

OUR PRIZE COMPETITION.

WHAT IS OPHTHALMIA NEONATORUM? STATE HOW THE INFECTION IS CONVEYED, AND GIVE AN ACCOUNT OF THE NURSING TREATMENT.

We have pleasure in awarding the Prize this month to Miss Florence Ibbetson, Essex County Hospital, Colchester.

PRIZE PAPER.

Ophthalmia Neonatorum is acute conjunctivitis of the newly born due to infection of the eyes by pyogenic organisms. The majority of cases are of gonococcal origin, but other pus-forming germs will attack the eyes of young babies—*e.g.*, streptococci, staphylococci, pneumococci. This disease is notifiable as an infectious disease. *Ophthalmia Neonatorum* is reckoned as a very serious infection, as it may result in total or partial blindness and at one time did account for a large percentage of blindness in the young. The blindness is due to softening and perforation of the cornea with escape of the eye contents, or due to corneal ulceration and subsequent scarring causing opacity of the cornea.

As a rule both eyes are infected in this disease, particularly if the causal organism is the gonococcus. Gonococcal infection is conveyed from mother to baby during birth. As the baby's head passes through the birth canal of an infected mother, its eyes become infected. Or, again, if a newly born baby is allowed to rub its eyes with its hands, infection may be conveyed. With a maternal infection the symptoms of the disease usually occur about the third day after birth.

Ophthalmia Neonatorum may also be due to lack of hygiene in those attending the baby—*e.g.*, touching the baby's face with dirty hands, flannels or towels, washing the baby's face in water used for its body, using toilet things that are common to other members of the household. Here the infection usually occurs much later—*i.e.*, the second week—and is not often of gonococcal origin.

The signs of *Ophthalmia Neonatorum* are very definite—red, hot, swollen eyelids in one or both eyes; the lids are stuck together, and the lashes matted, and the eye is screwed up due to spasm of the muscles and photophobia. When the lids are separated there is a spurt of thick yellow pus. The conjunctiva is cedematous, and the eye is red and engorged. The acute condition prevails for several days, during which time permanent injury may be done to the eye.

The most important treatments in dealing with this disease are the various prophylactic measures, which are reducing its incidence very markedly. The Central Midwives' Board has drawn up several stringent rules for midwives regarding this disease, and doctors must notify it. Careful ante-natal care is important too, as mothers suffering from gonorrhoea may be treated before the birth of the child, and where this is done usually the baby is quite free from infection.

When a baby's head is born, the rule is that its closed eyes should be swabbed with boracic lotion, using a separate swab for each eye and using each swab for one stroke only. After the child is born it is wrapped up at once in a sterile towel with its arms fastened in so that it cannot rub its eyes with hands potentially infected. As soon as possible Arg. Nit. 1 per cent. drops are instilled into both eyes. This drug is perhaps the best eye antiseptic known. When the baby is bathed, its

face is always washed first and dried on a clean towel, so that its eyes may not be contaminated by the water or the towel.

According to the Midwives' Rules, a midwife must report at once to the local supervising authority and to the doctor any inflammation or discharge from the baby's eyes, however slight.

Nursing treatment of Ophthalmia Neonatorum.—A swab is taken to isolate the causal organism. The baby is put into strict isolation, and in some hospitals there are wards set aside for the babies and their mothers, so that both may receive the necessary treatment.

The nurse must take great precautions to protect herself and others from this infection. She must wear a gown, rubber gloves and goggles for all treatments. The goggles are of great importance, as when she leans over the baby to open its eyes, pus may spurt into her own unless she is protected, and that means loss of the eye in an adult. She must scrub up her hands most carefully after treatments. She must not attend any midwifery cases, nor nurse other babies, or do any eye treatments; in fact, she should special her patient.

All the baby's belongings must be marked and kept separate, and it must have its own dressing-tray, drops, etc. At the termination of the disease all fomites must be disinfected as for any infectious case. If one eye only is infected put a Buller's shield on the sound eye and keep the baby over on its affected side. The arms should be kept inside, by carefully wrapping a thin blanket around the child.

The local eye treatment consists of frequent irrigation of the eye with mild lotions. These must be bland and at body temperature, and all apparatus must be sterile. Sterile water, normal saline solution, boracic 2 per cent., permanganate of potash 1/5,000 may be used; the effect is mostly that of a mechanical washout, not necessarily antiseptic. Then antiseptic drops are instilled, also warmed. Silver salts are the best: Gutt. Arg. Nit. 1 per cent., Protargol 5 per cent., Argyrol 10 per cent., Sophol, etc. The lids are smeared with vaseline to prevent them from sticking together, as the pus must drain freely. Never bandage the eye.

The method of carrying out the above treatment is as follows:—

Prepare the tray with two mackintoshes, two sterile towels, small wool swabs (an undine can be used, but is not absolutely necessary), 1 pint of lotion at 100° F., the drops and dropper standing in warm water, a receiver, vaseline, and a pail are required.

The easiest way to treat a baby's eyes is to sit down with a pail in front of one's legs and a mackintosh hanging well over the knees; wrap a mackintosh around the baby, tucking it in at the neck, and place the baby in the lap with its head between the knees. This leaves both hands free for a delicate treatment, and also the baby is under full control. The nurse must render her hands surgically clean and don gloves which must be dried on the sterile towel. It is impossible to perform eye treatments with wet hands.

The lids are gently opened and the eye is irrigated with an undine or wet swabs from the inner canthus outwards, and the fluid is caught in the pail. Then the drops are instilled, and the closed lids are dried, and a little vaseline applied to the margins. The

[previous page](#)

[next page](#)