

The Midwife.

The Premature Infant.

The term "premature" is usually applied to infants born before the expiration of the full term of pregnancy, though it might also very well be used for those born at term insufficiently developed and congenitally feeble. The mortality in infants of twenty-eight to thirty-two weeks' gestation is extremely high; in the returns given no distinction, unfortunately, is made between deaths of viable and non-viable fetuses; in English vital statistics 13 per cent. of the mortality during the first year of life is ascribed to prematurity. The average number of premature births taken from the statistics of ten large clinics in various parts of the world is 17.5 per cent., *i.e.*, roughly one in six; it is thus highly necessary for every midwife and monthly nurse to study the necessary and best lines of treatment; naturally there will be no fixed laws, they will be determined by the degree of prematurity, the constitution of the child, and the amount of skilled supervision available. If born of healthy parents after the thirty-second week, and if surrounded by the tenderest and wisest care from the moment of birth, the premature baby is a fascinating and satisfactory patient. After a few weeks he is transformed; after a few months he is not to be distinguished from a full term baby. The most reliable sign of prematurity is deficient length; a simple way to estimate the intrauterine age of the infant in lunar months is to divide the length in centimetres by 5 (or the length in inches by 2), thus if the measurement is 40 centimetres (16 inches) the baby is probably 8 lunar months or 32 weeks; its weight, a less reliable guide, will be 1,600 to 1,900 grammes ($3\frac{1}{2}$ lbs. to $4\frac{1}{4}$ lbs.). Other physical signs are the dearth of subcutaneous fat, allowing the skin to hang in folds and wrinkle; the dermis is red, transparent, showing the network of blood-vessels, sensitive, and therefore liable to become easily chafed; it is covered with soft down, known as lanugo. The body is small and puny in comparison to the head; the sutures are wide, and the fontanelles large; the nails are soft, and do not extend to the ends of the fingers; in a boy the testes may not have descended into the scrotum; in a girl the labiæ gape. The infant's movements are slow, the cry is feeble, and he often sucks with difficulty; the lungs expand

imperfectly, breathing is frequently bronchial only; the function of heat-forming is defective, and the digestive organs are hyper-delicate. Should the circulatory and respiratory systems work unsatisfactorily, the blood is insufficiently oxygenated, the metabolism of the body is interfered with, the temperature becomes depressed, the nervous system more than ordinarily unstable, and there is cyanosis. Anatomists are still investigating the degree of development of the various organs in the premature baby.

With regard to treatment, there are four necessities—maintenance of the temperature of the body, proper feeding, protection from infection, and constant intelligent supervision. If only slightly premature, it is not necessary to vary the régime from that followed with a full term baby; the weakling, however, demands additional care.

1. *Maintenance of temperature.*—At birth the normal rectal temperature is between 99 and 100 degrees; it is possible to prevent the loss of more than one degree. The premature baby should be received into a layer of warm wool; the air passages being cleansed, he should be gently dried, transferred to a second weighed and warmed layer, and swaddled in a blanket; in tying the cord there must be as little exposure as possible. After this operation he should be placed in a cradle with a well-protected indiarubber bottle (temperature of water about 150 degs. Fahr.) close to a good fire, protected from draughts by a screen, and carefully watched. If after an hour respiration is well established, the cry fairly vigorous, and the rectal temperature between 98 degs. and 99 degs., he may be weighed, measured, and oiled with warm olive oil, every precaution being taken to prevent chilling. Radiation takes place more rapidly from the oiled skin, so that it is important to cover the small patient immediately after the anointing, the oil then acts as a bad conductor, it protects the skin, and some little may be absorbed. The most suitable material for a garment is wool covered with fine muslin or gauze; a straight strip with two holes cut in it serves as a "coatie," for the arms and legs long strips may be wound round in "puttee" fashion, and tied with narrow tape or ribbon; a small diaper of the wool, and a wee muslin wool-lined cap complete the outfit. The next question is how best to maintain an equable temperature; the object in view is to

[previous page](#)

[next page](#)