordinated; he became disorientated; and his gait was unstable. The drug was withdrawn. Within 15 days, he became normal again.

Dapsone was reintroduced, at a dose of 50 mg daily for 6 days a week. The mental symptoms returned, only to cease when dapsone was discontinued. The patient gave no family history of mental illness or instability. The pattern—onset, return to normal, renewed symptoms, and again return to normal—was thought to indicate a definite relation between dapsone and psychosis.

S. G. Browne

Comparison of B1912 and clofazimine (B663) in Mycobacterium leprae infections (35654) by C. C. SHEPARD, L. D. WALKER, R. M. VAN LANDINGHAM and M. A. REDUS. Proc. Soc. exp. Biol. Med. 1971, 137, 728-729.

B1912 is a newly synthesized type of rimino compound; it has about the same activity against tubercle bacilli in mice as clofazimine (B663). Clofazimine is now generally accepted as the

drug of choice in treating infections of man with sulfone-resistant *Myco. leprae*. Like clofazimine, B1912 deposits in the tissues of mice and other experimental animals, but it gives higher serum levels and lower tissue levels (except in fat) than clofazimine under similar conditions. We have compared B1912 and clofazimine in *Myco. leprae* infections in mice.

The effect of clofazimine was compared with another, more newly developed rimino-compound, B1912, in *Myco. leprae* infections in mice. The two drugs were found to have very similar activity.

Authors' Summary

Liver in leprosy: histological and biochemical findings, by A. B. A. KARAT, C. K. JOB and P. S. S. RAO. *Br. med. J.* 1971, 6, 307-310.

The histological findings and their correlation with biochemical functions of the liver in 240 leprosy patients are presented. In 21% of those with tuberculoid leprosy and in 62% with lepromatous leprosy, leprous granulomata were found in the liver. A significant prevalence of granulomatous lesions in the liver among patients with tuberculoid and borderline-tuberculoid leprosy of less than one year's duration suggests that bacillaemia occurs in all forms of leprosy.

There was a direct correlation between bacterial index and the presence of acid-fast bacilli in the liver. Of 50 patients with negative skin smears 7 had acid-fast bacilli at liver biopsy. From none of these liver homogenates were acid-fast bacilli grown on culture in Löwenstein-Jensen medium.

The alterations in liver functions were more consistently seen when acid-fast bacilli were associated with the presence of leprous granulomatous lesions. The acid-fast bacilli were found to persist even after 1 to 5 years of specific antileprosy therapy and after the bacilli in the skin had cleared up. This may explain the relatively frequent recrudescence or relapse of the bacillated types of leprosy when specific antileprosy therapy is stopped soon after bacterial negativity is attained on skin smears.

Authors' Summary

6. Mycobacterium fortuitum—A Human Pathogen, by W. L. HAND and J. P. SANFORD. Ann. intern. Med. 1970, 73, 971-977.

Mycobacterium fortuitum is often considered to be merely a saprophytic organism in spite of adequate evidence to the contrary. To illustrate the clinical manifestations and relative frequency of Myco. fortuitum infections, 6 recently observed cases are presented. These include 5 patients with cutaneous infection or abscess disease after trauma (one of whom also had suppurative adenitis) and one patient with a cauda equina abscess and meningitis. The most frequently reported Myco. fortuitum illnesses are cutaneous and deeper infections after trauma, pulmonary disease, and corneal infections. Infections associated with contaminated trauma, including corneal infection, are related to the widespread distribution of Myco. fortuitum in nature. Pulmonary infection is usually superimposed on pre-existing lung disease. Local measures, including debridement, drainage, and sometimes excision, are the treatment for cutaneous infections, abscesses, and corneal infections. Although drug therapy has been ineffective, patients with pulmonary disease frequently recover spontaneously.

Authors' Summary

Cases of Mycobacterium borstelense and M. abscessus infection observed in Belgium, by S.
R. PATTYN, J. VANDEPITTE, F. PORTAELS and A. DE MUYNCK. J. med. Microbiol.
1970, 4, 145-148.

Cases of multiple cutaneous abscesses due to *Mycobacterium borstelense* and *M. abscessus* are described. One occurred in Belgium after insulin injections and the other as a result of a wound infection sustained in Central Africa.

The differentiation of M. borstelense from M. abscessus, M. fortuitum and M. peregrinum is discussed.

Authors' Summary

 Disseminated atypical mycobacterial disease presenting as "leukemia", by V. R. GRUHL and M. H. REESE. Am. J. clin. Path. 1971, 55, 206-211.

A case of disseminated infection with *Mycobacterium kanasasii* is described. The diagnosis was made by demonstrating acid-fast bacilli in a biopsy specimen of the liver and by cultures of the sputum and bone marrow. Although the initial hematologic findings suggested subacute myelogenous leukemia, the clinical course was that of leukemoid reaction secondary to the mycobacterial infection.

Authors' Summary

9. Hallazgo de bacillos ácidos resistentes en la pulpa dental da pacientes lepros (Acid-fast bacilli in the dental pulp of patients with leprosy), by T. CESPEDES and B. MEONO. *Acta Méd. Costarric.* 1970, 13, 105-110.

Eighty-two biopsies from active Hansen's disease removed from dental pulp were studied.

Ten patients had invasion of the pulp tissue by acid-resistant bacilli with important histopathologic changes.

We emphasize the fact that finding the bacilli in the dental pulp also implies the possibility of finding the bacilli in the dentine with the corresponding histopathologic alterations.

Authors' Summary

10. Vers une recrudescence actuelle de la lèpre en France (The reappearance of leprosy in France today), by M. THOREL. Rev. Med. Normande. 1970, p. 449.

The author alerts practising French physicians to the possibility of leprosy appearing in various guises among people who have been exposed to infection overseas. He mentions 10 patients he has diagnosed in his Skin Clinic [though he does not mention the period during which these patients were seen], and indicates the presenting symptoms or signs that brought them for medical advice: deep burns (in a foundry worker suspected of self-injury), perforating plantar ulcer, hypopigmented or erythematous macules, facial nodules, etc. In one patient, examined radioscopically for injury to the lumbar spine, erosion of the apophyseal articular surfaces led eventually to the diagnosis of leprosy.

S. G. Browne

11. WHO co-ordinated short-term double-blind trial with thalidomide in the treatment of acute lepra reactions in male lepromatous patients, by C. G. S. IYER, J. LANGUILLON, K. RAMANUJAM, G. TARABINI-CASTELLANI, J. TERENCIO DE LAS AGUAS, L. M. BECHELLI, K. UEMURA, V. MARTINEZ DOMINGUEZ and T. SUNDARESAN. Bull. Wld Hlth Org. 1971, 45, 719-732.

This co-operative study provides a detailed comparison of the efficacy of thalidomide and acetylsalicylic acid in the treatment of acute exacerbation occurring in the course of lepromatous leprosy. The 18 tables present the clinical and pathological findings in great detail.

It is concluded that thalidomide, given for a short period, favourably influences the skin lesions of "reaction", and brings about a fall in body temperature. The effect on nerve and eye lesions is less pronounced.

Thalidomide is superior to acetylsaliclyic acid in controlling the local pathological effects of reaction in the testes, lymph-nodes, liver and spleen. No serious side-effects of thalidomide were

noted, but attention is drawn to the occurrences of leucopenia and bradycardia as being possibly due to the drug.

The whole report may be read with interest.

S. G. Browne

12. Blood groups and abnormal haemoglobins in leprosy, by J. LANGUILLON, LINHARD and G. DIEBOLT. Bull. Soc. Méd. Afr. noire, Lang. Fr. 1971, 16, 581-584.

The authors studied the frequencies of blood groupings (ABO and rhesus) in 480 leprosy patients (lepromatous 235 and tuberculoid 245), representing diverse ethnic origins, and in 238 healthy subjects.

They found some association between lepromatous leprosy and blood group A, and between tuberculoid leprosy and blood groups B and AB. There was no concordance between these two polar groups and the occurrence of the rhesus factor. No association was found between abnormal haemoglobins AS, AC and SC and leprosy.

S. G. Browne

13. Blood groups and leprosy in Dakar, by I. FAYE, H. RUSCHER, M. P. TSALA and G. BLOC. Bull. Soc. Méd. Afr. noire, Lang. Fr. 1971, 16, 551-553.

In a series of 107 patients suffering from leprosy (lepromatous 55, tuberculoid 52), the authors found no significant differences in the frequencies of blood groups (O, A, B, AB, rhesus) compared with those found in the healthy Senegalese population.

S. G. Browne

14. Isolation of a mycoplasma from three patients with lepromatous leprosy, by ELLI JANSSON, SIRKKA TUURI and D. S. RIDLEY. *Int. J. Derm.* 1971, 10, 175-178.

This paper reports the first recovery of proved mycoplasma from the skin of patients with leprosy. Of the 3 patients concerned 2 had lepromatous and 1 near-lepromatous leprosy. Material was obtained from "skin-scrapings" from the lesions, the skin having been subjected to a 70% ethylalcohol compress and left to dry. The culture medium used was modified cell-free (Jansson) broth. All 5 mycoplasma isolates were arginine-positive and showed similar antibiotic sensitivity.

The interest of these observations lies in the reported resemblance of T-stain mycoplasma to Mycobacterium tuberculosis.

S. G. Browne

 Erythema nodosum: a study of 60 cases, by M. EL ZAWAHRY. Int. J. Derm. 1971, 10, 145-150.

The author provides an interesting review of patients seen in a Cairo dermatological department. Of 60 patients with erythema nodosum, 24 had verified streptococcal infections of the upper respiratory tract, 23 had various rheumatic conditions, 5 had leprosy, 3 tuberculosis, and 2 sarcoidosis. [The caption for fig. 4 suggests, probably erroneously, that tuberculoid leprosy was the cause of erythema nodosum of the pretibial region.]

S. G. Browne

16. Inoculation leprosy appearing after seven years of tatooing, by V. N. SEHGAL. *Dermatologica (Basel)* 1971, **142**, 58-71.

The author reports an instance of possible transcutaneous implantation of *Myco. leprae* by tatooing. The patient, a female aged 25, developed a lesion diagnosed as typical of tuberculoid leprosy at the site where she had been tatooed 7 years previously.

S. G. Browne

17. Activity of compound TH 270 (N-p-isobutoxyphenyl-N'-p'-\alpha-pyridyl-ethyl-phenylthiourea) on the experimental infection with Mycobacterium lepraemurium and Mycobacterium leprae, by S. R. PATTYN and W. H. WAGNER, Ann. Soc. belge Méd. trop. 1972, 52, 55-61.

The authors investigated the activity of a new thiourea derivative, TH 270, (N-p-isobutoxyphenyl-N'-p'- α -pyridyl-ethyl-phenylthiourea) against certain standard strains of Myco. lepraemurium and Myco, leprae in mice. TH 270 had been found experimentally to have the best chemotherapeutic properties of the 283 new thiourea compounds investigated. In the present trials. TH 270, which has decided anti-tuberculosis activity, was inactive against Myco. lepraemurium, but definitely active against Myco. leprae. Cross resistance with thiambutosine was considered to be likely.

Since the thioureas show considerable variation in the pattern of internal absorption and serum concentration, further information concerning actual plasma-levels after either oral or parenteral administration is necessary before definite appraisal of the therapeutic value of TH 270 in human leprosy can be made.

S. G. Browne

18. Polyradiculonévrites chez le Noir au Sénégal, by H. COLLOMB, P.-L. GIRARD, M. DUMAS and L. HERAUT. Bulletin de la Société Médicale d'Afrique noire de langue francaise. (3), 347.

The authors give a useful review of recent literature on the subject associated eponymously with Guillain and Barré. Of interest to leprosy workers is the clinical description of 31 cases of the condition seen in hospital practice in Dakar, in which disturbance of motor and sensory modalities of peripheral nerves, of sphincter function, and of certain cranial nerves, sometimes resembles and sometimes differs from the peripheral neuritis common in leprosy.

The rôle of a preceding ill-defined febrile illness of viral or unknown etiology is mentioned.

S. G. Browne

19. Some problems of leprosy, by ABDUL BASIT. Pakistan Med. Rev., 1971, 6, 45-49.

The author writes from Dacca, and briefly summarizes the views on leprosy generally current a decade ago. The incubation period is said to be "5-30 years", and the infection "is spread by prolonged skin to skin contact". The disease is to be controlled by "segregating the infective cases". In addition to dapsone, diphenylthiourea and thiosemicarbazone, the "topical application of chaulmoogra oil or Etisul cream" is advocated.

Leprosy is admitted to be a problem of considerable importance in the former East Pakistan, with an estimated 200,000 cases. In West Pakistan, about 6000 out of the estimated 80,000 patients are getting treatment, but in the former East wing the proportion is even lower.

S. G. Browne

20. Estudio anatomopatologico de la distribucion de amiloidosis, by J. C. BERNARD. 1971, 16, 15-25.

"We have discussed the incidence of amyloidosis in 50 necropsies of lepromatosie persons performed at the Baldomero Sommer Hospital. We have arrived at the following conclusions:

- (1) The amyloidosis is the most frequent cause of death among the lepromatosic patients (56% of the cases), through a renal insufficiency.
- (2) In active lepromatosie the kidney was the most affected organ, while in the residual ones it was the suprarenal gland in the first place, and secondly the kidney.

- (3) There are to be found two anatomic forms of renal amyloidosis: the little retracted kidney without nefrosis, which predominates among the residuals and old age people, and the large kidney with nefrosis, which predominates among the active and younger people.
- (4) In patients with visceral dissemination of lepromatosie lesions, amyloidosis cannot be shown either anatomically or histologically."

Author's Summary

21. A discussion on integration of leprosy control campaigns into the general health system, by J. WALTER. *Acta* 1971, 44, 67-82.

The author provides a very useful summary of the progress of thought and action on the subject indicated by the title. His thesis takes cognizance of the various medical and social factors involved, the failure of mass treatment campaigns to reduce the incidence of leprosy (mainly by reason of incomplete coverage, the long period of treatment required, irregularity of treatment, and lack of general medical facilities), the inherent difficulties of the problem of a slowly developing disease not easily recognized in its early stages, etc. The background assumptions reflect the slowness of integration in many countries where the social stigma of leprosy is strong, and hence where integration must needs be slow. Resignation, approaching despair, is even hinted at.

Specialized services are indicated in situations where the prevalence of leprosy is high, and some suggestions are given for criteria of progress in leprosy control that should be attained before complete integration is attempted. The theoretical advantages of integration may well be lost if premature or precipitate action is taken in the absence of adequate preparation of the populace by education and in-service training of medical auxiliaries. Progressive and gradual integration of leprosy control into the general health service is considered to be the most feasible approach to a delicate problem.

The whole paper will repay careful study, providing as it does much factual information as well as an extensive list of references to original articles.

S. G. Browne

Norwegian scabies in a male mongoloid: report of a case and a review of the literature, by J. ZAKON and R. H. McQUAY. Int. J. Derm. 1972, 11, 8-15.

The interest of this article lies in its extensive bibliography, no fewer than 149 papers being mentioned, and in the association of the condition historically with leprosy and with the name of Boeck. Norwegian scabies is a very severe infection with the *Acarus scabiei*, and is frequently characterized by chronic infection of the extremities and absorption of the terminal phalanges of the fingers and toes.

At the present time, Norwegian scabies is found mainly in mentally retarded persons, and perhaps especially in males suffering from Down's syndrome. The 11th case to be reported in the United States forms the subject of this paper.

S. G. Browne

American Dermatological Association Meeting, May 16-20, 1971, by HARRY L. ARNOLD. Straub Clinic Proceedings, 1971, 37, 119-126.

In his summary of the Proceedings at the Meeting, Dr Arnold gives a succinct account of papers by H. W. Jolly on so-called "swimming pool" granuloma in which the majority of the 31 cases of M. marinum (balnei) infection reported were not acquired in swimming baths, but in either brackish water or without evident exposure to water at all. Unusual manifestations included tenosynovitis, bursitis, arthritis and osteomyelitis. More than half reacted more strongly to PPD prepared from mycobacteria other than M. marinum—an unexpected finding. It is suggested that tuberculin conversion may occur as the result of infection with M. marinum.

Another paper by I. Zeligman reported 18 cases of *M. marinum* infection, in which the incubation was as short as under 2 months in those patients giving a reliable history. Spontaneous resolution was the usual outcome.

S. G. Browne

24. Assessment of the importance of reconstructive surgery in the control of leprosy from the public health point of view, by L. M. BECHELLI and J. WALTER. *Acta Leprologica*, 1971, 45, 5-29.

This article provides a very useful summary of the pros and cons of reconstructive surgery assessed as a factor in the control of leprosy. The value of orthopaedic and plastic—and even cosmetic—surgery to the individual is not in question, but the rôle of reconstructive surgery in a leprosy control programme is still a matter for debate.

The wording of the problem differs according to one's objectives and criteria of obligation to meet a human and social need. From the strictly utilitarian and economic standpoint, reconstructive surgery, in the context of poor and developing countries faced with serious public health problems, may be adjudged a prohibitively expensive luxury—expensive in terms of man-hours of surgical and nursing time, bed-occupancy, physiotherapy and prostheses. For the involved physician, the benefit derived by the individual patient in terms of human dignity, employability and economic independence, is compensation enough for the expenditure. These diverse approaches are recognized, but the yardstick of efficacy in leprosy control of reconstructive surgery is ruthlessly applied.

The literature of the subject is objectively reviewed, and the shortcomings and over-enthusiasms of much of the reported work are exposed. Controlled and evenly-matched series are often impossibly difficult to obtain, and realistic assessment of work capacity and employability after surgery is hard to make.

However, the authors advocate objective appraisal of the results of surgical intervention, and a cost/effectiveness analysis of the immediate and long-term effects of reconstructive surgery in the medical, socio-economic, and professional rehabilitation of leprosy patients. It is concluded that reconstructive surgery be placed at the end of any scale of priorities in programmes of leprosy control in developing countries facing a considerable leprosy problem, but that education and prevention of deformities should be an integral part of all leprosy treatment or control projects.

S. G. Browne