

The Midwife.

THE NEED FOR RESEARCH IN ANTE-NATAL PATHOLOGY.

The importance of ante-natal hygiene, and the influence of ante-natal conditions on the fetus *in utero* are beginning to be appreciated, and we know that sound and successful midwifery include the observation and care of the woman with child. A paper, therefore, on the above subject read by Dr. Amand Routh, F.R.C.P., Consulting Obstetric Physician to Charing Cross Hospital, and to the Samaritan Free Hospital, at a meeting of the Obstetric and Gynaecological Section of the Royal Society of Medicine, and published in the *British Medical Journal* is of great interest.

Dr. Routh estimates that there are about four times as many abortions as still births, that is 2.2 still births, and 8.8 abortions to 100 live births, which means that in England and Wales about 100,000 potential infants die before birth, and about as many die in their nine months of intra-uterine life as during the survivors' first year of life, and this estimate is, he points out, much below that given by Sir William Priestley, who held that to every three or four full term deliveries there was one abortion, and that three to six out of every ten women about at least once during their married life.

Midwives and nurses will realise that if they can in any way assist to diminish this terrible mortality it is their bounden duty to do so. One of the pre-disposing causes of early abortions, and the birth of sickly children given by Dr. Amand Routh, is maternal and perhaps paternal malnutrition, and here the midwife who books her cases months beforehand and keeps them under observation during pregnancy can be an influence for good by putting them in touch with organisations which will help them to obtain nutritious food, and, if necessary, medical treatment.

From a lecture full of interest we select the following passages:—

THE TOXAEMIAS OF PREGNANCY.

We know very little concerning the intrauterine mortality due to the toxaemias of pregnancy, especially in obscure cases where autotoxaemia is merely causing renal inadequacy with little or no albuminuria, but with a greatly reduced output of urea. These unrecognised cases are not infrequent causes of fetal death in the last week of pregnancy. Research, again, will prove whether in cases of maternal albuminuria, eclampsia, or acute yellow atrophy of the liver, the fetal organs participate in the pathological changes found in the mother in these diseases. In such serious and often fatal maternal toxic diseases our every effort is concentrated upon the mother, and the pathology of the fetus, which is often dead, is liable to be disregarded.

Careful examination of the organs and tissues of a fetus expelled during the severe types of chorea gravidarum may help us to determine the causation of that complication—as to whether, for instance, it is toxaemic in origin.

SYPHILIS.

Bacteriology has led to the discovery of the specific germs of so many of the maternal diseases which cause fetal death that our task now is much easier, and this is especially true as regards syphilis since the discovery of *Spirochaeta pallida* by Schaudinn in 1905, of the diagnosis of syphilis by Wassermann's reaction in May, 1906, and of its treatment by salvarsan by Ehrlich in 1909.

EVIDENCES OF SYPHILIS IN THE STILLBORN FETUS.

Edena states briefly that these are "a bullous eruption (pemphigus) on palms and soles, gummata in liver and spleen, hyperplasia of the cartilaginous element along the line of junction of the shafts of the long bones and the epiphysis." Elsewhere we are told that the *Spirochaeta pallida* is found in the fetal lungs in 87 per cent., pancreas 80 per cent., skin 66 per cent., suprarenals 64 per cent., spleen 62 per cent., liver 59 per cent., kidneys 54 per cent., but it is easiest to find it in the liver and spleen.

PLACENTAL SYPHILIS.

In my student days we were taught that a syphilitic placenta was small and shrivelled. Now we know that, relatively to the fetus, syphilitic placentae are large and heavy, bearing the proportion of 1 to 3 instead of the normal 1 to 5.5, according to Blacker, who also states that the syphilitic placenta is pale, soft, friable, and mottled with yellow patches, whilst the cord may be oedematous and the liquor amnii excessive.

HOW TO PROVIDE FACILITIES FOR RESEARCH.

Every general hospital and lying-in hospital in our larger towns should be provided with ante-natal research laboratories. In addition, wherever practicable, laboratories should be formed in every county and county borough under the supervision of the medical officer of health, where abortions and stillborn fetuses could be collected and either examined there or sent on in sealed jars (labelled and with history appended) to the nearest ante-natal laboratory.

As a preliminary, or perhaps as a permanent, alternative to this extended investigation of abortions and stillbirths, I would suggest that investigation should be carried out in large cities by forming centres of small groups of general hospitals, lying-in hospitals, and Poor Law infirmaries, with the co-operation of old students, so that material for research could thereby be ensured. Funds are, of course, the difficulty, but by concentrating effort in a few centres expense would be minimized. Such a centre must be

[previous page](#)

[next page](#)