

Reports of Societies

CONTROL OF INFECTIOUS DISEASES

At a meeting of the Society of Medical Officers of Health, held at their house on May 25th, with Dr. CHARLES PORTER in the chair, Dr. H. STANLEY BANKS, medical superintendent, Park Hospital, London, opened a discussion on "Current Methods of Control of Infectious Diseases."

Dr. Banks critically reviewed the main conclusions of Report No. 35 of the Ministry of Health on scarlet fever. The report favoured limitation of the number of scarlet fever cases admitted to hospital, and the preferential admission of pneumonia, measles, and influenza. This had been tried, particularly in London, but there was still an insistent demand for hospital facilities in scarlet fever. An alternative method was to shorten the period of detention in hospital to two or three weeks. This had been found to be quite practicable in the great majority of cases which were treated adequately with scarlatinal antitoxin at an early stage of the disease, and particularly by the intravenous route. Complications were then very few, and almost entirely limited to children under 5 years of age, who were susceptible to mixed infections. Short detention in scarlet fever wards was in the interest of the patient, provided that nutrition was maintained from the outset. Late complications in scarlet fever wards were probably often the result of superadded infection from patient to patient. It was desirable to combine short detention with attendance at an out-patient clinic at least once before the patient returned to work or school. This method had, in his experience, given satisfactory results. He agreed with the report in condemning terminal disinfection of houses and wards as an ineffective procedure. Current disinfection of hands and fomites during the illness was the important matter. This subject had been discussed *ad nauseam*, and the modern view was accepted by most authorities. He suggested that the time had come to make it public.

Dr. E. H. R. HARRIES, dealing with diphtheria, said that this was a preventable disease, only to be controlled adequately by the active immunization of susceptible children. The disease was prevalent and severe in this country at the present time, and it was to be hoped that immunization upon a scale sufficiently great to affect incidence might not be unduly delayed. Many cases of severe clinical type were associated with either the *gravis* (starch-fermenting) or *intermediate* (Mair's barred form), strains originally described by the Leeds workers. The swab, used as a primary or chief means of diagnosis, frequently resulted in fatal delay in the injection of antitoxin, and in the erroneous diagnosis of diphtheria in patients harbouring non-toxic organisms. Patients should be sent into hospital upon suspicion without swabbing, the necessary investigations being left to the hospital to carry out. Practitioners were reluctant to inject antitoxin pending diagnosis. Fears of anaphylaxis, especially with modern, practically protein-free, concentrated sera, were greatly exaggerated. Severe reactions, even with massive intravenous dosage, were extremely rare, and were controllable by the injection of adrenaline, which should always be available. Post-tonsillectomy diphtheria and scarlet fever might be obviated by the prior injection of a combined prophylactic dose of diphtheria and scarlet fever antitoxins. Preliminary Schick and Dick tests were preferable, as these would indicate which, if any, of the specific sera were called for. The value of terminal swabbing was problematical. The ordinary standard was two consecutive negative swabs from nose and throat. Chronic carriers nearly always had some nasopharyngeal abnormality which called for rational surgical measures. True intermittency of the carrier state among diphtheria convalescents nursed in open wards was rare. The apparent intermittency was frequently due to contact reinfections. Convalescent carriers were best treated in cubicles or in the open air. Swabbing as a means of detection of carriers

in the community was hopeless, but found its legitimate uses in the control of outbreaks in institutions when combined with virulence tests and Schick tests.

Dr. W. GUNN, in opening the discussion on measles and whooping-cough, mentioned some of the clinical and epidemiological features of these infections in the search for more rational and effective measures for their control. He referred to the great increase of facilities for hospital treatment and the wider provision for domiciliary care of measles cases by various health authorities and agencies within recent years. He exhibited charts detailing the numbers of measles patients admitted to the infectious diseases hospitals of the late Metropolitan Asylums Board and of the London County Council during the years 1924-34, and the numbers of contacts injected with immune measles serum during the last two epidemics, showing a steady increase of those two measures for measles control. While a great future was predicted for the general employment of immune serum in the prevention and attenuation of measles, the benefits of routine hospitalization of measles cases were probably overrated. To justify the expenditure of much public money and energy it was necessary to show that hospital treatment gave much better results than those following domiciliary care. Bacteriological evidence was brought forward to prove that the majority of the complications of measles were due to invasion by the haemolytic streptococcus, transmission of which from patient to patient was readily traceable, especially when they were nursed in ordinary "open" wards. He urged the general application of "bed-isolation" principles to the nursing of all cases of measles in the early stages of the disease, pointing out that the problem of "cross infection" was thereby largely solved. The sole exception to this was chicken-pox, ward outbreaks of which were readily controlled, as it was usually possible to identify the immunes and isolate the rest in appropriate wards. The frequency with which cross infection was directly attributable to exposure in the waiting rooms of practitioners and the crowded waiting halls of general hospitals, and measures for checking it, were mentioned. The therapeutic and prophylactic employment of various immune sera—measles, adult and convalescent, streptococcal and diphtheritic—in averting the most dreaded complications and secondary infections associated with measles was briefly discussed. Definite benefit appeared to follow the intravenous administration of immune measles serum when given in the early phases of the disease. Our measures for the control of whooping-cough, curative and preventive, remained unsatisfactory both for the individual and for the community. Routine administration of so-called specific drugs was unnecessary, and even harmful. Drugs should be reserved for cases where indications were present calling for their exhibition. Vaccines prepared from the Bordet-Gengou bacillus had proved useless—and occasionally dangerous—in treatment, but there was room for an extended investigation into the efficacy of a reliable vaccine in the prophylaxis of whooping-cough, such as had been carried out in America and Canada and on the Continent. In this country many workers had had adequate experience of the most approved methods of control of measles and whooping-cough, but, so far, the necessary administrative machinery and driving force had been lacking. Little real progress could be expected unless the various public health and hospital authorities joined hands in a resolute endeavour to stamp out the more serious acute infectious diseases.

On May 24th the Mayor of Middlesbrough opened the new municipal hospital for children at Holgate. The buildings were transferred from the late board of guardians in 1930, and have since been converted for their new use at a cost of about £2,500. Provision has been made for eighty-two beds, the acute cases being warded on the ground floor of the two-story building. There is also a schoolroom, and arrangements are made for the teaching of children with chronic diseases in the wards. An up-to-date operating theatre and an anaesthetic room are placed on the first floor.