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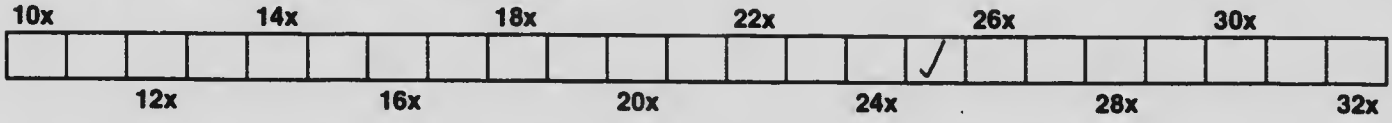

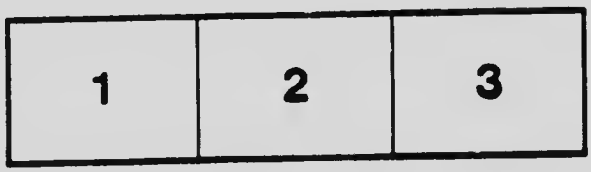

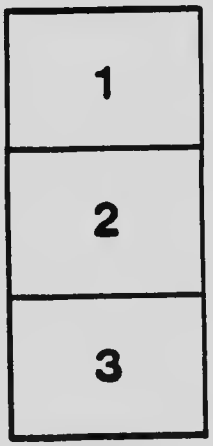

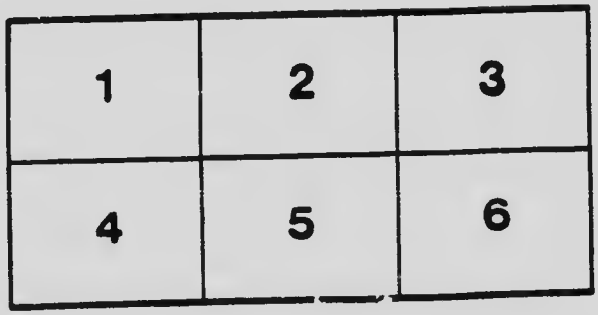

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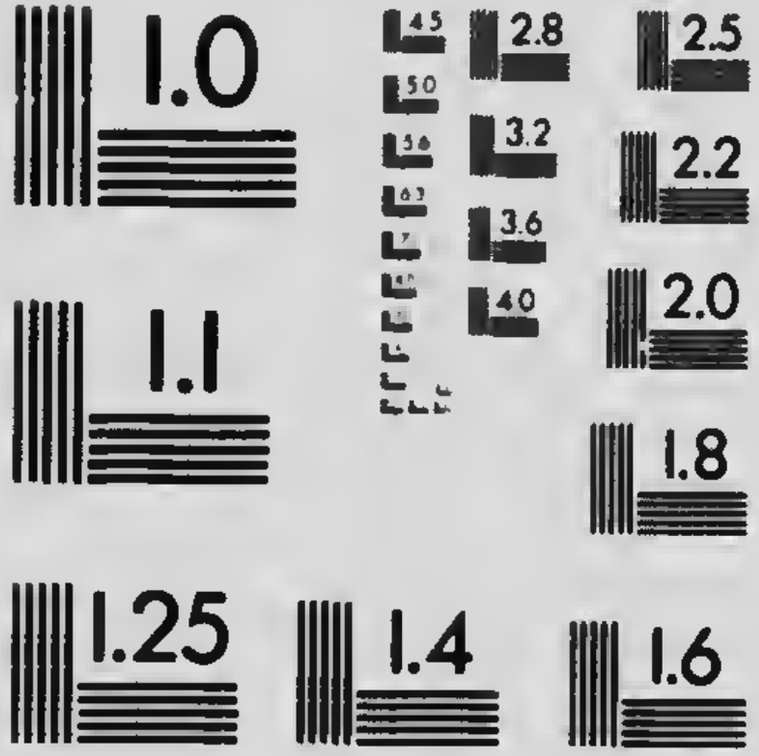

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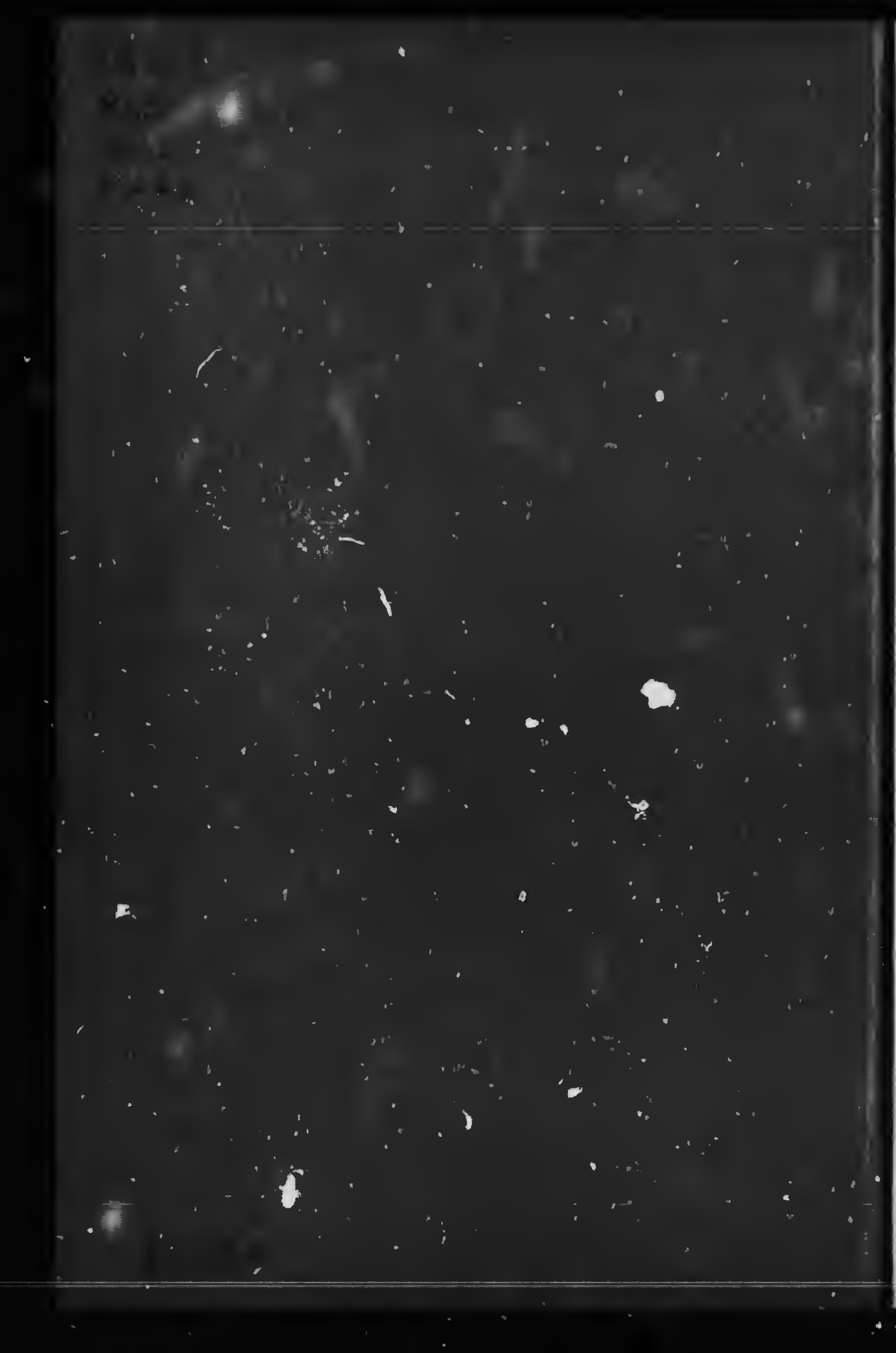
NORMAL LABOUR.

BY

R. PRESTON ROBINSON, M.D.,
Attending Physician to the County Carlton General Hospital.
Ottawa.

Reprinted from the Montreal Medical Journal, October, 1902.



NORMAL LABOUR.*

BY

A. PRESTON ROBINSON, M.D.,

Attending Physician to the County Carlton General Hospital.

The subject of normal labour in general practice is more important than has generally been recognized. My object is, therefore, to outline the subject briefly, with the hope of bringing out some important discussion on the whole subject of obstetrical practice.

At the outset I desire to say that if the laity were better informed with regard to the great importance of the proper management and treatment of the patient during gestation, as well as during her delivery and after treatment, it is my firm belief that the oft resultant wrecking of the mother's health would be materially minimized, and the manifold operations and treatment of the ambitious gynæcologist would be considerably diminished. It is not my desire, however, to depreciate the good offices of the gnyæcologist, but rather to chide ourselves, the general practitioners, for our many failures in the past to bring our patient successfully through her gestation and puerperium.

Lest I might be considered pessimistic, let me say at the outset, from observation, that I believe the results obtained at present in the management and treatment, especially of the puerperal state, are much better than the results obtained by ourselves and our predecessors ten or fifteen years ago. For this improvement, much credit is probably due to the more general understanding by the profession of asepsis and antisepis as applied to labour and the puerperal state. There is yet much room for advancement, however, and we, as physicians, should not be satisfied till we are able, even in abnormal and difficult cases, to guide our patient through her oft-dreaded and all important event, without any lacerations or complications of any kind.

Now, what is the physician's duty with regard to a patient in the early stages of gestation, who engages him for her confinement, and who may or may not draw his attention to any of the various ills to which she may be subject at this time? Some women there are who are so healthy, or who from instinct or acquired knowledge, so regulate their habits by an obedience to Nature's laws, that they require little or no advice during this period. Many, however, stand greatly in need of special treatment or advice to guide them aright in this important era.

Who can estimate the importance of a woman's environment, as well as that of her general health, in its effect upon her expected offspring

* Read before the Canadian Medical Association, Sept. 18, 1902.

while it is yet in the early embryonic stage? While scientific investigation in the human family has not yet reached a climax along this line, yet we learn from the analogy of comparative anatomy and physiology that a healthy mother, surrounded during gestation by refined and cheerful company, and the best possible environment, cannot fail to produce the most desirable and healthy features in her child both physical, mental and moral.

With regard to the diet of the patient during gestation, and other hygienic treatment, I shall say little, as the same general rules apply as at other times. The bowels should be regulated by laxative foods, mild laxatives, mineral water, etc., and the diet should be nutritious, but not excessive.

Perhaps the most important organs of the whole body to watch at this important period are the liver and kidneys, whose functions in the most healthy are ofttimes prone to be refractory on even slight provocation. Toxaemias of various kinds, with their multitudinous nefarious effects—now well worthy of our suspicion in almost every functional deviation from health—should be doubly doubted in the case of the pregnant woman who manifests any special disturbance of her physiological functions.

Pregnancy is not a disease, but a physiological incident, and can be maintained as such by the observant and ready physician. Let us not wait, then, till serious manifestation of albuminuria are apparent or the blood becomes surcharged with bilirubin or biliverdin, urea or uric acid; but set about without delay by the ordinary eliminative processes, to rid our patient of the waste products retained in the blood.

The principal reasons why our pregnant patient is peculiarly exposed to the dangers of auto-intoxication are that she is exposed to an increase of waste as well as a diminution of excretion. First, her blood contains an increased amount of poisonous material due to stimulation of the metabolic processes to provide for the nourishment and protection of the fœtus and the tissue-waste passing into her circulation from the fœtus. Secondly, the enlarging uterus may produce reflexly a spasmodic contraction of the blood vessels, and as it enlarges there is a constantly increasing intra-abdominal pressure with a growing liability to mechanical interference with the action of the liver, bowels and kidneys. I need not here enumerate the various symptoms of these toxaemias familiar to you all, but would only emphasize the importance of frequent urinalyses to ascertain the presence or absence of albumen or sugar, and above all, to measure the approximate elimination of urea from a 24 hour sample of urine, which may be deemed a reliable clinical index of elimination. A microscopic examination showing the state

of the kidney tissues will complete the data required for an exact diagnosis.

I have, perhaps, indulged in some verbosity with regard to toxæmia in pregnancy, because I recognize in its train a large factor in the causation of all the ills that may follow during labour and the puerperal state. Even pernicious vomiting of pregnancy may own toxæmia as its chiefest cause, although in this case, we should examine closely into probable peripheral sources of irritation as well. Perfect quiet and rest may be required by an excitable and weakened patient.

Irritation from a displaced uterus can be detected and corrected by bi-manual manipulation. Pessaries or aseptic tampons may be used to advantage. Should the displacement be complicated by adhesions, tampons medicated with ichthyol and glycerine are useful. If there is no pathological condition other than a cervical discharge or erosion of the os uteri, then treat with nitrate of silver applications, or dilate the os; if rigid, dilate under chloroform, which may, however, produce an abortion, mention of which should always be made if such procedure be deemed necessary. Chloral and sodium bromide may also be used to overcome the irritability of the nerve centres after eliminative measures are exhausted. Abortion or premature labour may be justifiable in extreme cases.

And now, with regard to *Labour*, it is not my intention to deal with the subject, more than to make a few observations which have frequently impressed me in my more or less limited twelve years' experience. I have learned to look upon normal labour as a physiological process which in normal conditions of health will be accomplished satisfactorily with little aid from the obstetrician. While meddlesome midwifery is surely to be deprecated, yet I believe much suffering can be averted and much appreciated aid can be rendered by the prudent, careful and judicious obstetrician.

In many cases the stage of dilatation is a much prolonged, necessarily painful and tedious process, due perhaps to the condition of the already weak, over-sensitive and exhausted patient. In such a case, my usual practice is to give a few whiffs of chloroform, and the same dilatation is accomplished by the fingers, without suffering, in three to five minutes, which would have taken by nature's patient and long suffering method hours to accomplish. Then I sometimes give her another chance in the second or expulsive stage, which is often too slow for the patient's patience or weak condition; the latter condition being usually the chief index of the length of time I wait before I again supplement her work by that most valuable though most dangerous instrument in undexterous hands, the forceps.

And here I desire to state my belief that in dexterous hands the forceps can be used successfully in almost any case of [illegible]ancement where indicated, except perhaps extreme contracted pelves or extreme monstrosity, without injury to either mother or child.

Many cases occur where the vertex is extremely large and the vagina and perineum comparatively small. These are the cases that are trying on the patience in an attempt to save the perineum, and where nature unaided, if she deliver at all, will be sure to rupture the perineum, perhaps completely into the anus.

These are cases where the experienced obstetrician can crown himself with glory, although the excellence of his work may never be recognized by anyone but himself in this world. On the other hand, the obstetrician who fails in preventative may crown himself with jewels by securing a more or less imperfect union of the lacerated perineal tissues, and the patient's knowledge of the brilliant stitching operation necessary in her extraordinary and unique case. A year or so later his patient returns with leucorrhœa and bearing down and sinking and pains galore. He now reveals to her the fact that she has a *new* disease in another and entirely different field, the gynæcologist's realm, who is in turn rendered ever grateful to his confrère for such fruitful supply.

It is not my purpose to go into the details of the *modus operandi* of the different stages of labour which every obstetrician works out more or less satisfactorily for himself. I beg leave to mention chloroform as a most useful adjunct, the benefit of which I believe to be great in almost every case when used judiciously. At the acme of expulsion, as the head is passing the introitus, the anæsthesia should generally be pushed to full unconsciousness. This not only spares the patient the severe pangs of labour, but, by retarding expulsion and by relaxing the muscular structures of the pelvic floor, it lessens the risk of lacerations at the vaginal outlet. I would also recommend the judicious use of chloroform occasionally in the second and first stages of labour. It relieves needless suffering and spares unnecessary exhaustion, but anæsthesia should be avoided till the latter part of the expulsive stage.

The mechanism of expulsion must be so regulated that the smallest circumference of the head is constantly kept within the grasp of the existing girdle. The direction of expulsion must also be controlled lest the soft parts be subjected to too great strain by misdirection of the driving force. The head should be permitted to descend only so far at each pain as can be done without exposing the tense structures to risk of tearing. To relieve the pelvic floor from undue strain by misdirection of the expelling force, press the head firmly up into the sub-pubic arch and at the same time the perineum may be supported by the palm

of the hand; thus the movements of the head may be controlled till the perineum is sufficiently stretched to ensure safety.

Having thus safely accomplished delivery, it is my practice to immediately proceed with the delivery of the placenta by a modification of the Crédé method, making only sufficient interval to tie the cord and wrap the child. With one hand firmly grasping the uterus and pressing it down and compressing it, I immediately enter the fingers of the other hand into the vagina, where, if I do not quickly find the placenta expelled, which is usually the case, I follow into the uterus and grasp or scrape if need be, with nature's best instruments, the fingers, and between my two hands I carry away, not only the placenta, but even the decidual membranes. If this final act of expulsion of the placenta and contraction of the uterus—thus completely emptying it of child, placenta membranes and incidental clots—is properly accomplished, and the uterus accordingly fully contracted, there is little or nothing to fear in the puerperal state. Nowadays, with our universal knowledge of asepsis and antisepsis, there is no excuse for septicæmia. I trust I may be pardoned, however, in this connection, for emphasizing more especially the universally admitted importance of the details of asepsis throughout the confinement.

The nails should be thoroughly cleaned and the hands scrubbed with soap and boiled water, if not in some antiseptic solution. Greater precaution still should be exercised if the physician has recently been exposed to the exanthematous diseases, diphtheria or a post-mortem examination.

The practice of keeping a puerperal patient in bed, using bed-pan, etc., and almost motionless for ten days, I think has now become almost obsolete. I am a thorough believer in attending to nature's calls in the erect posture as soon as they occur, and I encourage the patient to sit erect in bed as soon as possible, because of the advantage of gravity in aiding the natural effort of the uterus to rid itself of the natural discharge. An occasional douche with warm water or any of the weak antiseptic solutions I believe to be useful in many cases, but I do not consider it necessary as a routine practice.

Another point on which I would like to hear some discussion is with regard to the use of ergot after delivery of the placenta. In my early experience I used it as a routine practice. I discarded it gradually, till at present I believe there is little or no need for it. The only case in which I would recommend it now, is that of possible post-partem hæmorrhage from inertia and relaxation of the uterus,—a complication which I believe to be entirely a preventable accident. The application of a good pad over the uterus and a snug and well-applied bandage will

ensure safety in the case of any uterus that hai once been fully contracted. Ergot may also be considered something of an additional safeguard where, for any reason, prolonged anæsthesia has been necessary.

Chloral has its well understood use in the first stage of labour, where the os is rigid, but I am not a believer in very large doses. Better supplement its action with a few whiffs of chloroform, even at the risk of diminishing temporarily the pains.

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