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OBSTETRIC METHODS IN PRAGUE.

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DURING the winter of 1885-'86 it was my privilege to live in Professor Breisky's clinic at the Maternity Hospital in Prague, Austria. This institution ranks second in size to the one at Vienna, three thousand births occurring in it annually, one third of this material being under Professor Breisky's charge at the time of my residence there. Some account of the antiseptic and other methods followed in the hospital may be of general interest.

The first essential in carrying out antiseptics is, of course, the thorough cleansing and disinfection of the hands of physicians and nurses. Before examining a woman in labor, the nails are cut and cleaned and the hands and arms scrubbed with soap and water and a brush. This is followed by irrigation with corrosive-sublimate solution (1 to 1,000), and the hands are held in a basin of sublimate solution (1 to 1,000) for a minute or so. Instruments are allowed to remain half an hour in carbolic-acid water after being used. Catheters are boiled half an hour in a 5-per-cent. carbolic-acid solution and cleaned internally with a brush. The catheters are specially made, the eye being double and going directly through the catheter, and the portion above

the eye being filled in with lead, allowing no crevice for the collection of dirt. The external genitals are carefully washed with carbolic-acid solution, before the catheter is passed, to remove mucus which might be carried into the bladder before it. Cystitis seldom occurs, and then only when the catheter is not clean. Hypodermic needles are heated in the flame of the gas, and before giving an injection the skin is washed. Small instruments, such as dressing forceps, are also held in the gas flame.

The following antiseptic precautions are adopted with regard to the patients: Upon their entering the hospital and before the first examination is made the vagina is irrigated with corrosive-sublimate solution (1 to 2,000). Patients are not irrigated daily unless they have some abnormal secretion, such as leucorrhœa. Upon the beginning of labor the vagina is irrigated before the first examination. The irrigation is not repeated during the course of the labor unless a number of students have examined, the patient has fever or hæmorrhage, or there is an indication for the use of instruments.

After the birth of the child the external genitals alone are washed, and the vagina is not irrigated in normal cases. When, however, any considerable laceration of its structure has taken place or instruments have been used, irrigation is employed. The uterus is never washed unless it has been operated upon, as in applying the forceps with the child high up, or in perforation or craniotomy.

The uterus is never washed with bichloride, carbolic-acid solution being always used in the strength of 3 per cent. for prophylaxis, or, when infection is present, 4 to 5 per cent.

After every uterine irrigation two iodoform suppositories are introduced into the uterus. All wounds of the genital passages are sewed up and dressed with iodoform,

After the birth of the child and before the placenta has come away the vulva is covered with a sheet of cotton soaked in chlorine water, which is left till soiled, and then replaced by a fresh one. This is changed every two hours at first, and afterward three times a day. Before the birth the genitals are washed with soap and sublimate solution. During the puerperal state the external genitals are washed with sublimate, but the vagina is not irrigated while the patient is doing well.

Foul-smelling lochia, a discharge too profuse in quantity, and the continuance of blood in the flow for a longer time than normal, are considered indications for irrigating the vagina either with carbolic-acid or corrosive-sublimate solution. The sublimate is never used when the patient is excessively anæmic or is suffering from kidney disease or diarrhœa. When the discharge is normal in character but profuse in quantity, an astringent—either alum or acetate of lead—is used as an injection. The uterus is never washed out without an indication, as, for example, if the patient has fever or endometritis, or the membranes or placenta are retained. Carbolic-acid solution from 3 to 4 per cent. is made use of in such cases.

In examining a patient with septicæmia, if, upon the introduction of the speculum, any portions of the vagina are found covered with diphtheritic deposit, the vagina is first irrigated, and then the patches of exudate are touched with tincture of iodine. When everything has been made clean, so that nothing septic can be introduced into the uterus, that organ is examined.

The rooms for puerperal cases, each one containing six beds, are washed once in ten days with soap and water and hypochlorite-of-lime solution. Woven-wire springs are used on the beds, and the mattresses are taken out of doors, beaten, and aired. In the lying-in room the beds are

changed daily. In septic cases the rooms are washed as usual, and, in addition, a spray of carbolic acid is used with the atomizer. The bedsteads are put into a room and exposed to a high temperature, the mattresses are beaten and aired, and, if discharges have soaked through the rubber cloth with which each bed is protected, the mattress is burned.

A good deal of weight is laid upon the treatment of the breasts. Upon entering the hospital, each patient has the breasts washed daily with borax-water, 4 per cent. in strength. When a considerable amount of sebaceous secretion is present, upon which the dirt has collected, they are rubbed with a 4-per-cent. borated vaseline to soften the deposit, and then treated as above mentioned.

As soon as the child is born, each of its eyes is treated with a drop of 2-per-cent. nitrate-of-silver solution. The children's mouths are no longer washed, since Professor Epstein, of the Foundling Asylum in Prague, has found that the delicate mucous membrane is apt to be abraded in the washing, and aphthæ form much more readily than upon an unbroken surface. The navels are packed in salicylated cotton, which is changed daily when the child is bathed. Diarrhœa and indigestion in newly born children are treated after a plan suggested and used by Professor Epstein. He supposes that the mother's milk, taken into the stomach by the child and not being digested, undergoes decomposition. Bacteria are produced and act as irritants, exciting a catarrhal inflammation, and keeping it up by their presence. The plan of treatment which he has used for some years past is to wash out the child's stomach, using a small Jaquë's catheter, to which are attached a rubber tube and a funnel. The catheter is passed through the mouth and œsophagus into the stomach; the funnel is elevated, and two ounces of plain warm water are poured into the stomach through the

funnel, which is then lowered and the water siphoned off. This is repeated several times until the water from the stomach comes away clear. Milk or food is forbidden for twenty-four hours, and the child is given albuminated water, made by mixing water and the white of egg, every two hours, the child taking about sixteen ounces in twenty-four hours. This is given on account of the thirst. The stomach washing is not repeated. When the diarrhœa is very severe, small doses of acetate of lead are given alternately with the albuminated water. Since the adoption of this plan of treatment in this disease the deaths have been much fewer than formerly.

I may here mention incidentally that the administration of ergot, as a routine treatment to favor firm contractions of the uterus, was abandoned in 1882. The patients do as well without it as during its employment, hæmorrhage being no more frequent.

In conclusion, I would say that the utility of the anti-septic precautions is proved by a comparison of the results before and after their adoption. In the old Maternity Hospital, before antiseptics was used, the mortality was from eight to fifteen in a hundred! In the present institution the entire mortality ranges from four to six deaths in a thousand, and the septic mortality is from two to two and a half in a thousand per annum. I should remark here that this hospital is used for teaching purposes, and each patient is examined by from three to six students in addition to the regular staff. Since the present method of treating breasts was begun, eight hundred and forty women had been confined in the hospital at the time of writing, and only two cases of mastitis had occurred, both of which were in patients who had no preparatory treatment, having entered the hospital in labor. Cystitis seldom occurs, and it is then usually traced to an improper cleansing of the parts or of the

catheter. The frequency of ophthalmia neonatorum has been greatly diminished under the use of nitrate of silver.

I take this opportunity of expressing my thanks to Professor Breisky and his assistant, Dr. Carl Fleischmann, for the many favors extended to me during my sojourn in Prague.

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