

THE ANTE-NATAL TREATMENT OF CONGENITAL SYPHILIS WITH SALVARSAN AND MERCURY.

BY
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In his article in the *JOURNAL* of November 26th (in the course of which he refers appreciatively to my cases at the Thavies Inn Clinic) Dr. Leonard Findlay states, "That the curative treatment of congenital syphilis, if not a failure, is at least a great disappointment, no one who has had much experience will deny." As this statement is opposed to my experience, I should wish to point out some difficulties Dr. Findlay has had to contend with in treating his cases, and to express the opinion that, had other methods been used, very different results would probably have ensued.

I will begin with Dr. Findlay's last paragraph, in which he says that all his cases were out-patients. In such circumstances the treatment of congenital syphilis would certainly be unsatisfactory and disappointing, for a large number of syphilitic babies would have died before it was possible for them to be treated as out-patients.

I would strongly urge that the best time to treat all cases of syphilis, whether ante-natal, post-natal, or acquired, is the earliest possible moment available, and this applies especially to newly born babies. I have seen several cases which, had treatment been delayed for a few days, would certainly have died. Babies have been treated at the Thavies Inn Clinic within a few hours of birth, and one of the earliest under an hour, with good results and perfect safety.

Pain is mentioned as a drawback to the treatment of post-natal syphilis, but if galyl in glucose is used intramuscularly in appropriate doses according to the age and weight of the child, no discomfort follows its use, and all the advantages of salvarsan are obtained.

Dr. Findlay's reference to "limits of curative treatment" is somewhat confusing, for he states: "In any case the curative treatment has the great shortcoming that it only influences the disease in children born alive, and neglects altogether the ravages during intrauterine life." If this paragraph refers to post-natal syphilis, one knows how difficult such cases are to deal with if allowed to go untreated for a year or more.

Under the heading of technique it is stated: "Administration of salvarsan in infants and children by the intravenous method considerably limits its use." Intravenous injection for babies and young children appears quite unnecessary, and in many cases would be impossible; injection into the superior longitudinal sinus is open to still greater objection, as at all times there must be a certain amount of danger; but intramuscular injection of galyl in glucose in the gluteal region is perfectly safe, painless, and effective, and should be adhered to in all cases of newly born babies and young children.

In his remarks on the time of election of treatment Dr. Findlay asks the question, "Should the treatment be carried out as soon as the diagnosis is made, or should it be delayed until the woman is pregnant?" My practice is to treat the patient at the very earliest opportunity and continue for a prolonged period—two years if possible.

The method of breast feeding as advocated by Dr. Findlay has brought about the best results in the cases under my care, but it is frequently found necessary to supplement it by some form of artificial food, and all patients, whether babies or adults, should be given mercury as well as salvarsan.

The accompanying table shows the result of treatment of

Result of Treatment of Women during Pregnancy and of the newly born Children.

Years (September 1st to August 31st).	Mothers Admitted with Syphilis.	Babies Born Alive.		Babies Dying of Syphilis.	Foetus Stillborn from Syphilis.
		Wassermann Reaction: Positive.	Negative.		
1917-1918 ...	23	17	6	Three at the ages of 3, 14, 33 days respectively	5
1918-1919 ...	30	8	21	One, 2 months	1
1919-1920 ...	37	1	36	None	0
1920-1921 ...	23	5	16	None	2*

* Neither of the mothers had treatment before admission and both were confined of macerated babies soon after.

Treatment of Babies.

Treatment ...	Wassermann test of		
	Mother	Placenta	Baby
...	+	...	+
...	+	...	+
No treatment
	Intramuscular Galyl in glucose†	Intramuscular Hg;	Oral Hg
1st day ...	1.5 cg.
8th ..	1.5 cg.	1/6 gr.	1/2 gr. daily Hyd. creta
22nd ..	2 cg.	1/4 gr.	...
36th ..	2.5 cg.	1/1 gr.	...
	Wassermann test.		
50th ..	2.5 cg.	1/3 gr.	...
64th ..	3 cg.	1/3 gr.	...
78th ..	3 cg.	1/3 gr.	...
	Wassermann test: Nearly all babies become negative before or at this period.		
120th day...	3.5 cg.	1/3 gr.	Intermediate treatment.
134th ..	3.5 cg.	1/3 gr.	...
148th ..	3.5 cg.	1/3 gr.	...
175th ..	Wassermann test.		

At the ninth and twelfth months courses of three injections of 4 to 5 cg. galyl and 1/2 grain mercury should be given, and gr. 1 hyd. creta daily for a month. Further treatment is governed by the progress of the case. Should the Wassermann test become positive at any future date intensive treatment should be begun immediately. These doses are calculated for babies of normal weight for their age.

women during pregnancy and of the newly born children at the Thavies Inn Venereal Centre for Pregnant Women during the four years it has been open. I append also a tabular outline showing the method of treating babies adopted at the clinic.

* Do not usually require the full course of treatment.
† To be obtained in 2.5 and 5 cg. ampoules from the Anglo-French Drug Co., Ltd., 238a, Gray's Inn Road, London, W. E. 1.
‡ Mercurial cream for adults, 40 per cent.; for babies, 20 per cent. Can be obtained from Squire, 413, Oxford Street, W. A special syringe, which can be obtained from Montague, 69, New Bond Street, W., marked with fifteen divisions, each of which is one-fortieth of a cubic centimetre, is recommended. With 40 per cent. mercurial cream each division contains 1 cg. or gr. 1/5 of mercury.

Memoranda :

MEDICAL, SURGICAL, OBSTETRICAL.

A CASE OF MENINGITIS SIMULATING TETANUS.

H. S., aged 47, came to the Casualty Department of the Radcliffe Infirmary, Oxford, on November 4th complaining of pain in the neck and abdomen and stiffness of the lower jaw. Six days previously he had fallen off his bicycle, cutting the inner aspect of the left thumb on a bucket he was carrying. The wound was carefully cleaned at the time and dressed on the succeeding days.

On admission there was some slight rigidity of the neck muscles and definite stiffness of the lower jaw, which he was unable to open more than about half an inch. A provisional diagnosis of tetanus was made and he was admitted, although in view of the fact that since the day of the injury he had repeatedly expressed his fear of contracting tetanus, it was thought the symptoms might eventually prove to be functional. On admission antitetanus serum was given as follows: Intrathecally 7,000 units, intravenously 10,000, and subcutaneously 10,000. The cerebro-spinal fluid removed was clear and not under increased pressure. The following day his condition was much the same; there was trismus and rigidity of the neck, but no opisthotonus, risus sardonicus or general muscular spasm, squint or photophobia were noted, but he complained of headache. The knee-jerks were brisk and the plantar reflex flexor; the bowels were constipated. There was retention of urine; on passing a catheter a urethral discharge was noted.

Later in the day he was seized with a sudden spasm of the glottis and became cyanosed and pulseless, but was revived by artificial respiration, etc. He was now unable to swallow either solids or liquids, as any attempt to feed by mouth tended to bring on another spasm of the glottis. The case was now diagnosed as one of cephalic tetanus.

In the course of the next day, forty-eight hours from the onset of symptoms, he had several similar spasms, and died during one of them, in spite of the hurried performance of tracheotomy. The temperature was subnormal throughout; the pulse varied between 60 and 80. There was never any general muscular rigidity, but the spasm of the jaw never relaxed.

The patient was seen by several medical men familiar with tetanus, and the general consensus of opinion was that the clinical picture, whilst not quite that of ordinary tetanus, most nearly resembled that of so-called cephalic tetanus.

At the necropsy the lungs and the right side of the heart were found deeply engorged; there was no tracheal or laryngeal obstruction. The convex surfaces of both cerebral hemispheres were