

Posture in Relation to Obstetrics and Gynæcology.¹

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THERE is no good reason why posture should not be made to play a part in curing diseases which it has partially caused. The laws of gravity act on the fluids and solids in the body as well as elsewhere in nature. Improper posture causes hyperæmia, blood stasis and dislocation of pelvic organs. (A demonstration of the erect posture was made by schematic drawings on the blackboard, and the subject was further illustrated by photographs of the several postures treated of in the paper.)

The Erect Posture.—The erect pos-

ture has some importance in both obstetrics and gynæcology, chiefly as facilitating in some cases differential diagnosis between pregnancy and tumors. It has, however, much importance in relation to the causation of disease. It is the posture of good health, and it is likewise the posture of pernicious disease, the difference only being between its correct and incorrect assumption. It is easy to distinguish between a healthy and diseased woman by the manner in which she assumes the correct or incorrect erect posture. Physicians should habitually instruct their patients as to the proper method of

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standing erect, and demonstrate to them the pernicious influences of stooping.

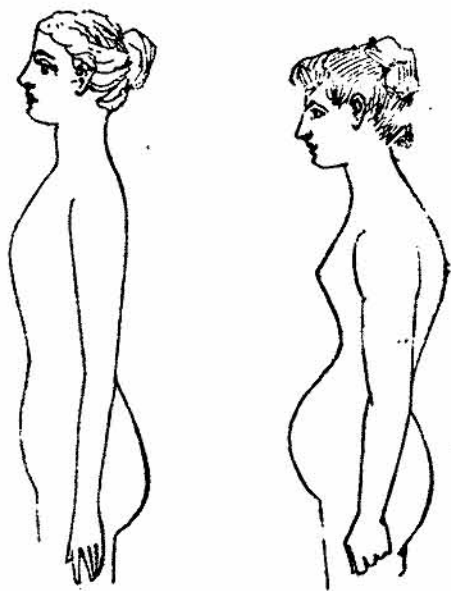
The Horizontal Posture. (Plate I, Fig. 1).—This posture has obstetric importance for the employment of palpation in the diagnosis of pregnancy, tumors, appendicitis and other intra-abdominal and pelvic conditions. It is the posture for abdominal section, and should be correctly assumed in cases of obscure disease in order to facilitate diagnosis.

The Dorsal Posture.—This is one of the most important postures in the whole category, since it has advantages for diagnosis and treatment in both obstetrical and gynecological procedures. In obstetrics it is the posture for the application of forceps as well as for many other obstetrical details. In gynecology it is the posture for bimanual exploration of the genital tract as well as for many plastic operations in that field. It is the posture for bladder investigation and treatment. A modification of the dorsal is the dorso-sacral posture (Plate I, Fig. 2) in which perineal lacerations are repaired, and in which vaginal hysterectomy is performed.

The Genu-pectoral Posture. (Plate II, Fig. 3).—This posture has obstetric importance in relation to prolapse of the funis, inspection of the head, and occasionally the performance of versions. In gynecology it reverses the normal gravity of the pelvic and abdominal viscera, and sometimes, unaided, replaces a retroverted or prolapsed uterus. It unloads the pelvic vessels, and is useful in the treatment and cure of many diseases of the pelvic organs, as well as in the diagnosis and management of intestinal disorders. It is especially the posture for the introduction of a pessary and for

its inspection *in situ*. It should be correctly assumed, a table forming the base of a right-angle triangle, the thighs the upright, and the body the hypotenuse.

Semi-prone Posture. (Plate III, Fig. 5).—This is the posture originally demonstrated by Sims, and grew out of the fact that the genu-pectoral posture was sometimes too fatiguing for long manipulation and



operations of the genital tract. He found that by placing the woman in the semi-prone position it would answer nearly or quite as well in many instances. It has become a popular posture among all trained gynecologists for diagnosis and treatment of many diseases of the genital tract. It is the posture for curettage and intra-uterine irrigation. There are few intra-uterine processes of instrumentation that are not better performed with the patient in the semi-prone pose than in any other. It is the posture for tamponade of the vagina, for uterine hæmorrhage,

for administering the hot rectal lavement, and Foster and others advise it for the vaginal douche. The mechanism of this posture is not always correctly understood, hence its application has not met with uniform success. It is a difficult posture to illustrate by photographs, but one to be studied carefully and employed frequently.

The Trendelenburg Posture. (Plate IV, Fig. 6).—This posture has been made use of chiefly by abdominal surgeons, where a reversal of gravity seemed to facilitate intra-abdominal operations. It has been extolled beyond measure by some, and condemned by others. A modified Trendelenburg posture, or an elevation of the body at an angle of fifteen or twenty degrees, is available in the treatment of pelvic disease. By keeping the patient in this posture for a more or less prolonged period, as advocated by Emmett and others, the inflammatory processes are cut short.

DISCUSSION.

Dr. James F. W. Ross, of Toronto: I hope that Dr. Potter will complete the series of photographs he has presented to us in season for our transactions for next year, showing something that has been omitted in these he has just now shown, and something that has not been presented to the student of medicine very clearly. I refer to the distention of the vagina by air with the patient in the genu-pectoral position. Then, in Sims' position, a photograph showing a vesico-vaginal fistula *in situ* would still further complete the work. I am not one of those who consider the faulty erect posture as a cause of disease, but rather the result of a

peculiar systemic condition that may itself aggravate the disease. I look upon these postures, however, as valuable from a surgical and gynaecological point of view.

In making examinations of women I insist on the removal of the corset. It is an impossibility to examine the pelvis of a woman properly while she has the corset applied to her body.

I would like to speak one word of praise for the genu-pectoral position. I have in one case operated for vesico-vaginal fistula with the patient in this posture, in which the woman refused to take chloroform, and it was one of the easiest operations I ever did. As for Trendelenburg's posture I take an intermediate view of its value. It has been of the greatest assistance to me, and especially in cases of severe pelvic hæmorrhage, for in these I can see the mouth of the bleeding vessels as readily as in amputating a leg.

Dr. Charles A. L. Reed, of Cincinnati: After I have examined a patient lying on her back and have found some evidence of displacement, I repeat that examination with the patient in the erect posture resting one foot on the round of a chair. In that way I determine with accuracy the degree of the existing displacement. Place a patient in the recumbent posture who has a retro-displacement, and it is exaggerated by virtue of this position if an anterior displacement, you can estimate the amount of pressure exercised upon the bladder and posterior structures with very much more accuracy by having the patient on her feet. So forcibly has this impressed me that I make it a matter of routine practice in all cases in which I am examining a woman for the accurate estimation of an existing displacement.

With regard to the Trendelenburg posture, permit me to say that Trendelenburg devised this posture for the performance of supra-pubic cystotomy, and that it was first applied, so far as any existing records show, for intra-pelvic operations, by Dr. Krug, of New York. By this adaptation of the posture, his name is justly entitled to be coupled with that of Trendelenburg, and in my published reports of cases I have alluded to this as the Krug-Trendelenburg posture.

Dr. William H. Taylor, of Cincinnati: I specially commend the photographs, presented by Dr. Potter, of the genu-pectoral position. I think it is in accordance with the experience of almost every gentleman present, who has attempted to teach the patients how to assume this position, that it is with great difficulty that they are induced to make the thighs perfectly perpendicular; almost always the upper ends are further inclined toward the body than the lower, so that patients do not get all the advantages of the genu-pectoral position that belongs to it.

With reference to the Sims position, I think it is greatly to be commended, in those harassing cases that we see in consultation, which the books call "neglected shoulder presentations," cases where the shoulder has become impacted under the brim of the pelvis. Very many have experienced difficulty in introducing the hand above the brim, seizing the neck, and making version. With a woman in the Sims position, or if supported in the genu-pectoral position, the body of the child will gravitate so as to draw the shoulder above the pelvic brim.

Dr. Joseph Hoffman, of Philadel-

phia: So far as the postures, as brought out by Dr. Potter in his paper, are concerned, I think they are admirable, and believe that in some respects they give us a better idea of the postures and of the way they are made to assume importance in the various operations than any heretofore published.

The ideas that Dr. Reed has given in reference to examination are of importance in some cases. As a routine practice, I would not go so far as he has expressed it. Each man, however, is entitled to his own views on points upon which he is thoroughly convinced.

So far as my own feelings in reference to the Trendelenburg posture are concerned, without challenging the methods by which the gentlemen have arrived at conclusions I will say that I do not think the posture is based upon physical and physiological facts.

Dr. Rufus B. Hall, of Cincinnati: I cannot agree with Dr. Hoffman when he states that the Trendelenburg posture is not a desirable one in many operations of the pelvis. Take, for instance, a case of hysterectomy for a large tumor: In operating with the clamp it is not necessary to elevate the hips; but those of us who have operated by total extirpation, and used the position, I am certain can indorse it most emphatically. Were I to make a total extirpation of the cervix I should adopt it; because it puts the field of operation plainly before the operator, especially the broad ligaments to be ligated, without lengthening the incision.

Dr. Edwin Ricketts, of Cincinnati: I would like to ask the question: Is it possible to put these patients to

bed as dry after having used the Trendelenburg posture as it is in the usual manner of operating? If such is the case, I have not been able to see it. It does seem to me this wetting process, that accompanies the use of the Trendelenburg posture, is a serious objection.

Dr. Frank A. Glasgow, of St. Louis: One point was not brought out by Dr. Potter in his paper, and was not referred to in the discussion, namely, the stooping posture. Entirely too much stress is laid on that as causing congestion and inflammation. No one can deny that a stooping posture has a bad effect on the pelvic organs. It aids congestion, I believe, not as the author says, through direct action on the circulation, but indirectly through a lack of development of the thoracic organs and through pressure.

Dr. J. Henry Carstens, of Detroit: Considerable has been said with reference to the standing posture of women. I would like to know what the effect is on women who sit and use sewing machines? If the intestines are pressing upon the pelvis, and have the effect of displacing the uterus of the women who sit all day long, they all certainly ought to have displaced uteri, congestion, inflammation, etc. I believe that that posture has very little to do with it. I think with Dr. Ross that it is some constitutional condition, some little malformation about the pelvis, that causes mischief, for a tilting of the pelvis in one woman is different from that in another.

Dr. L. Ch. Boisliniere, of St. Louis: In obstetrics the dorsal position is to be preferred, as it allows of uterine massage by the Dublin or Kristelter method, and the easier expression of the child and placenta. It also guards

against the entrance of air into the uterine sinuses—sometimes a cause of sudden death. This position permits the introduction of the hand or forceps in the direction of the axis of the superior strait. If the head of the child is high the patient should be placed at the very edge of the bed, the knees kept widely apart by two assistants. If the child's head is at the inferior strait, place the patient also on her back, but not so near the edge of the bed. This position will allow of a more ready delivery of the shoulders, should these be large.

An exception to this method is when, in turning, the back of the child is to the back of the mother; then the lateral position is preferable. It will facilitate the introduction of the hand, as, in this case, the anterior plane of the child being to the mother's abdomen it is easier then to enter the uterus in the direction of the axis of the superior strait, and the feet will be easily seized, as they are placed on the anterior plane of the child.

When, in turning, the feet have been brought down, the woman should be replaced on her back, as in this position, by external pressure, the child's head will be kept flexed, its arms folded on its anterior plane, and the after-coming head and placenta may be gently expressed by the Credé or Penrose method during contraction, or the forceps applied.

Another exception to the dorsal position is when labor, too precipitate, has not been checked by an application of the forceps; the woman should then be placed on her side, especially if the pelvis is very large and the child small. This lateral position will then much moderate the uterine contractions.

Postural replacement of the cord by placing the woman in the knee and chest position, as advocated by Drs. Thomas and Papin, succeeds occasionally, but it is not to be depended upon. It sometimes succeeds when the cord presents at the superior strait, but always fails when the cord is prolapsed in or out of the vagina. This position, if prolonged, is moreover very fatiguing to the woman, and hinders labor. The surest course to follow is to apply the forceps when the head is in the excavation with a prolapsed cord, or version if the head is at or above the brim. This method in the hands of eminent accoucheurs has saved fifty-two out of sixty-four children.

In retroflexion, the knee and chest position will gently assist in attempts at reposition.

Dr. A. Vander Veer, of Albany: The excellent paper presented by Dr. Potter has received such a thorough discussion by the Fellows, that I will only make one remark in regard to the dorsal position in some of the operations we do upon the vagina. I have a narrow table that can be converted into the Trendelenburg posture at any time. It has two detachable posts against which the patient can be braced close to the operator. The position exposes the vaginal walls.

Dr. William Warren Potter, of Buffalo (closing the discussion): Dr. Ross was kind enough to suggest that I might have been more accurate, or should have perfected some of the postures to a greater degree. The difficulties in getting a good model with which to produce all the details of posture are very great. One needs

to have two or three models, and these cannot always be obtained.

Dr. Ross also spoke of replacing the displaced uterus with a sound. I have no use for the sound in such cases. The genu-pectoral position with reference to the reposition of displaced uteri can be employed with greater safety, as well as more ease and certainty.

Dr. Reed called attention to utilizing the erect posture for diagnosis in a way which I have not emphasized. I am greatly indebted for the hint, and will avail myself of the first opportunity to put it into practice.

Dr. Glasgow evidently misunderstood me. I desire to be understood as saying that the class of women who often become habituated to the faulty erect posture are the women who do not work hard in one sense, who do not scrub the floor or do the washing, for the hard-working women are less often gynecological patients than the medium-worked women who stand on their feet in the shop day after day for several hours at a time, or who sit at their sewing machines, or who apply their needles—work which inclines them constantly toward an incorrect assumption of the erect posture for standing or sitting. Finally, I do not desire to be understood as asserting that the imperfect erect posture ought to be charged as causing a large percentage of pelvic disease; but I do assert that in a percentage of disease that cannot otherwise be accounted for—namely, by puerperal, specific or traumatic infection—there is in the habitual maintenance of the faulty erect posture an adequate course to be found.

PLATE I.

Fig. 1.



HORIZONTAL POSTURE.

Fig. 2.



DORSO-SACRAL POSTURE.

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PLATE II.

FIG. 3.



GENU-PECTORAL POSTURE.

Fig. 4.



KNEE-ELBOW POSTURE.

PLATE III.

Fig. 5.



SEMI-PRONE POSTURE.

PLATE IV.

Fig. 6.



TRENDELENBERG'S POSTURE.