three varieties of pemphigus contagiosus. I cannot agree with Dr. Sichel in attributing pemphigus contagiosus to "excessive sweating," and I consider the term "sudoral dermatitis" as quite inappropriate when applied to this disease. This disease is extremely infectious, and I have seen a bulla on the forefinger of a mother eight hours after its appearance on the arm of her child. Possibly, however, the vesicular eruptions associated with lichen tropicus may have some such origin.

MALARIA AND PREGNANCY.*

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THE coincidence of malaria and pregnancy must always cause anxiety, for the foetal life is often sacrificed and the mother's endangered and sometimes lost. The subject divides itself into the effects of malaria—intermittent, remittent, and cachectic—on, first, the period from conception to the sixth month, and, secondly, from the sixth month to the end of the puerperal period. The simple intermittent has no effect on conception, and, if mild, no influence on the mother's or child's life.

In July, 1898, I saw a young girl who for the previous six or seven months had had a slight intermittent, never going for more than a fortnight without chills and fever, which had been treated with quinine, arsenic, aconite, amongst other drugs prescribed by a dispenser. I was called in on account of persistent vomiting which had come on during the last two months, and, on examination, satisfied myself that the girl was probably at the end of the third month of pregnancy. Under treatment the vomiting—which I considered as the sickness of pregnancy—was stopped, and the pregnancy continued its natural course.

If, however, the intermittent is more acute, and the temperature rises over 104° , abortion will usually take place, as in the case of a girl who, having missed two menstrual periods, developed an acute intermittent (quotidian), and on the third day, with a temperature of 104.8° , passed a complete membrane containing a foetus before she had time to get the quinine mixture made up.

In all cases of pregnancy seized with acute intermittent the patient complains of the pains in the abdomen, and the uterus can be felt hard and firmly contracted; but if quinine be given and the temperature does not rise to 104° , each succeeding paroxysm will have less effect on the uterus, and mother and child will be saved.

The (bilious) remittent malarial has the same effect on pregnancy as the simple intermittent, only differing in degree, the fever being usually higher; abortion is more common, and is often followed by a very large hæmorrhage of florid blood. Here also, if the case comes under treatment early, and the pregnancy be not taken into account, there is not much greater danger to the mother than in cases where there is no pregnancy. Malarial cachexia, notwithstanding the great depression and apparently low vitality of the subjects, is no bar to conception, and does not interfere with the progress of pregnancy, nor need its treatment be neglected on account of the pregnancy.

Last year a young girl came to town from up the river Demerara. She was said to have had low fever every fourth day for nine months, and was, when I saw her, in a chronic malarial cachexia. I also found that she was about four months pregnant. After taking iron, bromides, and nuxvomica she improved greatly, and returned to her home with every prospect of fulfilling her time successfully.

The absence of effect on pregnancy in these cachectics is probably due to the absence of high temperatures.

In the second period the complication of pregnancy with malaria gives rise to a much more acute and dangerous condition, due in great part to the reaction of the now partly independent foetus. In this period, if the woman be attacked by an intermittent during the first paroxysm, the foetal movements become very strong, and cause rather severe pain; they can be seen in many cases until the temperature passes 103° , when a painful, continued cramp of the uterus appears to limit the foetal movements; in this case the foetus may die, or it may live to react against another paroxysm; but in either case the mother will say she did not feel any more movement after such a certain paroxysm, although the next paroxysm will still be marked by the strong and painful contraction of the uterus, and soon a paroxysm is accompanied by a miscarriage of a foetus bearing evidence of intrauterine death of some few days, peeling epidermis and mottling, and the placenta is discharged of a heavy dull blue colour.

In October last year I saw a woman who was in her eighth month. At the time she was in the hot stage of the fifth paroxysm of an intermittent

(tertian), temperature, 104.6° ; the movement had been violent for the two first attacks, but had not been felt at the later, nor during the intervals; the uterus was painful and very hard. Before she could get the prescription made up, she had miscarried, the foetus peeling, and the placenta gorged and leaden-coloured.

If the intermittent be not treated, the same painful, hard contraction of the uterus takes place at the succeeding paroxysms.

A bilious remittent malaria complicating the second period is the most serious condition we have to deal with; the reactions of the foetus are marked at first, but as the fever remits become weaker, and seem to fade away gradually, and not to cease after a certain definite effort. The contraction of the uterus is not so firm, but is painful, and there is much soreness and tenderness over the uterus and usually over all the abdomen. The adynamic character this fever tends to causes delay in miscarriage or in parturition, and at the same time does not admit of the use of ergot, or of chloral, so that the process of delivery is very slow, lessening the chance of saving the child's life, which otherwise might be effected more frequently than in intermittent. However, if the temperature has risen much over 104° , the foetus will be dead before delivery.

When this bilious remittent appears during or just after parturition, the mother's life is placed in the greatest danger. I have seen young and healthy women pass to the last week of pregnancy in good condition, and then fall off, become sallow-looking, have low remittent fever; during labour the temperature has risen, the tongue become thickly coated with a yellow fur, the patient become very restless, the pains weak and long drawn; after delivery there has usually been gushing of fluid dark blood; then an improvement for—usually—48 hours, when a relapse (another paroxysm?) comes on with higher temperature, deeper jaundice, greater weakness and constipation, which, on relief being given by an enema, results in the passage of a large, black, stinking stool. After five or nine days' alternations—each marked by increasing weakness—the patient dies quietly, with many appearances of puerperal fever, but having had her lochia of good colour, quantity, and odour; and having had no uterine pain or tenderness. In these cases the child is frequently strong and healthy, but there is not a more dangerous condition for a woman than to be seized by a malarial remittent during her puerperium.

Malarial cachexia affects the second period of pregnancy much as any other condition of debility. The sufferer is reduced to a very low state by the cachexia, which is an asthenic state much increased by the disordered digestion usually present in these cases, where the stomach refuses to retain any medicine, and rejects even the lighter forms of nourishment. Labour is very slow and lingering, with weak inefficient pains, and usually requires the assistance of forceps. The child is often born big and strong.

Twenty years' active work in malarious districts has convinced me that malarial fever is responsible for a large number of stillbirths. I am constantly seeing pregnant women suffering from untreated malaria, and always find that in the first paroxysm of intermittents, during the ague stage, the foetal movements are very strong and frequent, and the uterus not contracted. During the hot stage the uterus contracts more strongly, and continues contracting so much and so firmly that the foetal movements cannot be felt. I have always prescribed quinine, 5 gr., every four hours, and in cases where the temperature had not risen above 103° , and in which foetal movements could still be felt, have seen the malaria checked and the pregnancy proceed to term. I have also often seen, where the foetal movements had ceased after a previous paroxysm, and where the patient commenced taking quinine as soon as it was ordered, the miscarriage in a few hours of a foetus showing signs of intrauterine death of some days before the quinine treatment was commenced. I have seen many cases where miscarriage has taken place, usually with evidence of intrauterine death of many hours, in patients whose malaria had remained untreated. I have also known many cases of pregnant women during the earliest months taking 10 and 15 gr. doses of quinine and continuing the pregnancy to term.

I am strongly of opinion that malaria, by rapidly raising the body temperature, tends strongly to abortion and miscarriage, and also that the early use of quinine, by reducing temperature, lessens very considerably the stillbirth rate.

* Presidential Address delivered to the British Guiana Branch.