## PREGNANCY AND LABOR IN EPILEPTIC WOMEN.

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According soccasionally meet with epileptics who have become pregnant, and who pass through the period of pregnancy and labor without any alarming symptoms, the fits occurring as usual before labor sets in, but being discontinued after the pains come on. The writer can call to mind several confirmed epileptics who have been under his care, who required no additional attention during the time when they were enceinte, and in whom the process of parturition was as favorable as in perfectly healthy women. So far as he can now remember without having notes of those cases, no paroxysms of the disease occurred during the conventional ten days succeeding delivery, when the women are under professional supervision.

That this happy termination of labor without epileptic seizures is not without exceptions the succeeding history shows conclusively.

The patient is an unmarried girl, æt. 23, who came to the Philadelphia Hospital to be confined. She is a short, stout woman, and when admitted she had the appearance of a confirmed epileptic. The disease had existed for years, and had resisted all efforts at treatment. The fits are preceded by a distinct aura, commencing in the leg. They occur very frequently, and have all the characteristics of the convulsions of this disease. In April last, shortly after admission to the hospital, she had no less than twenty-five convulsions in five hours. After that time the frequency of the seizures diminished under the use of bromide of calcium prescribed by my colleague, Dr. Girvin, and for some time before labor commenced her condition was very fair, but as the time for her travail approached there was a more decided tendency to convulsions.



Labor began about 5 p.m., on June 30th, and almost immediately afterwards epileptic convulsions set in. Dr. John M. Keating, the resident accoucheur, at once sent me a hurried message, stating that it was probable that immediate delivery was indicated. When I reached her I found that she had reached full term. Labor pains of a severe character were occurring at regular intervals. Her abdomen was very large. This had attracted attention before the commencement of her labor. The distention was increased by tympany. Vaginal examination showed that the os was dilating. At this time, two hours and a half after the commencement of labor, it would more than admit two fingers, and was not at all dilatable. The child's head could be felt presenting, and could be moved with great ease in the cavity of the uterus. It was evident that the womb contained a large quantity of liquor amnii. The pelvic passages were perfectly normal.

Her pulse was 96 per minute, full and round. Epileptic fits occurred at short intervals. Between five and half-past seven o'clock she had sixteen of these, remaining perfectly unconscious for some time afterward. Dr. Keating had noticed from the time that labor commenced the convulsions were preceded by violent slapping of the belly with her hands, while when the pains would come on she would clap her hands strongly and rapidly. We were thus enabled to tell whether a fit or a pain was approaching when sitting anywhere in the room. The convulsions were very violent, lasted several minutes and presented all the ordinary phenomena of these epileptic seizures. They were remarkable in one particular, being characterized by extreme opisthotonos. The heels and occiput were almost in contact, while the chest and protuberant abdomen made a very strong curve. During the paroxysm the legs were so strongly flexed that the heels were brought in contact with the posterior surface of the thighs and retained there until the force of the paroxysm was entirely spent. During the intervals between the convulsions she laid with her legs fully extended, but during the fits only the occiput and knees touched the bed.

Shortly after 7.30 P.M. she was etherized. The ether arrested the convulsions, but it likewise completely suspended the strong labor pains which had been occurring at intervals of ten minutes. As the convulsions were so severe, and as it seemed



probable that they would recur when she rallied from the influence of the ether, I determined to hurry dilatation of the os and rupture the bag of waters with the hope of mitigating or arresting the convulsions. At 8.15 Dr. Keating introduced the middle-sized Barnes' dilator with great ease. It was slowly distended, and the largest size soon substituted for it. At 9.15 p.m. this dilator, which was not as large as it should have been, was removed and the dilatation of the os was almost complete. The head was now found in the left occipito-anterior position. The child was very movable in the cavity of the uterus. The membranes were very strong and bulged freely from the os uteri. About 10.35 p.m. they were ruptured and a large quantity of liquor annii drained off.

Simpson's forceps were now applied with ease, but upon making traction the os was almost, but not quite sufficiently dilated to allow the head to pass. They were therefore removed, and as the uterus was considerably diminished by the discharge of the waters, it was decided to suspend the use of the ether, and if possible to allow nature to finish the nearly complete dilatation.

When the effects of the anæsthetic disappeared she was semiconscious, and complained of exhaustion and pain in her head. The uterine contraction recurred at regular intervals, and in a little more than an hour dilatation was complete. Dr. Keating again applied the forceps, and at midnight delivered her of a healthy living boy, who weighed seven pounds seven ounces. After delivery she remained absolutely unconscious for some time. After consciousness was restored she was in fair condition, and had no more convulsions. Her urine was not albuminous at any time.

There are several points of interest in connection with this case. Standing by the poor woman's bed-side during the violent convulsions which she had in April last, or during those which she had while in labor, one could hardly believe that she could give birth to a living child. Bent almost double, with only the bases of the arch touching the bed, it seemed almost impossible that the child could escape injury. Especially when we remember that death of the fœtus—though by no means universal, is the common result in puerperal convulsions. In this particular that disease appears to differ from epilepsy.

The second point of interest is the management of the case. She would have borne bleeding, but there was no obvious indication for it. Her arm is already sufficiently scarred by the lancet, though according to her own statements venesection has always injured her.

The administration of the anæsthetic is probably the first therapeutic agent that would suggest itself to any accoucheur, and it certainly acted most happily so far as the convulsions were concerned, but it completely arrested the pains. Then came up the important question, shall we trust to the anæsthetic to ward off the convulsions, and wait until nature has had an opportunity to complete dilatation? There was evidently a necessity to empty the uterus as quickly as possible, if irritation produced by the extreme distention, had anything to do with the production of the epileptic paroxysms. Therefore I decided to complete dilatation as rapidly as possible, and to deliver with the forceps if necessary, though I freely acknowledge that had the case occurred in private practice I would not have been so hasty. It is to elicit discussion upon the method of managing these cases that I have dwelt thus long upon this subject.

Another interesting case of epilepsy in a pregnant woman came under my care a few years since. The lady, who was then about twenty-four years old, engaged me to attend her in an approaching confinement. She was at that time a handsome woman, with good blood-making powers, dark hair, fair complexion, and thin, delicate skin. She had every appearance of a woman in good health. She had no venal disease. There was no hereditary tendency to nervous affections, and no member of the family had ever had epilepsy. My patient herself remained perfectly free from the disease until she was between three and four months gone in her first pregnancy, when an epileptic convulsion occurred. The fits were repeated at intervals of a few days, or one or two weeks, until she was about seven months gone, when she miscarried with a dead and decomposing fœtus. She had no convulsions during labor. Her recovery was natural, and after delivery there was no tendency to epilepsy.

In her second and last she came under my care too late for me to hope to do anything to prevent the epilepsy. The fits had set in when she was about three months gone. They recurred several times a week; came on without warning, so that she would fall unconscious wherever she might be at the time of the paroxysm. The convulsive movements were not remarkably severe, but the general characters of an epileptic seizure were fairly developed. The symptoms continued until the end of the eighth month of gestation, when I delivered her of a dead decomposing fœtus, of seven months' development. The labor differed in no respect from ordinary labors, in which dead children are born. She had no convulsions during labor.

Since this confinement, about four years ago, this lady has never been pregnant. In summer of 1872 she began to show signs of commencing phthisis. During the succeeding fall she had a number of severe pulmonary hemorrhages, which prostrated her very much, but she rallied again after several weeks. During the next year, besides many other cares, she was much occupied in nursing her mother and sister, both of whom died in 1873. Notwithstanding these drawbacks, her pulmonary disease is at least quiescent, if she is not recovering from it. During this time she has not had an epileptic fit, nor has she manifested a tendency to any other nervous disease.

The influence of gestation upon epilepsy has been noticed by numerous writers. These observations, however, refer to women who were epileptic before becoming pregnant, and in whom the severity of the disease was either increased or diminished (generally the latter) during the existence of pregnancy. Cases of epilepsy, produced by pregnancy, are comparatively rare. Andrèe gives the history of a woman who became epileptic in her two pregnancies. In both instances—like the woman whose history I have related to-night—she aborted.

Tissot met with two cases of this form of disease. In one the fits occurred almost every week until the motion of the child was felt, while the other woman had a fit every month during the first two pregnancies. Echeverria states a single case in which the patient was epileptic during seven pregnancies, though she had no paroxysms during labor. Nor was there any difficulty in the labor of Griffin's patient, who was pregnant for the first time, and who had fits every six weeks during the early part of her gestation, though their frequency was greatly increased towards the end of her time.

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La Motte has recorded a curious case of epilepsy during pregnancy, in which the sex of the child in utero appeared to have an influence in producing the disease. She was pregnant eight times, and only had fits when carrying a male child. Van Sweeten mentions a similar case.

In none of these cases, so far as we are able to determine by access to their records, did the epilepsy become permanent; but Malgaigne has published the account of a patient who had epileptic fits for the first time during pregnancy, and who had them ever afterwards.

In regard to the relations existing between pregnancy, parturition, and epilepsy, experience and the study of the literature of the subject appear to warrant us in making the following statements:

- 1. Epileptics rarely have convulsions during labor. They are not more liable to puerperal convulsions than healthy women. Labor in them is, as a rule, not more unfavorable than in healthy women.
- 2. In the exceptional cases, in which violent epileptic convulsions occur during labor, it is not decided whether it is best to hasten delivery or to trust to nature.
- 3. Pregnancy may be the immediate cause of epilepsy. In these cases fits rarely occur during labor, and the disease is immediately arrested by parturition, but it will almost always reappear whenever the woman becomes pregnant.
- 4. Either form of epilepsy may result in the death of the fœtus, but convulsions of this kind are not as likely to destroy the child as are those which may be correctly designated puerperal.

