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ORIGINAL ARTICLES.

THE INFLUENCE OF THE POSITION OF
THE PATIENT IN LABOR IN CAUS-
ING UTERINE INERTIA AND
PELVIC DISTURBANCES.

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It has been generally taught that during the first stage of labor the patient may be allowed to assume that position which she considers the easiest for herself. Some accoucheurs encourage the patient not to take to the bed at the beginning of labor, but for the influence of the pressure of her own hands and the weight of the foetus in aiding flexion of the head and in promoting dilatation of the cervix, to maintain the sitting or upright posture. In the early stage, the dorsal position is often assumed; later, for convenience in making frequent inspection of the perineum, in assisting to carry out certain manipulative procedures, and in giving the necessary attention to uterine and rectal discharges, the left lateral posture is often advised. Some place the patient on the side to which the occipital presentation is inclined. Some reverse the position by placing the patient on the side toward which the sinciput or the vertex is descending. Women of the lower classes of some countries, while in labor, place themselves on their hands and knees. Other positions are sometimes assumed, such as half-sitting or partially reclining postures. Some women persist in standing or in getting on their knees. Formerly, the French women were delivered while in the dorsal position, with knees drawn up. In other countries, especially among the Aborigines, or among the half-civilized orders, many strange and singular positions have been assumed by women when in labor. Inquiry into the purpose for which any of the various positions which women have from time to time assumed while in labor, will show that the choice has been made more from the force of custom, from caprice, ignorance, and from a blind submission to authority—exercised by those who make unwarrantable pretensions to skill in midwifery, than from

knowledge deduced from facts gained by careful study and close observation.

The left lateral posture, with thighs drawn up and legs flexed upon the thighs, the shoulders projecting forward and the spine curved, has been thought to be more favorable for relaxation of the psoas and other muscles traversing the brim of the pelvis. This position has also been thought to be more favorable, as the axis of the entrance of the pelvis and that of the trunk would be on the same line, or be nearly parallel. Those who place their patients in such posture look upon the phenomena of parturition as dependent on mechanical forces, and not on the physiological function of the uterus and the powers of the system generally. The effectiveness of the uterine pains has been increased by change of posture, especially after the patient has maintained for a long time a constrained position. Under such circumstances, a mere temporary relief from a too irksome restraint has been followed by an increase in the general character of the pains which has more than counterbalanced any deficiency in the advantage of a better mechanical position. Women who are of a nervous temperament often find it exceedingly difficult, in the second, as also in the first, stage of labor, to undergo the fatigue of any one position for a considerable length of time. The vital forces of the system generally are often the first to suffer, and this fatigue quickly extends to the nervous force resident within the uterine and adjacent muscular tissue. The exhausting effects of a constrained position cannot be wholly overcome by the employment of anæsthetics, for often the only manifestation of an expression of the baleful effects of too long constrained position is in the failure of the power of the uterine pains. The patient then begins to complain of weakness, she appears unable, or at least is unwilling, to move or to alter her position in bed. She may call for ether; if she is indulged by its employment the beneficial effects which follow are the result of its stimulating properties, and from change of position for its administration. If, unfortunately, the position is not materially altered, and the second stage of labor is not near its termination, the increased power in the pains derived by its administration will soon cease, and the patient will lapse into a state worse than the

one before its attempted administration. Fortunately, on the other hand, in such cases, in which ether is given with only temporary benefit, early in the second stage of labor, it is often deemed advisable to withhold it until the patient regains more or less consciousness. The outcries of the patient then for more ether, and the changes of position in bed she frequently makes, notwithstanding the severe restraint imposed upon her by the attendants, serve to increase the power of the pains and to bring to happy termination the second stage of labor.

Besides the occurrence of uterine inertia from long-continued position of the patient in labor, other disturbances are liable to arise. The effects of the blood pressure, and the gravitating of fluids toward the left uterine appendages and the peri-uterine structures, when the patient occupies for a long time the left lateral posture, should not be overlooked. Such untoward effects are particularly apt to follow in cases of those who suffer from cardiac affections, from disease of the lungs, bronchial tubes, kidneys, from general or partial cedema, and from deficient circulation. As already stated, parturition is not a mechanical but a physiological function, dependent upon a force having its origin in the nerves distributed to the uterine tissue and to the system generally. Whatever, therefore, tends to exhaust the general system, interferes with the normal action of the parts, and disturbs the proper function of the uterine tissue. When such disturbances are imparted to structures outside of the uterine walls, they are not easily overcome, but leave their impress more or less indefinitely on the parts involved. The great impressibility—as well as sensibility—which women acquire even in the early stage of pregnancy, is well shown by the development of that peculiar appearance denominated mother's marks which sometimes occur on the cutaneous surface of the child. It is not only in the early stages of pregnancy, but in every stage of that condition, and even for some time after delivery, that this highly sensitive condition obtains, leaving its impressibility more or less permanently not only on the fœtus, but also on her own tissues adjacent to the uterine structures.

Among the puerperal lesions which may result from the lateral posture too long retained are affections of the bladder. The prolonged pressure of some portion of the fœtus on the sensitive bladder arrests to a considerable degree the normal action of that viscus. It thus weakens its integrity—causes inflammation of the mucous surface. The inflammation in the bladder is prone to extend backward into the ureter. The ureter itself, on one or both sides, taking on inflammatory processes becomes distended with unhealthy urine. This may lead to rupture into the pelvic tissue, and thus give rise to sloughing or to the formation of abscess. I have notes of

the autopsy in the case of Mrs. E., who died during the third week after delivery. The death occurred after second confinement. The bladder throughout its entire surface was tumefied, red, and covered with dark, purulent fluid. The pelvis contained a quantity of semi-purulent exudation having the odor of urine. The left ureter was abnormally distended, it was inflamed and was found to have undergone rupture at a point three and one-quarter inches from the base of the bladder. The ureter on the right side, though somewhat inflamed from the contact with morbid urine, was not greatly distended. The history of the case showed that the patient was in labor some thirty-six hours, and that during the last twenty-three hours she had occupied for the most part the left lateral posture. The pelvis was well formed and of normal dimensions. The child was not large. It was born alive and did well. The cause of the delay in the delivery appeared to be owing to inertia into which the uterus had partially lapsed quite early in the second stage of labor. The patient had suffered from chronic cystitis and from marked anteversion of the uterus. Recto-vaginal and vesico-vaginal fistulæ are lesions which now and then occur and which are largely the result of childbirth. Emmet mentions two hundred and two cases that were admitted to the Women's Hospital. One hundred and seventy-one of the cases were caused by child-birth. He says the average duration of the labor completed from rupture of the membranes was 58.69 hours. On another table he says 46.19 per cent. of the cases were delivered by forceps, and that the average duration of labor was 68.55 hours. Emmet does not coincide in the popular belief that instrumental delivery is the cause of fistulæ. He rather attributes their occurrence to retardation in the progress of labor, induced by negligence to empty the bladder. Though he recognizes over-distension of the bladder as a factor in the production of fistulæ, he does not appear to be wholly certain as to that condition of the patient being the final cause, for he says it is not improbable, since the averaged time is so long before the separation of the sloughs that the additional force in many cases necessary to effect the delivery may be the exciting cause of the inflammation. In six cases of vesico-vaginal fistulæ whose histories I obtained, the additional factor could not be attributed to force necessary to effect delivery. It was clearly due to the position of the patient too long retained. In three of the cases the position was the left lateral, in two the dorsal; in one was the right lateral which the patient persisted in retaining for some forty-four hours.

Among the other inflammatory conditions which follow confinement are those of the uterine appendages. Sometimes we have salpingitis on one or both sides, but often more severe on one side. Sometimes the morbid process comes from

the escape of blood through the fimbriated extremity of the tube into the pelvic cavity. Sometimes we have following confinement an hæmatic tumor or cyst, and occasionally, if not often, hæmatosalpinx. All these lesions or morbid processes, whatever be their predisposing causes, are influenced more or less by posture of the patient.

Hæmorrhage from the lungs and from other organs, and from the vascular tissues, is greatly influenced by position. In the treatment and in the prevention of such symptoms position of the patient and of the parts must always be a factor for consideration. In the management of hæmorrhage and accidents peculiar to the puerperal state position of the patient becomes of still more consequence. This is rendered so not only on account of the extreme sensitiveness of the organs and the system generally but also on account of the development of that nervous function and the exhausting exercise of it necessary for production and accomplishment of parturition. Another condition sometimes following labor is subinvolution of the uterus. The cause of this condition has often been ascribed to laceration of the cervix. Cases of subinvolution now and then occur in which no appreciable laceration can be found to have taken place. In such cases in the absence of a history of an injury having been received it is usual to consider the cause to be want of tone in the pelvic venous circulation.

I have the history of two cases of subinvolution of the uterus, in which there was no laceration of the cervix nor of the perineum. Nor was there any reason to suspect that there existed in either case a perverted condition of the system generally. Neither patient had sustained injury immediately preceding or during parturition. In one case uterine dyskinesia was also a troublesome symptom. In the other case, though the subinvolution was not so pronounced, there was for a long time inability to walk (uterine lameness). There was an increase of the tendon reflex, and there were areas of much sensitiveness in the vicinity of the dorsal and lumbar vertebrae. The first patient was in labor forty-nine hours, but was delivered without instruments. She occupied for the most part the left lateral posture. The second patient was in labor fifty-three hours. She was delivered also without instrumental interference. She occupied almost continuously during labor the dorsal posture.

In conclusion I would say that I have chosen this subject for consideration not because I am now prepared to offer any special rules for guidance as to the position of the patient in labor, but from a conviction, deepening more and more by experience, that posture in some, if not in a large class of cases, is an important factor in the production of derangement of uterine force and also in that of pelvic disturbance. Such perversion in

the function of the uterine tissue and adjacent structures is liable to be looked upon as being the result of some possible defect in the particular treatment in which all due and proper care may have been exercised, and not as the result of some other element in the management of the case for the reason of which it has not occurred to the medical attendant to make inquiries.

(For discussion see Society Proceedings.)

MIGRAINE AND FUNCTIONAL HEAD-ACHES FROM EYE STRAIN.

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Writers on nervous diseases, as a rule, devote considerable attention to migraine, its etiology and clinical phases. It is generally conceded that it is due to some special sources of irritation, whether in the stomach, uterus, eye or elsewhere in the system. The eye is often honored as a causative factor with the appropriate heading of "Ophthalmic Migraine." Physicians and scientists have recorded minutely and accurately, attacks occurring in their own persons. Among these, Wollaston stands preëminent as the first who drew general attention to one phase of this functional disturbance, viz.: temporary hemianopsia. A dissertation on the "Semi-Decussation of the Optic Nerves" was published by him in the "Philosophical Transactions" a few years prior to his death, which took place in 1806, from organic disease of the brain. In this paper he stoutly affirmed his belief in the semi-decussation of the nerves at the optic chiasm. He arrived at this conclusion by a study of his seizures of temporary homonymous hemianopsia. His experience led him to regard temporary hemianopsia as common in migraine seizures. Sir John Herschel, Sir Charles Wheatstone and Dr. Herbert Airy have recorded their special phases of the disease.

Parry, to whom credit is due for first having drawn attention to that complex disarrangement of several organs, which we now designate as Basedow's or Graves' disease. He described the eye symptoms occurring in his own person during migraine attacks as incomplete scotomata, lasting from twenty to thirty minutes. We find various names used to designate these attacks: migraine, megrim, sick or bilious headaches, hemicrania.

The influence of heredity is marked, and we find a neurotic element in many of the cases. Women are supposed to suffer much more frequently than men. Eulenburg states that the proportion is five to one. Three to two would be more in keeping with my record of cases. We find that migraine is likely to last from the fifteenth to the fiftieth year—the active period of life; that young children and quite old may suffer with it. In the majority of these attacks the pain is apt to begin