

## EXTERNAL PRESSURE TO THE UTERUS IN LABOR.

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In 1856 Von Ritgen suggested the employment of external pressure on the uterus as an adjuvant in cases of powerless labor. In 1867 Kristeller carried the suggestion into practice, and published a number of cases in which he had found it of use.

The object was, to *push* the presenting part through the pelvic canal in cases in which the forceps would otherwise be

required to *pull* it through ; to apply, in fact, a *vis a tergo* instead of a *vis a fronte*.

This proposal has met with but little attention in this country ; and the only author who, as far as I know, refers to it, is Dr. Barnes, in his recent admirable work. He says with regard to it: "This resource, then, should not be lost sight of. In certain cases it may obviate the necessity of using the forceps ; or it may stand you in good stead when instruments are not at hand."

It is certain that the advantages to be derived from external pressure are not yet widely known or recognized ; and as I have now received very material assistance from it in many cases of lingering and powerless labor, I believe it may not be without interest to state briefly the result of my experience on this point, especially as I do not know of any published cases in this country in which its use had been described.

The class of cases in which external pressure is likely to prove serviceable is of very frequent occurrence—viz., in which the presentation is natural, and the pelvis roomy, but in which delivery is retarded, simply from deficiency or absence of uterine contraction. These are the cases in which resort to the forceps is so often essential, in which the head has passed well into the pelvis, possibly descended as low as the perinæum, and in which apparently but one or two good pains are required to complete the delivery.

Firm pressure, applied under such circumstances, may act in two ways:—First, and most commonly, it may merely stimulate the sluggish uterus to increased exertion, just as firm pressure after delivery will cause a relaxed uterus to contract. In this way, pains that are feeble and ineffective may be rendered strong and useful, and a natural termination may result when artificial assistance might otherwise be required. I have of late been frequently in the habit of thus stimulating the uterus, and I feel certain that I have in many instance greatly shortened the progress of a labor that threatened to be long and tedious. It is, indeed, often curious to observe how rapidly the pains increase in force and duration, under the stimulation of gentle and steady pressure at the commencement of each pain. The following case may be taken as a good example of the beneficial effect of pressure applied in this way :



Mrs. —, about 35 years of age, the mother of several children. Labor commenced at noon on the 23rd of February, 1868. The pains were at long intervals, feeble, and of short duration. At 3 a.m. on the morning of the 24th the membranes had been ruptured for several hours, and the os was fully dilated. The pains were now more frequent and regular, but they had no effect in causing the head to pass through the brim. It remained partially engaged, but always receded in the intervals between the pains. After waiting for some time, it seemed as if the forceps would be required. Von Ritgen's method was now tried. The patient being laid on her back, and the hands being spread out on the sides and fundus of the uterus, firm downward pressure was made in the axis of the brim at the commencement of each pain. The good effects of this manœuvre were very striking. The first pain was manifestly increased in strength and duration, and the head was felt to advance decidedly as it was pushed down. The contractions now increased greatly in force, and in about six pains the head was expelled. It was in the third position, and the rotation of the occiput forward was readily made out as it descended. The child was of immense size, and living. The mother made a good and rapid recovery.

This may be taken as a typical example of the most usual effect of pressure—viz., to stimulate the uterus to increased exertion; and I believe it to be a far more effective and safe agent for this purpose than ergot.

Secondly, it is sometimes possible to push out, as it were, the fœtus in the entire absence of uterine pains. I presume that cases suitable for this must be rare, and that, as a rule, extraction by the forceps is to be preferred. Still, the following case may be taken as proving the possibility of occasionally effecting delivery in this way:

—, aged twenty-five, a lady of great delicacy of constitution, was pregnant of her third child. She had suffered a good deal during gestation, was immensely distended with liquor amnii, and for some months had been almost entirely confined to her sofa. Her labor commenced on the 10th of August, 1870. During most of the day she had feeble pains, and at long intervals. At 10 p.m. the os was only slightly dilated, and the head was felt to be presenting. The pains got somewhat stronger at 3 a.m., and at 4 a.m. the membranes ruptured, an enormous

quantity of water being discharged. At 6 a.m. the os was fully dilated, and the head was engaged in the brim in the first position. The pains were now scarcely worthy of the name. At short intervals there was a barely perceptible hardening of the uterus, which disappeared almost as soon as it was felt, and had no appreciable effect on the presenting part. I was informed that ergot had been administered with advantage in a former labor, and I gave her a full dose without any good result. After waiting till 11 a.m., I began to despair of any progress. The slight contractions previously felt had disappeared, or nearly so, and I made up my mind to apply the forceps.

The husband, however, objected so strongly to any instrumental interference that I determined to try the effect of pressure, although, in the uterine contractions, I scarcely expected any beneficial results.

Spreading the hands over the uterus in the usual way, I made firm downward pressure at intervals of from five to ten minutes. The effect was more favorable than I had anticipated. With each application of the pressure the head was felt to descend, and in about three-quarters of an hour it was distending the perinæum. Now for the first time some slight contraction was felt, and the head was soon expelled. The child was born alive, and the mother made an excellent recovery.

A case of this sort is no doubt quite exceptional, and I should generally prefer under such circumstance to apply the forceps. Still it may serve to illustrate Kristeller's statement that external pressure alone is capable of effecting delivery. It is, however, as an adjuvant in cases of lingering labor, and as a means of stimulating a feebly-contracting uterus, that pressure promises to be of service. I need hardly add, by way of caution, that gentle but firm pressure in a proper direction is to be used, and that all rough handling of the uterus is to be avoided. The pressure can be most readily applied with the patient lying on her back, but this is by no means essential, and I have constantly used it in the ordinary position on the side, and without disturbing the patient.