

## Chapter 10 — Sunrise Slumber and Nitrous Oxid

from *The Mother and Her Child* (1916)

by William S. Sadler, M.D., and Lena K. Sadler, M.D.

© 2023 Matthew Block

### Sources for Chapter 10, in the order in which they first appear

- (1) J. Clarence Webster, M.D., “Nitrous Oxid Gas Analgesia in Obstetrics,” in *The Journal of the American Medical Association*, March 6, 1915 (pp. 812-813)
- (2) Carl H. Davis, M.D., “Nitrous Oxid Analgesia in Obstetrics,” in *The Journal of the American Medical Association*, Sept. 18, 1915 (pp. 992-994)
- (3) Frank W. Lynch, M.D., “Nitrous Oxid Gas Analgesia in Obstetrics,” in *The Journal of the American Medical Association*, March 6, 1915 (p. 813)
- (4) Carl H. Davis, M.D., *et al.*, “Abstract of Discussion on Papers by Drs. Davis and Polak,” in *The Journal of the American Medical Association*, Sept. 18, 1915 (pp. 996-998)
- (5) S. W. Bandler, M.D., “The Use of Morphine and Scopolamine in Labor,” in *American Medicine*, January, 1915 (pp. 59-62)

### Key

- (a) Green indicates where a source author first appears, or where he/she reappears.
- (b) Yellow highlights most parallelisms.
- (c) Tan highlights parallelisms not occurring on the same row, or parallelisms separated by yellowed parallelisms.
- (d) An underlined word or words indicates where the source and the Sadlers pointedly differ from one another.
- (e) Bold type indicates passages which the Sadlers copied verbatim, or nearly verbatim, from an uncited source.

- (f) **Pink** indicates passages where the Sadlers specifically shares their own experiences, opinions, advice, etc.
- (g) **Light blue** indicates passages which strongly resemble something in the Urantia Book, or which allude to the Urantia phenomenon.
- (h) **Red** indicates an obvious mistake, in most cases brought about by the Sadlers' miscopying or misunderstanding his source.

Work-in-progress Version 30 Nov. 2023  
 © 2023 Matthew Block

## X: SUNRISE SLUMBER AND NITROUS OXID

10:0.1 SINCE the public has already been told so much about obstetric anesthesia, we deem it best to go into the whole subject thoroughly, so that the expectant mothers who read this book will be able to form an intelligent opinion regarding the question, and thus be in a position to give hearty cooperation to the decision of their physician to employ, or not to employ, any special form of anesthesia or analgesia in their particular. In order to give the reader a complete understanding of “painless labor,” it will be necessary to give attention to that newer and more safe method of obstetric anesthesia called “sunrise slumber.” This method of anesthesia consists in the employment of nitrous oxid or “laughing gas,” and will be fully considered in this chapter.

### OBSTETRIC FEAR

10:1.1 In this connection we desire to reiterate and further emphasize some statements made in the preceding chapter concerning the unnatural fear and abnormal dread of childbirth.

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Webster 812)

10:1.2 We feel that

It is very important

it is very important

	in connection with this new movement in obstetrics to reduce the woman's pain and suffering to the lowest possible minimum, that the trials of labor should not be overdrawn and the pangs of confinement overestimated.
that women should not be educated to regard labor as a terrible experience, something akin to a surgical operation, necessitating the free use of anesthetics.	We must not educate the normal woman to look upon labor as a terrible ordeal— something like a major surgical operation— which, since it cannot be escaped, must be endured with the aid of a deep anesthesia.
The large proportion of patients suffer comparatively little severe pain.	10:1.3 The facts are that a very small per cent of healthy women suffer any considerable degree of severe pain— at least not after the first child.
Very often the support and encouragement of a judicious physician or nurse	We often observe that judicious mental suggestion on the part of the physician or nurse in the form of encouraging words and supporting assurances
have a marked effect in subduing nervousness and distress.	tends to exert a marked influence in controlling nervousness and subduing the sufferings of the earlier labor pains.
It is to be hoped that the new movement in obstetrics will not result in	10:1.4 We must not allow the efforts of medical science to
destroying courage, self-reliance and endurance in our women (W 812).	lessen the sufferings of child-bearing, to rob womankind of their natural and commendable courage, endurance, and self-reliance.

“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

[contd] If the belief that pain is an inevitable accompaniment of labor

has, in the past, reconciled mothers to endure it, the joy of successful motherhood has caused them to forget it.

Severe pain is not essential to childbirth,

and there is no logical reason why women should endure it.

[?]

For many centuries drugs have been used to relieve pain in surgical cases,

but it was only sixty-eight years ago that Simpson introduced anesthetics into obstetric practice.

10:1.5 We do not mean to perpetuate

the old superstition that pain and suffering are the necessary and inevitable accompaniments of child-bearing—

that the pangs of labor are a divine sentence pronounced upon womankind—and that, therefore, nothing should be done to lessen the sufferings of confinement.

Severe and unnatural pain is not at all necessary to childbirth,

and there exists no reason under the sun why women should suffer and endure it,

any more than they should suffer the horrors of a very painful surgical operation without an anesthetic.<sup>1</sup>

In this connection, it should be recalled that analgesic drugs have been introduced into obstetric practice only during the last fifty years,

while such methods of relieving pain have been used in general surgery for a much longer period.

It is now only sixty-nine years since Simpson first employed anesthetic in obstetrics,

SOURCE

Six years later, when Queen Victoria gave them her seal of approval chloroform *a la reine* became the fashion and analgesia was maintained for many hours in large numbers of cases (D 992).

ADVANTAGES OF NITROUS OXID-OXYGEN ANALGESIA (Davis 993)

Thirty years ago in speaking of the expectant mothers, Lusk warned us that:

“As the nervous organization loses in the power of resistance as the result of higher civilization and of artificial refinement, it becomes imperatively necessary for the physician to guard her from the dangers of excessive and too prolonged suffering” (D 994).

NITROUS OXID IN OBSTETRICS (Davis 993)

[contd] Klikowitsch of Petrograd applied nitrous oxid and oxygen analgesia to twenty-five obstetric cases in 1880 (D 993).

[Note: 1916 - 1880 = 36 years.]

X: THE MOTHER AND HER CHILD

while six years afterwards Queen Victoria gave her seal of approval to the use of chloroform in labor cases.

10:1.6 Thirty years ago, in speaking of the expectant mothers, Lusk warned us:

10:1.7 As the nervous organization loses in the power of resistance as the result of higher civilization and of artificial refinement, it becomes imperatively necessary for the physician to guard her from the dangers of excessive and too prolonged suffering.

**NITROUS OXID —  
“LAUGHING GAS”**

10:2.1 Nitrous oxid, or “laughing gas,” was first used in labor cases in 1880 by a Russian physician.

During the last **twenty-five** years it has been used off and on by numerous practitioners in connection with confinement, but not until the last few years has this method of relieving labor pain come into prominent notice.

10:2.2 While the “laughing gas” method of obstetric anesthesia did not gain notoriety and publicity from being exploited in magazines and other lay publications, it did get its initial boost in a very unique and unusual manner.

Arthur Guedel, in 1911, advocated the use of nitrous oxid and air analgesia during the second stage of labor; but our first knowledge of its prolonged use was in July, 1913, when Drs. Lynch and Hoag attended in confinement the daughter of a Mr. Clark, the maker of a gas-mixing apparatus.

[The patient was the daughter of Mr. Clark, a maker of instruments for anesthesia, who had sought at his own risk to try in his family the method which his demonstrators were teaching for dentistry (Lynch 813).]

In that case, Mr. Clark's demonstrator gave the anesthesia for more than six hours.

Dr. Lynch was very enthusiastic over the results obtained and since then has used it in nearly all his cases (D 993).

[See 10:2.1, above.]

A gentleman who manufactured and sold a "laughing gas" and oxygen mixing machine

for the use of dentists, insisted that this method of anesthesia should be used in the case of his daughter, who was about to be confined.

This patient was kept under this nitrous oxid anesthetic for six hours—

came out fine—

no accidents or other undesirable complications affecting either mother or child, and thus another and safe method of reducing the sufferings of childbirth has been fully demonstrated and confirmed,

although it had previously been known and used in labor cases to some extent.

10:2.3 Starting from this particular case in 1913, many obstetricians began experimental work with gas in labor cases; and, at the time of this writing, it has come to occupy a permanent place in the management of labor, alongside of chloroform, ether, and "twilight sleep."

**ANALGESIA VS. ANESTHESIA**

10:3.1 The reader should understand the difference between analgesia and anesthesia. Anesthesia refers to the condition in which the patient is more or less unconscious—wholly or partially oblivious to what is going on, and, of course, entirely insensible to all pain. Analgesia is a term applied to the loss of pain sensation. The patient may not be wholly or even partially unconscious—merely under the influence of some agent which dulls, deadens, or otherwise destroys the realization of pain. This is the condition aimed at by the proper administration of any form of “twilight sleep,” whether by the scopolamin-morphin method, or by the nitrous oxid (“sunrise slumber”) method.

10:3.2 Any method of treatment which can more or less destroy the pain of labor without in any way interfering with its progress, and which in no way complicates its course

[3. There are no ill-effects to mother or child (Webster 813).]

or leaves behind any bad effects on either mother or child,

must certainly be hailed with joy by both the patient and the physician. While chloroform has served these purposes fairly well, there have been numerous drawbacks and certain dangers; and it was the knowledge of these limitations in the use of both chloroform and ether, that has led to further experimentation and the development of these newer methods of producing satisfactory analgesia—freedom from pain—without bringing about such a state of profound anesthesia as accompanies the administration of the older methods.



10:3.3 It should be borne in mind that in using “sunrise slumber” (nitrous oxid) for labor pains, the gas is so administered that the patient is just kept on the “borderline”—in a typical “twilight” state—and not in the condition of deep anesthesia which is developed when nitrous oxid is employed by physicians and dentists as an anesthetic for major and minor surgical operations.

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Lynch 813)

Analgesia is obtained during the first stage of anesthesia.

It is the stage of *Dammerschlaf*, the threshold of sleep,

in which stimuli to the skin cause no mental impression,

and consciousness is disordered (L 813).

Gas is the ideal drug for conducting labors.

It is the most volatile of anesthetics,

acts most quickly, and its effects pass away most rapidly.

[5. The administration is under control all the time,

10:3.4 Analgesia is the first stage of anesthesia—

the “twilight zone” of approaching unconsciousness—

in which the sense of pain is greatly dulled or entirely lost,

while even that which is experienced is not remembered.

It seems to the authors that

“gas” is the ideal drug for producing this condition

whenever it is necessary,

as nitrous oxid is the most volatile of anaesthetics,

acts most quickly, and its effects pass away most rapidly,

while its administration is under the most perfect control—

it may be administered with any desired proportion of oxygen—

## SOURCE

and can be stopped at any moment (Webster 813).]

It is practically free from danger even when continued for analgesia of many hours.

Nor does the drug cause, as chloroform, lesions of the fetus,

since there is no resultant tissue asphyxia on which are dependent the visceral and hemorrhagic diseases of the new-born (Graham) (L 813).

## X: THE MOTHER AND HER CHILD

and may be discontinued on a moment's notice.

It is practically free from danger even when continued as an analgesic for several hours.

Nitrous oxid never causes any serious disturbance in the unborn child, as chloroform sometimes does when used too liberally.

## EFFECTS OF NITROUS OXID

10:4.1 It will not be necessary to compare the favorable and unfavorable claims for nitrous oxid as we did the contentions for and against "twilight sleep." Whatever service "laughing gas" or "sunrise slumber" can render the cause of obstetrics we can accept, knowing full well that, in competent hands, it can do little or no harm; and this we know from the facts herewith recited and from the further fact that we have gained a wide experience with this agent in the practice of both dentistry and surgery. In a general way, the influence of "sunrise slumber" on mother and child may be summarized as follows:

"NITROUS OXID GAS ANALGESIA IN OBSTETRICS" (Webster 812)

10:4.2 1. It can accomplish its purpose—can quite satisfactorily relieve the mother of severe pain—when employed as an analgesic.

SOURCE

X: THE MOTHER AND HER CHILD

2. Deep anesthesia is not necessary (W 813).

It is not necessary to administer the gas to the point of anesthesia

except at the height of suffering at the end of the second stage of labor, when the head of the child is passing through the birth canal.

[repeated from 10:3.4] 5. The administration is under control all the time, and can be stopped at any moment (W 813).

10:4.3 2. This method can be stopped at any moment—

the patient can be brought out from under its influence entirely and almost instantaneously.

It is not like a hypodermic injection of a drug which may exert a varying and unknown influence upon the patient, and which, when once given, cannot be recalled.

“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

ADVANTAGES OF NITROUS OXID-OXYGEN ANALGESIA (Davis 993)

It is as safe in the home as in the hospital (D 994).

10:4.4 3. It is a method which may be used in the patient’s home just as safely as in a hospital;

CHOICE OF GAS MACHINE FOR ANALGESIA (Davis 993)

the only drawback being the inconvenience of transporting the gas-containing cylinders back and forth.

This is even now partially overcome by

In the maternity ward of the Presbyterian Hospital we are using a mixing apparatus equipped with automatic regulator which enable us to maintain a constant pressure in the gas-bag.... For use in the home I have a similar machine, but on a smaller stand, so that it may be carried easily in the automobile (D 993).

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Webster 812)

4. The strength of uterine contractions is not diminished,

no matter how long the administration of the nitrous oxid gas is continued (W 813).

Expulsive efforts on the part of the patient are not interfered with,

to any appreciable extent (W 812).

As soon as the uterine contraction

begins to subside,

the inhaler is removed

and the patient is again conscious (W 812).

the improved combination gas and oxygen form of apparatus which has been devised.

10:4.5 4. The administration of nitrous oxid analgesia or anesthesia does not interfere with or lessen the uterine contractions

or expulsive efforts on the part of the mother—

at least not to any appreciable extent.

10:4.6 5. Just as soon as a severe uterine contraction—

attended by its severe pain—

begins to subside,

the gas inhaler is immediately removed,

and in a few seconds the patient is again conscious.

It is not necessary to keep the patient continuously under the influence of the drug, as in the case of the scopolamin-morphin method of “twilight sleep.”

“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

ADVANTAGES OF NITROUS OXID-OXYGEN ANALGESIA (Davis 993)

[T]he “Freiburg method” may be used only by the specialist, while nitrous oxid and oxygen analgesia may be employed safely and efficiently by all who will (D 994).

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Lynch 813)

The gas in analgesic doses

appears to stimulate the uterine pains (L 813).

There is freedom from pain (L 813).

There is no doubt of the patient bearing down more energetically when under the influence of the drug (L 813).

10:4.7 6. This method (“sunrise slumber”) is certainly far more safe in ordinary and unskilled hands than the “twilight sleep” procedure.

The patient is more safe with this method in the hands of the average doctor or trained nurse.

10:4.8 7. It has been our experience that

nitrous oxid in the smaller, interrupted and analgesic doses,

actually tends to stimulate the uterine pains and contractions,

while at the same time rendering the patient quite oblivious to their presence.

When properly administered,

the freedom from pain is perfect.

10:4.9 8. Under the influence of “gas,” patients often appear to “bear down” with increased energy.

It certainly does not lessen their cooperation in this respect.

There was no case of inertia,

post-partum hemorrhage or shock (L 813).

[Repeated from 10:3.4 and 10:4.3: 5. The administration is under control all the time,

and can be stopped at any moment (Webster 813).]

“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

COST OF NITROUS OXID-OXYGEN ANALGESIA (Davis 993)

Should an operative delivery be necessary, the analgesia is increased to anesthesia (D 993).

[Note: The Sadlers here seem to be using ‘analgesia’ and ‘anesthetic’ interchangeably, after having spent the previous chapter distinguishing their meanings.]

10:4.10 9. We have not observed, nor have we learned of,

any cases of inertia

(weak and delayed contractions),

post partum hemorrhage, or shock,

as a result of “laughing gas” or “sunrise slumber” analgesia.

10:4.11 10. This method lends itself to perfect control—

it may be decreased, increased,

or discontinued, at will;

it may be given light now and heavy at another time;

while, at the height of labor, it may be pushed to the point of complete anesthesia, if desired.

10:4.12 11. We have found “sunrise slumber” (nitrous oxid) analgesia to be the ideal obstetric anaesthetic, and have adopted it quite to the exclusion of both chloroform and “twilight sleep.” We find that this form of analgesia has all the advantages of “twilight sleep” without any of its dangers or disadvantages.

## COST OF NITROUS OXID-OXYGEN ANALGESIA (Davis 993)

After considerable experimenting we have made a hospital charge of \$1.50 per hour for the nitrous oxid and oxygen used in maintaining analgesia.

As we use the large cylinders, it allows for any leakage and usually gives the hospital a small profit (D 993).

## ABSTRACT OF DISCUSSION ON PAPERS OF DRS. DAVIS AND POLAK (Davis, et al. 998)

While the cost is increased by using the small tanks which must be employed in the homes, the cost should average from four to six dollars and rarely exceed twelve dollars (D 998).

## “NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Webster 812)

The technic is very simple.

Usually the administration is begun

10:4.13 12. A possible objection to the nitrous-oxid method is the cost, especially in the private home.

The average cost in the hospitals where we are using this method runs about \$2.00 for the first hour and \$1.50 for each hour thereafter.

This is the cost when using large tanks of gas,

and is, of course, somewhat increased when the smaller tanks are used in the patient's home.

**METHOD OF ADMINISTRATION**

10:5.1 Since it was thought best to give the reader some idea of the technic for the administration of “twilight sleep,” it may not be amiss to explain how “sunrise slumber” is usually employed in labor cases.

The technic is very simple.

The administration of the gas is generally begun

SOURCE

when the patient complains of second stage pains,

though it may also be used during the first stage.

In the majority of cases, however,

gas is not necessary during the greater portion of this period (W 812).

The apparatus is that ordinarily employed by dentists (W 812).

[contd] It has been found best to use a small nasal inhaler, the mouth of the patient being uncovered.

[The best results are obtained with a nose-piece such as is used by dentists, but the ordinary mouth-piece will answer (Lynch 813).]

The gas-bag attached to the tank is kept under lower pressure

and, as the pain begins, the patient is instructed to breathe quietly, keeping her mouth closed.

Ordinarily, light inhalation suffices to produce the analgesic effect.

It is not necessary to cause asphyxiation or jactitation which are due to the inhalation of large quantities of gas (W 812).

X: THE MOTHER AND HER CHILD

about the time the patient begins seriously to complain of the severity of the second stage pains;

although, of course, the gas can be given during the first stage pains if desired.

In the vast majority of cases, however,

we think it is best to encourage the patient to endure these earlier and lighter pains without resorting to analgesic procedures.

10:5.2 The form of apparatus used is the same as that employed by dentists

and contains both nitrous oxid and oxygen cylinders.

A small nasal inhaler is best,

although the ordinary mouthpiece will do very well.

The gasbag attached to the tank should be kept under low pressure

and, as a pain begins, the patient is told to breathe quietly, keeping the mouth closed.

As a rule this sort of light inhalation serves to produce the desired analgesic effect.

It is not necessary to put the patient deeply under in order to relieve the pain.



“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

NITROUS OXID IN OBSTETRICS (Davis 993)

It is our custom at the Presbyterian Hospital to begin the analgesia whenever the uterine contractions become painful.

If started early in labor, we use a higher percentage of oxygen

and give three or four inhalations.

Later we use less oxygen

and allow five or six deep inhalations previous to the bearing-down effort.

The gas must be inhaled with the first suggestion of a contraction;

after the patient has made strong traction on the straps, which we fasten to the foot of the bed,

she is often given another inhalation containing a larger percentage of oxygen (D 993).

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Lynch 813)

Pure nitrous oxid gas is turned full on at the beginning of the pain,

and the patient is told to breathe deeply but rapidly through the nose (L 813).

10:5.3 It is our custom to begin “sunrise slumber” as soon as the uterine contractions become painful.

The earlier the gas is started, the more oxygen should be used.

Two or three inhalations

will suffice to take the “edge” off the earlier and lighter pains.

When the pains grow heavier we use less oxygen

and permit three or four deep inhalations just before a bearing-down pain.

At the first suggestion of a contraction, the patient must begin to inhale the gas;

while after the patient has pulled hard on the traction strops—

just as the contraction pain is passing—

she is given an inhalation containing a larger percentage of oxygen.

10:5.4 At the beginning of a pain, pure nitrous oxid is administered,

and the patient is instructed to breathe deeply and rapidly through the nose.

“NITROUS OXID ANALGESIA IN OBSTETRICS” (Davis 992)

NITROUS OXID IN OBSTETRICS (Davis 993)

In giving the analgesia the gas-bags should be only about half filled.

The mixture required aries considerably and must be determined for each patient (D 993).

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Lynch 813)

[contd from 10:5.4] Five or six respirations suffice to produce analgesia,

even in the presence of the uterine contraction.

The patient is told to breathe through the mouth,

and analgesia is maintained by admixing oxygen with the gas until the end of the pain (L 813).

The percentage of oxygen varies from nothing to 10 per cent (L 813).

This process is repeated with each pain (L 813).

The gasbags should be about half filled.

The mixture of gas and oxygen must be determined by the severity of the pains and individual behavior of the patient.

10:5.5 Four to six inhalations of the gas are sufficient to produce the required analgesia in the average case.

Following the first few deep inspirations through the nose,

the patient can be instructed to breathe through the mouth,

while the gas is well diluted with oxygen and continued until the end of the pain.

In this way a satisfactory analgesia is maintained throughout the “pain” with a minimum of “gas.”

The proportion of oxygen used will run from nothing up to ten per cent.

This procedure is repeated with the occurrence of each pain.

10:5.6 The use of the “mask” is just as effective as a nasal inhaler,

It is more difficult to maintain analgesia with the mouth-piece without wasting much gas, since the depth of anesthesia is now more difficult to control (L 813).

When the head distends the perineum, the anesthesia is carried to the surgical degree,

and the color of the patient is controlled with oxygen (L 813).

“NITROUS OXID GAS ANALGESIA IN OBSTETRICS” (Webster 812)

[contd] For many years chloroform and ether have been used to alleviate the pains of women in labor.

Valuable as these agents are when deep anesthesia is required for the carrying out of operative procedures, they have not proved satisfactory as analgesic agents.

If administered in small quantities at the commencement of a strong uterine contraction, the patient does not usually inhale sufficient to abolish pain.

She is then apt to be irritated and is certain to insist on being given a larger quantity.

but wastes more gas

and so is more costly.

10:5.7 When the head is passing the perineum the gas should be pushed to the point of anesthesia,

while the patient’s color will suggest the amount of oxygen to be used as well as serve to control the administration of the nitrous oxid.

## CHLOROFORM AND ETHER

10:6.1 For many years chloroform and ether have been used to alleviate the pains of women in labor.

Valuable as these agents are when deep anesthesia is required for the carrying out of operative procedures, they have not proved satisfactory as analgesic agents.

If administered in small quantities at the commencement of a strong uterine contraction, the patient does not usually inhale sufficient to abolish pain.

She is then apt to be irritated and is certain to insist on being given a larger quantity.

If a sufficient amount be administered to satisfy the woman, the continued repetition gradually inhibits the power both of the uterus and of the accessory muscles,

so that labor is unnecessarily prolonged, and, possibly, the life of the fetus endangered.

Physicians have, therefore, been accustomed to employ these drugs very sparingly, restricting their use to the very end of the second stage,

during the painful passage of the head through the vulva.

The results of the administration at this time are also uncertain.

If delivery be rapid the woman may not be able to inhale sufficient to abolish her consciousness of pain.

If it be slow she may take too much and weaken the muscular powers, thereby prolonging labor and, often, necessitating forceps delivery.

It is not surprising, therefore, that the medical profession has long been hoping that a more satisfactory method of relieving the pain of labor would be found (W 812).

If a sufficient amount be administered to satisfy the woman, the continued repetition gradually inhibits the power both of the uterus and of the accessory muscles,

so that labor is unnecessarily prolonged, and, possibly, the life of the fetus endangered.

Physicians have, therefore, been accustomed to employ these drugs very sparingly, restricting their use to the very end of the second stage,

during the painful passage of the head through the vulva.

The results of the administration at this time are also uncertain.

If delivery be rapid the woman may not be able to inhale sufficient to abolish her consciousness of pain.

If it be slow she may take too much and weaken the muscular powers, thereby prolonging labor and, often, necessitating forceps delivery.

It is not surprising, therefore, that the medical profession has long been hoping that a more satisfactory method of relieving the pain of labor would be found.

## CONCLUSIONS

10:7.1 In summing up our conclusions regarding analgesia and anesthesia in labor cases, the authors would state their present position as follows:

10:7.2 1. That anesthetics or analgesics are a necessary accompaniment of confinement in this day and age; that the average labor case demands some sort of pain-relieving agent at some time during its progress; but that intelligent efforts should be put forth to limit and otherwise control their use. While we recognize the necessity for avoiding needless suffering, at the same time we must also avoid turning our women into spineless weaklings and timid babies.

10:7.3 2. That we should seek to develop, strengthen, and train our girls for a normal and natural maternity; that we should study to attain something of the naturalness and the painlessness of the labors of Indian tribes; and, even if we partially fail in this effort, we shall at least leave our women with ennobled characters and strengthened wills.

10:7.4 3. That the scopolamin-morphin method of inducing “twilight sleep” has its place—in the hands of experts—and in the hospital;

[[T]he treatment continues for it is apparently the best method so far discovered to mitigate the pains during the first stage of labor (Ralph **Waldo**, M.D., F.A.C.S., “Relieving the Pain of Childbirth” [1915]).]

and that in many cases it probably represents the best method of obstetric anesthesia which can be employed.

10:7.5 4. That as a general rule and in general practice, the safest and best method of inducing the “twilight” state of freedom from severe pain, is by the use of nitrous oxid or “laughing gas”—the “sunrise slumber” method. **It has been our practice to start all general ether anesthetics with gas for a number of years, while we have been doing an increasing number of both minor and major operations with “gas” alone.**

10:7.6 5. That we still employ general ether or chloroform anesthesia in Cesarean sections and other major obstetric operations, although several operators are beginning to use “gas” in even these heavy cases.

“THE USE OF MORPHINE AND SCOPOLAMINE IN LABOR” (Bandler 59)

It has been my experience in the last two or three years that the judicious use of pituitary extract in small and repeated doses, never more than 1/3 or ½ ampule at a time,

has shortened the duration of labor

and has most decidedly diminished the necessity in a large proportion of cases, for the use of forceps in the second stage (B 61).

10:7.7 6. That the intelligent and careful use of pituitary extract

in certain cases of labor

serves greatly to shorten the second stage;

that it is of great value in certain “slow cases,”

and serves greatly to reduce the use of low forceps.

10:7.8 We have treated the subject of obstetric anesthesia in this full manner, because of the fact that so much has appeared in the public press on these subjects, and, further, because we desired that our readers should have placed before them the facts on all sides of the question just as fully as a work of this scope would permit.

1. Similar to this statement in 9:1.5:

At the same time we do not mean to advocate that women should suffer unnecessary pain any more than we allow them to suffer in connection with surgery.