The Midwife.

INTRA=UTERINE OPHTHALMIA.

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Intra-uterine ophthalmia is sufficiently rare to make the following cases of interest to midwives. In each case the child was seen by a registered medical practitioner soon after birth.

Case 1.—Patient had no history of a vaginal discharge. The presentation was a vertex; the child was born naturally forty minutes after rupture of the membranes, with acute inflammation of the conjunctiva; the lids were cedematous and spongy; the upper lids projected over the lower lids; a straw-coloured serous discharge was present. The inflammation yielded readily to treatment, and the cure was complete in a fortnight.

Case 2.—Twin labour. The patient had had a yellow discharge two days before labour; no antepartum douche was given. The first child only was infected; the presentation was a vertex; natural delivery took place ten minutes after the rupture of the membranes; the liquor amnii was turbid and greenish. Thirty minutes after birth a slight yellow discharge was noticed in the right eye. One drop of silver nitrate 2 per cent. was instilled into each eye; two hours after, the lids were swollen. Thirty hours after, the lids were red and swollen; the corneæ were hazy, with some infiltration in the lower part. The child made a fair recovery.

Case 3.—The patient was a duopara; the labour was natural. The presentation was a first vertex. An antepartum douche of I in 2,000 perchloride of mercury was given. There was no history of a vaginal discharge. The membranes were ruptured artificially, and the child was born forty-five minutes afterwards. The third stage was normal, but the chorion was somewhat torn; it is possible that there might have been some rupture of the membranes high up before the artificial rupture. Within an hour after birth the lids were noticed to be swollen, and the conjunctiva was slightly inflamed. The doctor saw the child, and a drop of solution of argyrol 20 per cent. was instilled into each eye. On the second day, pus exuded from the eyes; the eyes were irrigated with boracic lotion every two hours. On the third day the congestion was diminished and the cornea clear. Two days afterwards the inflammation was subsiding, but the corneæ were hazy. Argyrol I in 50 was instilled twice daily, and the irrigations continued. The child, who weighed 7 lb. 10 oz. at birth, developed marked

symptoms of congenital syphilis, and grew rapidly worse. On the ninth day the corneæ were ulcerated; convulsions set in, and the child died on the twelfth day from the above disease. There was no history or symptoms of maternal specific disease.

The details in these cases are somewhat scanty, but they are all well-authenticated cases of intra-uterine ophthalmia. A study of the literature on the frequency of this complication shows that there are fifty-four records of cases. These are admirably tabulated and summarized in a paper on "Antepartum Ophthalmia" in the Ophthalmoscope of April, 1906, by Dr. Sydney Stephenson and Miss Rosa Ford, M.B. In many of these cases the disease was in an early stage; but in two the ophthalmia had apparently run its course in utero, leaving a shrunken eyeball, with signs of inflammation still present; this would point to infection some weeks or even months before birth. Hellendall has proved experimentally that bacteria can pass through the intact amnion and infect the amniotic fluid. The only solution of these early infection cases, and those in which the child was born within a few minutes of the rupture of the membranes, is to assume that bacterial infection has taken place with intact membranes; about half the published cases can be accounted for by premature rupture of the membranes allowing access of micro-organisms to the conjunctival sac.

The minimum incubation period of ophthalmia neonatorum is twenty-four hours; therefore, if symptoms appear before this period has elapsed the case may be considered as one of intrauterine ophthalmia, some or all of the incubation period having been passed in utero. We know that all cases of ophthalmia neonatorum are due to germ infection; it is therefore certain that in those cases in which premature rupture of the membranes does not explain the intrauterine infection the germs must find access either through the unruptured membranes or, as suggested by Armaignac, by general systemic infection, the fœtal circulation becoming infected either through the maternal circulation or from the placental site.

In the cases cited above, the membranes only ruptured within an hour of the birth of the child; infection must therefore have taken place before the membranes ruptured. In case 2 the patient acknowledged to a yellow discharge before labour; it may possibly have been gonorrhœal; the fact that the first twin only was



