many of whom have never known consistency or stability, always keeping in view our goal, which is that, if at all possible, the child shall eventually return home. We have aimed at a combination of routine with latitude, and of kindness and understanding with the gradual development of a really constructive attitude towards the child. (3) Play therapy has been widely utilized both as individual and as group treatment, and for the older children talks and discussions. (4) We have invited the parents to attend regularly for interviews, and in some cases have had to insist that they keep in touch with us. This is most important, as some parents are only too willing to shelve their responsibilities, and it is very noticeable that in these cases the children lose all their symptoms immediately they enter hospital but relapse very quickly when they return home. (5) Finally, we have tried to return the child to his normal environment gradually, by a slowly extending system of group parole, days out with relatives or friends, and weekend leave.

Disposal.—The majority of the children (roughly 80%) returned home, 14% were placed in foster homes or specially chosen institutions (for example, national children's homes), and about 6% went to M.D. colonies or special schools.

Results.—Some 80% recovered or were very much improved, and 16% showed some improvement; only 4% showed no improvement. All the children were followed up, either by attendance at the out-patient clinic or by home visits or letters. The Table gives details of 10 unselected cases. All these cases were treated on the general lines described above, with the exception of Case 4, a young schizophrenic who, after extensive psychological treatment both here and elsewhere had failed to produce any result whatsoever, was treated by electric convulsion therapy.

Conclusions

From the foregoing account it will be seen that some 80% of the children were greatly benefited by in-patient treatment. It should be noted that the majority of these had received previous child guidance treatment as out-patients, both here and elsewhere, without any appreciable improvement in their condition. It would seem, therefore, that there is a great need for the provision of in-patient treatment, and it may be of interest to note that since it became known that we were undertaking the care of such children in this hospital we have been inundated with requests to arrange admissions from doctors and local authorities all over the country. It is, unfortunately, only possible to cope with an extremely small proportion of these pleas, which continue to arrive at the rate of about three a day.

We wish to thank Dr. Thomas Beaton, medical director of the Portsmouth Mental Health Service, for helpful criticism and permission to publish this article.

REFERENCE

Burlingame, C. C. (1947). *Digest Neur. Psychiat.*, 15, Editorial.

The librarian at the London School of Hygiene and Tropical Medicine, Mr. C. C. Barnard, has written an interesting illustrated pamphlet entitled *History of the Library*. The London School of Tropical Medicine was founded in 1899 by the Seamen's Hospital Society, and by 1904 had collected 373 volumes. The first librarian was appointed in 1915 and in 1921 a library committee was formed and £10,000 invested to produce an annual income for the support of the library. In 1924 the library was incorporated in the newly constituted London School of Hygiene and Tropical Medicine, and in 1929 it was moved into the School building in Keppel Street. Preparations for the recent war were begun as early as 1938, some of the more valuable periodicals being removed to the basement and duplicates evacuated to Kent. On the outbreak of war the library remained open, but in 1941 a large number of books and periodicals were sent to Hampshire and other places. The librarian then made monthly visits to collect books that had been asked for during the preceding weeks and brought them to London or posted them to the required addresses. A valuable adjunct to the library is the instruction in its use—a course of three lectures on tropical medicine, public health, and bacteriology given to students at the beginning of each session, preceded by a conducted tour of the library.

Medical Memoranda

Smallpox: A Case with Minimal Lesions

About 9.30 p.m. on Monday, Oct. 21, 1946, one of the practitioners in this area telephoned me saying: "I have got a case of alastrim . . . with the amber-coloured lesions. I would like you to see it with me to-morrow." At the consultation next morning I agreed that the diagnosis was smallpox.

The patient, a garage proprietor aged 37, lived with his wife in a flat above his garage in Beaconsfield. He had spent six weeks, partly on business and partly on holiday, in Sweden and Denmark. He returned to this country on Oct. 3. On Oct. 15 he felt sick and complained of a severe headache and backache. When seen by his doctor on Oct. 17 he had a temperature of 102° F. (38.9° C.); the only other sign was a severe stomatitis. He was regarded as a case of influenza and treated accordingly. The feverish illness lasted for three days. On Oct. 21 both temperature and pulse became normal, and have remained so ever since.

In consultation the practitioner and myself observed five small suspicious lesions. There were several superficial pustules of an acneform type widely distributed all over the body, but the suspicious lesions were peripherally distributed—on the right hand, right arm, and the sole of the left foot. Most of them were no bigger than a large pin's head; they were intradermal, and the lesion on the palm of the hand felt "shotty," as did the one on the sole of the foot. They all appeared together during the night of Oct. 20-21.

The yellow pustular lesion on the palm of the right hand was about 1 cm. in diameter, and its base was surrounded by a distinct margin of erythema. It was intradermal and very "shotty" to the touch. The peripheral distribution of the lesions, the short sharp febrile illness, and the site, character, and "feel" of the right palmar lesion in my opinion definitely suggested smallpox.

Dr. W. H. Bradley, of the Ministry of Health, made arrangements for one of the smallpox consultants on the regional panel to see the patient with the practitioner concerned and myself the same afternoon. The deputy M.O.H. for the county was also present. At this consultation there was no diagnostic unanimity, but it was decided to vaccinate the patient and his wife. Specimens of blood, crusts, and swabs were sent to Prof. Downie at Liverpool, and the patient was isolated. Prof. Downie reported on Oct. 25 that the patient's serum gave a negative reaction for variola antibody; and that the material on the swab was insufficient for examination by the complement-fixation test. Further specimens of crusts were then sent to him.

The patient had been vaccinated sixteen years previously. When he was revaccinated on Oct. 24 his doctor reported there was an immediate reaction. His wife had been vaccinated in infancy and her reaction to revaccination on the same day was delayed but very marked on the fifth day. Both were kept under general surveillance during the period of isolation. On Nov. 1 a wire was received: "Variola virus isolated from crusts and swab." Arrangements were made through the Bucks County Council and the Oxford authorities to open up the Garsington Smallpox Hospital, where the patient was admitted on Nov. 2.

Despite the isolation conditions imposed on Oct. 23, several friends, his own garage hands, and some relatives had visited the patient in his flat. There was also the question of laundry and of petrol coupons to be considered. Between Oct. 28 and Nov. 1 one set of laundry had been collected, put through the laundry and returned; another lot had been sent to the laundry on the morning of Nov. 1. To minimize the risk to public health, the workers at the laundry were offered vaccination; 33 were vaccinated on the same day, the remainder during the following weekend—Nov. 3-5. As the patient had himself handled the garage petrol coupons during his infective stages, these were regarded as fomites. By an arrangement with the Petroleum Department, 2,572½ units in a sealed envelope were burnt, and a certificate to this effect was given for replacements.

All visitors and relatives who had been in contact with the patient, except a squadron-leader and a friend, whose address was unknown, were traced. Of these 9 contacts 2 had been vaccinated during the past two years in the Services; none of the remaining 7 had been vaccinated since infancy and they were revaccinated. The local practitioners, neighbouring local authorities, and hospitals were notified.

My thanks are due to Dr. Kipping, the practitioner, who was convinced throughout that the case was one of smallpox, though the lesions were minimal and the clinical picture was that of a patient suffering from a sharp three-day influenza attack which became apyrexial.

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Suprarenal Cortical Extract for Collapse in Infantile Eczema

Although sudden collapse in cases of infantile eczema admitted to hospital is well known, little has been written concerning treatment. Twiston Davies (1940) suggests that adrenaline can be of value, but states that most patients die in spite of all treatment. The following report of two successive cases seems to indicate the possibility of a more positive approach.

CASE I

A five-months-old boy was admitted to hospital on Jan. 8, 1947, with a history of repeated mild attacks of rash on the face since he was four days old and a severe relapse two days before admission.

On examination he was seen to be a healthy well-built baby, with no physical abnormality except a severe weeping and crusting eczema of the head, face, back, and limbs. The temperature was 102.4° F. (39.1° C.), pulse 120, and respirations 22. Treatment was commenced with starch poultices to all areas. Feeding 6 oz. (170 ml.) four-hourly, half-cream milk, and glucose and water between feeds. On Jan. 9 at 9.30 a.m. he was more comfortable, and there was less exudation. The temperature was 99.2° F. (37.3° C.), pulse 90. A calamine liniment was applied to all areas. At noon the temperature rose rapidly to 105° F. (40.6° C.), and the pulse to 128. Fearing a possible respiratory infection, penicillin in oil, 50,000 units, was given intramuscularly. At 7.45 p.m. the child suddenly became unconscious and cyanosed, the respirations were very rapid and shallow, the pulse uncountable, and the temperature 105.4° F. (40.8° C.). There were many moist rales in chest and slow coarse nystagmus to the left. Adrenaline, 2 min. (0.12 ml.), was given subcutaneously, and the respirations at once became slower and deeper, the rales disappeared, and there was a partial return of the response to visual stimuli. At 8.30 p.m. there was a sudden relapse, with rapid respirations and rales, followed by cyanosis and nystagmus. Adrenaline, 1 min. (0.06 ml.), was given subcutaneously with only partial relief. Five minutes later a further 2 min. (0.12 ml.) gave greater benefit. At 8.45 p.m. the respirations again became rapid, and prompt relief was obtained with 2 min. of adrenaline subcutaneously. At 8.55 p.m. the respiratory rate was rising and adrenaline, 2 min., was given subcutaneously with immediate relief—respirations 35, deep, no rales, pulse 130. The skin was pale, and the eczema had nearly cleared. The temperature was found to be 108° F. (42.2° C.)—and this could not be reduced by tepid sponging. At 9.45 p.m. he had a convulsion, beginning with twitching of the right side of face and neck, and passing to rhythmical contractions of right arm and leg. Reflexes were not obtainable; nystagmus to left. From this time the condition of the child deteriorated, with convulsions becoming more pronounced and spreading to the left side. Later the coma became deeper, with Cheyne-Stokes breathing, followed by death at 2.20 a.m. the following morning.

The relief obtained in this case, although only temporary, attracted attention to the suprarenal gland, and suggested the possible value of employing the cortical extract in addition.

CASE II

A five-months-old baby girl was admitted on April 15, 1947, with a history of rash on both cheeks since she was three months old, which spread to the body with increasing severity during the three weeks before admission.

On examination a healthy well-built baby was seen, with no physical abnormality except a severe weeping eczema of the head, face, buttocks, and limbs. The temperature was 98.2° F. (36.8° C.), the pulse 126, and the respirations 28. Treatment commenced with lead lotion to the limbs, zinc oxide and ichthyol ointment to the body, and ammoniated mercury with tar to the face and scalp. Feeding 5 oz. (142 ml.) three-hourly, half-cream milk, and glucose and water between feeds. On April 16 the child appeared well, she had occasional cough, and there were a few rales in chest. The temperature was 99.8° F. (37.7° C.), pulse 134, and respirations 34. Zinc oxide and ichthyol ointment was applied to the limbs in place of the lotion. The condition remained the same until the

evening of the following day. At 5 p.m. on April 17 the child was very quiet. The skin condition was clearing rapidly. She vomited after the 4.30 p.m. feed. The temperature was 102° F. (38.9° C.), the pulse rapid, uncountable, and the respirations 60. The breath sounds were clear. Fluid was not detected in the bronchi. Sodium bicarbonate, 1 teaspoonful to 1/2 pint (284 ml.) of water, was given, 3 oz. (85 ml.) taken. At 6.45 p.m. the child was comatose but could be roused. Her colour was good. The temperature was 100.5° F. (38.05° C.), pulse rapid, uncountable, respirations 90. The limbs were flaccid, the eyelids drooping. The breath sounds were clear. The condition of the child was obviously deteriorating rapidly. Adrenaline, 2 min., was given subcutaneously with immediate improvement. There was a partial return of response to visual stimuli; the limbs were flaccid. At 6.55 p.m. her condition deteriorated and the respiratory rate increased. Adrenaline, 3 min. (0.18 ml.) subcutaneously, and extract of suprarenal cortex ("eucortone," Allen and Hanburys) 3 min. intramuscularly were given with immediate improvement. At 7.5 p.m. she had a relapse. She was very pale; respirations 90, very shallow; the pulse was of good volume, rapid, uncountable. She had divergent squint, the left eye rotated slightly inwards, and the right eye rotated upwards and outwards. The pupils were small and equal. Adrenaline, 5 min. (0.3 ml.), and cortical extract, 8 min. (0.5 ml.), were given together intramuscularly, with immediate effect. The respirations were 60, deeper, the breath sounds clear. Active movements of the limbs, very weak. She was trying to scratch. At 7.30 p.m. she was greatly improved: her colour was good, she was crying and was able to sit up, showing active movements of limbs, and was interested in the surrounding activities. The skin condition was much improved, moist. At 8 p.m. the child was restless, but the general condition gave no indication of the serious state in which it had been one hour previously. The temperature was 99.8° F. (37.7° C.), pulse 120, and respirations 70. The breath sounds were clear. Glucose and water, 3 oz., was taken with avidity, followed by 2 oz. of milk and water in equal parts. The child then slept for 2½ hours, and after receiving 2 oz. of glucose and water she appeared much brighter. A green frothy stool was passed at 11.30 p.m. From this time the child has given no cause for anxiety.

Cases of sudden collapse in infantile eczema have been known to recover without treatment, but the dramatic results shown in the second case suggest that suprarenal cortical extract should be administered when this serious condition occurs.

I am indebted to Dr. P. B. Mumford and Dr. M. Peach for permission to report these cases.

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REFERENCE

Davies, J. H. Twiston (1940). *Brit. J. Derm.*, 52, 182.

The annual report from the Medical Department of the Gold Coast Colony contains an interesting account of an outbreak of cerebrospinal meningitis which assumed major epidemic dimensions. Co-operation between all departments made it possible to circumscribe its area, otherwise the whole of the Northern Territories and Ashanti might have been involved. There were 9,863 cases recorded, with 1,056 deaths. In 285 of the fatal cases it was not possible to give any treatment. The lowness of the mortality rate is attributed to early treatment with sulphonamide drugs. To ensure immediate treatment small stocks of these drugs were entrusted to the care of the chiefs, with instructions for their use, thus treatment at an early stage, before a medical officer could arrive on the scene, was possible. The epidemic covered an area of nearly 10,000 square miles, calling for extensive travelling by the staff engaged in its control. Sulphanilamide was found more effective than sulphapyridine. A chief of any village where a case of sudden suspicious death had occurred, or where spread was expected, was furnished with a number of tablets of sulphanilamide and was instructed to give one tablet at once for every double hand span—18 in. (46 cm.)—of the patient's height, and to report immediately to the nearest control camp. If his village was very remote the chief was instructed to repeat the dose in three hours' time. It is stated that faulty diagnosis was unusual, the commonest error being confusion of the condition with pneumonia in children. The mortality rate in the treated cases was 7.8%. It is added that the prevention of a recrudescence of outbreaks of cerebrospinal meningitis in the north of the Gold Coast depends very largely on the question of housing. The need is to enforce increased ventilation and avoidance of overcrowding. The "fortress" type of house does not lend itself readily to improvement, but the "round house" compound, with well-spaced houses, and provided with windows yielding cross-ventilation, can be made a satisfactory type of community dwelling.