form as it were the "nursery slopes" from which the injured workman graduates to his own factory.

Although the inferences of this paper have been drawn from experience of "long-term" cases, much has been learnt about the possible application of such results to the treatment of acute injuries. Apart from the prophylactic aspect—the prevention of adhesions and loss of muscle tone—recently injured joints and muscles appear to respond rapidly to the controlled industrial methods of rehabilitation of this type. Furthermore, when the injury is of industrial origin the early return of the absentee to full-time or part-time selected work not only prevents a loss of skill and a lowering of morale that so often follows in the wake of prolonged unemployment but also tends to reduce the exaggerated importance attached by the workman to the accident.

Summary

This paper presents an experiment in the rehabilitation of injured Service men using existing conditions in industry.

The principles of treatment are discussed and illustrated.

From the inferences made the application of such a scheme to a peacetime industrial accident service is discussed.

We are indebted to Dr. W. J. T. Kimber, medical superintendent, Hill End E.M.S. Hospital, for help and advice on the organization of the scheme; to all sections of the De Havilland Aircraft Co., Ltd., for their willing co-operation; and to Mr. S. L. Higgs and Mr. Rainsford Mowlem for permission to publish the cases.

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ACQUIRED SYPHILIS IN CHILDREN

BY

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To the great increase in early syphilis during the war years may be attributed the emergence of cases of acquired syphilis in children. Six cases are here recorded in order to focus attention on the possibility that the disease is transmitted through close contact with actively infectious individuals, either adults or children, and by contact with infected articles, and on the possibility of such transmission occurring even in families where there are no known cases of syphilis. For example, several children have been brought for examination because they had picked up and inflated condoms found in the parks, and one of the cases reported may have been infected in this way. Poor environmental conditions, carelessness, and lack of attention to hygienic precautions are not invariably present as contributory factors, as infections through contacts have occurred in professional homes. The early recognition of these cases is of such vital importance, both to the child and to those in close contact, that acquired syphilis as a possible diagnosis should be considered in any case in which there is a rash accompanied by headache, sore throat, and adenitis, and where the rash does not conform to the commoner skin conditions or to one of the other exanthemata. The frequency of the commoner symptoms and signs of secondary syphilis in this group of cases is shown in Table II.

Unfortunately, in no case so far has syphilis been suspected while still in the primary stage, although a primary sore on the tonsil was detected in two of the secondary cases now reported. If a chancre appears on the lip, characteristically as a solitary indurated erosion with accompanying unilateral indolent rubbery enlargement of the neighbouring lymphatic glands, it should not be missed, and yet experience shows that suspicion is often not aroused until the secondary stage is reached. All the cases in the present series had had symptoms for three or four weeks before arriving at the clinic.

In the past five years six cases have been examined and treated. Tables I and II give the chief points noted. In

TABLE I

Case No.	Date Seen	Age (yrs.)	Sex	<i>T. pallidum</i> Demonstrated	Site*	Source of Infection
1	4/1/45	3½	M.	+	Anus	Mother
2	17/6/41	6	M.	—	—	Parents
3	14/8/45	7	F.	+	Labia	Indian servant
4	4/5/46	7	F.	+	Vulva	Found condom in park; always sucks things she picks up
5	26/6/46	8½	F.	—	—	Parents
6	26/7/46	16	F.	+	Anus	Nephew with acute congenital syphilis

* Area from which serum (for demonstration of *T. pallidum*) was obtained.

TABLE II

Case No.	Malaise	Headache	Sore Throat	Pains in Limbs	Rash	Alopecia	Sore in Mouth	Adenitis	Condylomata
1	+	—	—	—	—	—	+	+	+
2	+	+	+	—	+	—	—	+	—
3	+	—	+	—	+	—	—	+	+
4	+	—	+++	—	+	++	+	+	+
5	+	—	++	+	+	—	—	+	—
6	—	—	+++	—	+	—	—	++	+

each case the Wassermann and Kahn tests of blood taken at the patient's first appearance were strongly positive, and the cerebrospinal fluid, taken in all except one case within the first fortnight, gave entirely negative findings in respect of cell count, globulin estimation, Wassermann reaction, and gold-sol test.

Diagnosis

A detailed history of the illness should be obtained, noting particularly the time incidence of the various symptoms. As a rule malaise and anorexia are early symptoms, then follows the rash and sore throat with adenitis, the condylomata in the genital or anal regions being late in appearance. Should, however, the primary sore be on the mouth or tonsils, the first symptoms will be referred to this area, and in that case the associated glandular enlargement is very noticeable and is usually commented upon.

The family history should be obtained in full, with particular reference to whether the parents have ever had treatment for syphilis. An inquiry should be made as to who sleeps with the child and looks after him; whether he keeps his own towels and washing things; whether he uses outside lavatories; and whether he has been staying away from home recently. A thorough examination should then be carried out from head to foot, noting especially the condition of the hair and scalp, mouth, skin, glands, and genitals. Serum should be taken from moist lesions, after ascertaining whether antiseptics or ointments have recently been applied, and blood taken for Wassermann and Kahn tests.

Differential Diagnosis.—All the other infectious diseases associated with rashes must first be eliminated, particularly rubella, which was diagnosed originally in Case 2. The throat infection may also be suspected—diphtheria, Vincent's angina, and streptococcal tonsillitis with a streptococcal rash all being possibilities. In children the rash of

secondary syphilis may easily be mistaken for scabies with impetigo, pityriasis rosea, or toxic rashes in general. Case 4, with numerous early condylomata lata on the vulva, was at first thought to be a case of herpes genitalis. Glandular fever and subacute rheumatic fever should be taken into account when the particular features of adenitis and muscle and joint pains are prominent. It must be remembered, too, that more than one condition may be present at the same time—for example, scabies and a syphilitic rash. If, however, all the signs and symptoms, together with the family history, are taken into account, it is usually easy to make a probable diagnosis, and this can be confirmed at once if *Treponema pallidum* is demonstrated, or in a few days by means of a blood test. It is essential that the parents and all close contacts be examined and blood-tested immediately, and it is advisable to make monthly tests for three months after the last contact for those who have been caring for or sleeping with the child. This maxim is illustrated by the unusual story of Case 6.

Case History

A girl aged 16 was referred from the ear, nose, and throat department on July 26, 1946, with the diagnosis of primary sore of the tonsil, already confirmed by a strongly positive Wassermann reaction. She still showed typical ulceration of the right tonsil, with marked localized adenitis, but she also showed a generalized rash and adenitis and condylomata around the anus, in the serum from which *T. pallidum* was easily demonstrated. Her family—father, mother, and a sister aged 30 who slept with her—were all examined and tested and found to be negative, and it was a mystery how she had been infected, as she denied any other contact.

On Sept. 13—that is, seven weeks later—a little boy aged 20 months was brought to the department, again diagnosed before admission, this time at the Royal Hospital for Sick Children. In appearance he presented a large square head with bossing of frontal bones, a poor bridge to his nose, and sores on the tongue and lower lip, noticed since August. *T. pallidum* was demonstrated, and blood tests gave Wassermann +++, Kahn +++. He was a nephew of the above patient, and she often visited his home and was very fond of him. It was revealed that his father had had primary syphilis in 1938 while in India. He had been fully treated, and had been observed for two years, with negative tests. There had, however, been either a recurrence or a second infection following a further exposure in 1941, for his blood tests were found to give Wassermann ++, Kahn +, although he had no signs or symptoms. The mother of the boy—an intelligent, co-operative, and clean-living woman—had been previously married, with four children by the first marriage and two by the second. The youngest child was the patient, the older one was conceived before his father went to India and was healthy. The mother had had no signs or symptoms of syphilis at any time and appeared perfectly healthy on examination, but her blood tests gave Wassermann +, Kahn +, and after a provocative injection of neoarsphenamine, Wassermann +++ and Kahn +++.

The last member of this unfortunate family to appear was the 22-year-old stepsister of the boy. She reported on Nov. 9 with a history of having noticed swollen glands on the right side of her neck four weeks before, followed a week later by a sore throat and headache, and a rash six days before reporting. *T. pallidum* was demonstrated in serum taken from sores in the mouth, and from moist papules at the anus, and blood tests gave Wassermann +++, Kahn +++. She also was devoted to her small stepbrother and often kissed him. There had been no other possible contact.

Comment

This sad story emphasizes the necessity for examination of all close contacts as well as the parents in cases of both acute congenital and acquired syphilis in children.

Mention must be made of the treatment adopted in these cases. Although no routine dosage has yet been decided

upon, every case was given parenteral penicillin in hospital in three-hourly doses, day and night, the total dose varying from 1,600,000 to 5,000,000 units per course. Case 3 received 1,600,000 units alone, and for a whole year has shown monthly negative blood tests, with maintained good health. All the other cases have received, in addition to the penicillin, at least one unit course of intramuscular arsenic and bismuth injections. Observation must be maintained for at least two years, with repetition of the cerebrospinal fluid tests before discharge.

We wish to express our gratitude to Dr. Batchelor for his help and encouragement in the preparation of this paper, and to Dr. Clark, the medical officer of health, for permission to publish the cases.

FACTORS INFLUENCING THE FUTURE PROVISION OF DAY NURSERIES

LONG-TERM POLICY

A statement by the Day Nurseries Committee of the Medical Women's Federation adopted by the Council of the Federation.

It should be the ultimate aim of a policy directed towards well-being in childhood that every mother should have the knowledge, means, time, and accommodation to bring up her own children in health and happiness within the family circle in their earliest years. It is recognized that after about the age of 3 years children benefit from contacts beyond the family circle, especially if the family is small or widely spaced. The provision of nursery schools (already part of the national policy) will increasingly meet this need where a mother is unable to arrange for it herself.

The full achievement of the aim of healthy happy family life in childhood is at present prevented by certain social disorders and conditions, and is likely to be so prevented for many years, probably even indefinitely. Among these social conditions may be mentioned: (a) inadequate housing and overcrowding; (b) circumstances which force the mother to be the sole or main bread-winner of the family (e.g., unmarried mothers, deserted or separated wives, widows, wives with incapacitated or unemployable husbands, etc.); and (c) difficult or bad home circumstances (e.g., illness or incapacity of the mother, poor parentcraft—from the physical or psychological aspect—poverty, drunkenness, etc.).

Day nurseries do not provide the social remedy for these conditions. They do, however, provide a means of alleviating the effects on young children. Other means are available also—as, for instance, home helps, carefully supervised daily minding, and direct financial assistance. Such methods, by retaining a more natural environment for the child, may well be preferable so far as they can be made available. But so long as these social disorders persist to any considerable extent, day nurseries, along with other methods, will be required on a scale commensurate with the extent and seriousness of these conditions in different localities, bearing in mind that for older children nursery schools will also play a part.

The provision of day nurseries should not be allowed to interfere with the radical measures necessary to abate, and not merely alleviate, these social evils—for example, better housing, adequate allowances, and more widespread teaching of parentcraft. As and when social conditions improve, so should health and happiness within the family circle become attainable for greater numbers of children and the need for day nurseries diminish.

For the social disorder of poor parentcraft day nurseries can provide a limited remedy as well as a means of alleviation. The children's life in a day nursery can be an object