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*** START OF THE PROJECT GUTENBERG EBOOK REMARKS ON THE SUBJECT OF LACTATION ***

REMARKS ON THE SUBJECT OF LACTATION,

&c. &c.

REMARKS

ON THE SUBJECT OF

LACTATION;

CONTAINING

OBSERVATIONS

ON THE

HEALTHY AND DISEASED CONDITIONS OF THE BREAST-MILK;
THE DISORDERS FREQUENTLY PRODUCED
IN MOTHERS BY SUCKLING;

AND

NUMEROUS ILLUSTRATIVE CASES;

PROVING THAT, WHEN PROTRACTED, IT IS A COMMON
CAUSE, IN CHILDREN, OF

HYDRENCEPHALUS, OR WATER IN THE BRAIN,

AND

OTHER SERIOUS COMPLAINTS.

BY

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TO

SIR HENRY HALFORD, BART., M.D., F.R.S., F.A.S.,

**PRESIDENT OF THE ROYAL COLLEGE OF PHYSICIANS, LONDON,
PHYSICIAN TO THE KING, &c. &c.**

THE FOLLOWING PAGES

ARE,

WITH HIS PERMISSION,

AND WITH

**A GRATEFUL SENSE OF THE HONOUR THUS CONFERRED UPON THEIR
AUTHOR, MOST RESPECTFULLY**

DEDICATED.

PREFACE.

[Pg vii]

Several cases which I witnessed led me to believe, some years ago, that inflammation of the brain, or its membranes, might be produced in children, owing to their being suckled for an undue length of time. Since that period, having enjoyed opportunities of observing infantile diseases on a much more extended scale, and my attention being expressly directed to the point in question, I not only became fully convinced of the correctness of my previous conclusions, but was induced to carry them still farther.

My opinions on this subject were briefly drawn up and published in the *Medical and Physical Journal* for August 1827, and have not passed altogether unnoticed by my professional brethren^[1], some of whom have done me the honour to speak of them in flattering terms, while no one, I believe, has attempted to disprove the existence of the important fact I was the first to announce.

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[1] Vide *Medico-Chirurgical Review*, *Gazette of Health*, *Dendy on Cutaneous Diseases*, &c.

The bare statement of that fact was, indeed, nearly all that my approaching departure from England, at the time last mentioned, left in my power: upon the present occasion I have offered arguments for, and endeavoured to anticipate those against, the deductions I then made public; and however imperfect may have been my success in either, the welfare of society at large is too deeply involved in the establishment of my opinions with respect to the custom I condemn, (if

those opinions be correct,) for me to hesitate while again committing them to the press in a more extended form.

These considerations, I respectfully submit, will render any apology for the appearance of the following pages unnecessary, and will, I trust, secure for them a candid and favourable reception from the Profession and the Public. [Pg ix]

15, Eaton Street, Grosvenor Place,
October 8, 1831.

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ERRATA.

Page 10, *for two read* a few.

Page 52, dele comma between the words *Tabes* and *Mesenterica*.

Transcriber's Note: The above corrections have been applied to this text, in addition to:

Page 18, *headach* corrected to *headache*.

CHAPTER I.

[Pg 1]

Of the Breast-Milk, &c. &c.

No sooner has the child been ushered into the world than the breasts of the mother pour forth their milk for its sustenance. This bland fluid is secreted from the blood, and varies, in quality and quantity, according to the time which has elapsed from delivery, being peculiarly and wonderfully adapted at every period to the wants of the individual for whose use it is destined. Thus, that first secreted, called *colostrum*, possesses a purgative quality evidently intended by the all-wise Author of our being for the purpose of removing *the meconium*^[A],—a process which experience has sufficiently proved to be necessary for the welfare of the newly-born infant. Afterwards, ceasing to possess this aperient property, it is calculated solely for affording nutrition; and finally, at a certain period from delivery, it gradually becomes impoverished, loses its former healthy qualities altogether, and acquires others which are injurious to life. This important change, as above noticed, generally happens at a certain period after delivery; varying, however, somewhat in particular women, and in the same female on different occasions: but, from disease, or other circumstances, the milk may become deteriorated before the time to which reference has just been made. If, for instance, the mother labour under any serious disorder, it is

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universally admitted that her milk may also become unhealthy; and this may take place even a short interval after delivery.

Although we cannot explain how the brain and nerves act, and probably never shall be able to do so, yet we are well aware that their influence is absolutely requisite for the healthy performance of every function in the human body.

That mental inquietude will impede digestion is a fact familiar to almost every one; but, I believe, it is not so generally known, that it will with no less certainty retard and alter the nature of the secretion furnished by the breasts of the lactescent female. Violent affections of the mind will cause the milk to become thin and yellowish, and to acquire noxious properties: even the fond mother's anxiety, while hanging over the couch of her sick infant, will be sufficient to render it unfit for the sustenance of the object of her solicitude. [Pg 3]

The state also of the stomach and bowels and the diet of the nurse materially and constantly influence the nature of the lacteal secretion.

The milk, besides, is liable to deterioration from another cause, namely, the recurrence of the usual periodical appearance—for should this take place in a nurse, it is agreed that her milk is liable to produce disorders in the child who imbibes it; which could not happen, if the former possessed its ordinary component parts, and retained its natural properties.

The recurrence, moreover, of pregnancy in the lactescent female may render the milk of a bad quality, and will invariably lessen its quantity. Mr. Burns asserts that in these cases the milk 'does not become hurtful,' but in this opinion I must beg leave to differ from him; since I have repeatedly seen it, from this cause, palpably altered in appearance, and have observed diarrhoea and great debility produced in the children who were suckled with it. [Pg 4]

An almost universally received opinion among females, and, indeed, one very frequently entertained by members of the medical profession, is, that while a woman continues to nurse her infant she will not again become pregnant; but this, as a general proposition, is unquestionably erroneous; it is even doubtful whether such opinion will hold good in a majority of instances. The continuance of lactation will very generally, it is true, tend to prevent the recurrence of the periodical phenomenon; yet, nevertheless, it will not in every instance prevent pregnancy^[B]. Should, however, a woman with an infant at the breast again become pregnant, (a circumstance that very frequently occurs, and of which, from the *general though not invariable* absence of those criteria by which this fact is accustomed to be recognised, she is not aware until it has made some progress,) one of two things will usually take place; either she will miscarry, or her milk will become impoverished in quality and diminished in quantity. Nor is this wonderful—it was not intended by Nature that the processes of pregnancy and lactation should go on simultaneously, but, on the contrary, that the one should commence when the other had terminated; and experience sufficiently proves that they will not proceed well together: the reason of which, as it appears to me, may be easily given. During pregnancy, and particularly during its latter periods, the vessels of the womb gradually enlarge, and a much greater quantity of blood than usual is determined to that organ for the increase and perfection of the embryo and its appendages; which, after delivery, becomes transferred to the breasts to supply the material for the secretion of the milk: but if, during pregnancy, lactation be also persevered in, the blood becomes directed at the same time to two different parts of the body, somewhat remote from each other, namely, to the womb, and to the breasts; hence, neither is likely to receive its due proportion of this vital fluid, and, consequently, the functions of one or the other, or both, are liable to become impeded or suspended. If the breasts continue to receive a sufficient quantity of blood, the secretion of milk goes on properly, but the womb is deprived of its necessary supply; the embryo, in consequence, languishes and dies, and, becoming an extraneous body, is thrown off, producing abortion; while, on the other hand, should the womb still obtain its due proportion of blood, the breasts are robbed of it, and the secretion of milk, if not altogether suppressed, is rendered either deficient in quantity or deteriorated in quality. [Pg 5]

Finally, the breast-milk may become depraved and injurious by the process of lactation being continued too long, a practice which is, unfortunately, in this, as well as other countries, extensively prevalent. [Pg 6]

I have not yet had an opportunity of examining the breast-milk in these diseased conditions except by the eye, and that rarely—but even this slight examination has enabled me to state, that it was greatly altered from its natural condition;—that it was more fluid than usual, and changed in colour, resembling a yellowish turbid serum, instead of displaying its well-known bluish hue.

I propose in future to attend carefully to this subject, and I would beg leave to recommend it as one well worthy the notice of those members of our profession who have made animal chemistry a particular study, having no doubt that they would be able, by a series of accurate experiments upon the breast-milk at different periods after delivery, and under various conditions of the mother, to collect many interesting and important facts—such, perhaps, as would tend very materially to augment our knowledge of pathology, and improve our practice in the treatment of certain diseases^[C]. [Pg 7]

We cannot but believe that the Supreme Being has done nothing without an infinitely wise and good object, and it is obviously our interest, no less than our duty, to be guided by those indications of the Divine purpose which are distinctly to be traced throughout the creation.

It must appear evident to all who examine the matter in question, that the infant was intended to be nourished for the first few months of its existence through the medium of a fluid; because no teeth are provided to prepare for its use substances of a more solid description; and there can be no doubt that this fluid is the mother's milk;—but when the child has attained a certain age the teeth begin to appear, doubtless at the precise time when they are meant to be used; and, therefore, more solid food should now be given. Besides, in consequence of its new acquisition, the child sucks less perfectly than before, an additional proof that weaning ought at this period to be commenced. Indeed, the teeth are calculated indirectly to produce this effect themselves, the mother being now liable to suffer inconvenience by letting the child take the breast—for the latter *bites* instead of *sucking* the nipple, and the pain hence arising may, perhaps, induce the former, for her own sake, to discontinue a practice injurious to both.

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It must also be remembered, that when the teeth are usually produced, the milk loses its nutritious properties, and this too at a time when the infant from his increasing size must evidently require a more solid and substantial, rather than a thinner and less nourishing diet. What rational argument, therefore, can be offered why he should still be suckled? If we observe the brute creation, do any analogies appear by which we can defend the propriety in the human species of protracted suckling? by no means:—on the contrary, we find that the female animals soon drive away their young from their dugs; and what is, perhaps, still more to the purpose, I have heard stated, on good authority, as a well-known fact among the breeders of cattle, that if calves be allowed to suck beyond a few months they do not thrive, but, on the contrary, become lean and diseased.

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The belief so generally prevailing, that the longer a child is suckled the stronger it will become, is a prejudice, like many others concerning women and children, which has been handed down from mother to daughter for ages, and has thereby become so universally entertained and so deeply rooted in the minds of females, that even medical men scarcely venture to question its propriety. My own experience, however, compels me to declare, that there is not a more erroneous or mischievous doctrine; and I can most truly affirm, that I never yet witnessed an instance where protracted lactation had produced any good effect^[D], though I have seen numerous examples (some of which will be introduced hereafter) where, I believe, it had been the indirect cause of death.

Having thus strongly noticed the impropriety of long continued suckling, it will, perhaps, be proper to state my opinion as to the period when this process should terminate. As a general rule, at nine months after birth the child ought to be entirely weaned; and in no instance should he be permitted to suck more than ten. In many cases suckling may be relinquished with advantage (and occasionally it is absolutely necessary to discontinue it) before the time first above mentioned; in others, however, it may be protracted beyond it.

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I by no means recommend the breast-milk to be at once superseded by artificial food, but, on the contrary, that the child should be *gradually* accustomed to such aliment from a much earlier period; the proportion of the latter being increased by degrees, while the breast-milk is diminished in a corresponding ratio. Hence we shall produce a double advantage; the mother will be benefited as well as the child—the former, by giving suck less frequently, and in smaller quantities at a time than usual, will have the secretion of milk *gradually lessened*, and, therefore all likelihood of inconvenience, as far as regards herself when the child is entirely weaned, will be completely prevented; while, on the other hand, the child being *insensibly estranged* from the breast, will have become accustomed to his new food, so that there will be less chance of its disagreeing with him when it forms his sole support; and thus the danger which is generally apprehended from weaning will be either materially lessened or altogether avoided.

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The difficulty of bringing up infants by hand, as it is termed, is well known; but I suspect that the great mortality which has been recorded as occurring from this source is not inseparable from the practice itself, but arises mainly from the improper manner in which it is usually conducted. When it is determined to bring up an infant by hand, the substitute offered for the mother's milk should as nearly as possible resemble that fluid; and the child should be constrained to imbibe it in *the same manner as* it would *the milk from the maternal breast*; that is, it should be *sucked* from a bottle contrived for that purpose, instead of the child being gorged with it, by means of a large spoon, or some other equally improper instrument, as is the usual custom. It is a fact too palpable to be questioned, that the food generally given to infants brought up by hand is not only administered in an improper manner, but is also of an improper quality; their tender stomachs are daily overloaded with *solid* instead of *liquid* aliment, and hence arises the numerous train of evils which, in my opinion, produce the great mortality just referred to.

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CHAPTER II.

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On Lactation, and the Disorders frequently produced in Women by that process.

There can be no doubt that, speaking generally, a mother is bound to suckle her children, and that the performance of this duty is no less conducive to her own health than to the moral and physical welfare of her offspring; yet there is not a more unfounded doctrine than that which

presumes every woman who is willing to be also capable of advantageously discharging the important office of a nurse.

If the mother enjoy good health, and the process be not continued too long, it is likely to produce beneficial effects both in herself and her infant; but if she be of a very delicate habit—labour under any dangerous disease—be subject during the period of lactation to great affliction, or constant mental inquietude—or should the periodical appearance return, pregnancy occur, or suckling be continued too long, it may not only prove highly detrimental to herself, but may be the means of occasioning serious or fatal consequences to her child.

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In cases of extreme delicacy of constitution, lactation will often produce the worst effects. Many young ladies, on becoming mothers, are incapable of supporting the constant drain to which the wants of their infants subject them—they lose their good looks, become gradually weaker, and as their strength declines, their milk is simultaneously lessened in quantity, and altered in its other properties.

If the suckling be still continued, their debility daily increases, distressing pains in the back and loins succeed; the patients become exceedingly nervous, as it is termed, and are unusually susceptible of ordinary impressions; pain in the head, often of great violence, follows, which, in some cases, is succeeded by delirium, in others, by absolute mania. Nor is this the whole catalogue of ills to which in such cases the unfortunate mother is subjected: the appetite fails, distressing languor is experienced by day, while copious perspirations deluge her by night, and dissipate the last remains of strength—producing a state which may easily be mistaken for, or terminate in, true pulmonary consumption;—finally, the sight becomes progressively weaker, until vision is almost destroyed; the eyelids exude a glutinous secretion, and ophthalmia itself is occasionally induced.

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These are the symptoms too often caused by lactation in delicate or debilitated habits, even a few months after delivery; the same also are observed when suckling has been injudiciously protracted beyond the period to which it should be confined.

A few only of the foregoing symptoms may be noticed, or nearly the whole may present themselves, in the same patient; and when this happens, unless the cause which has given rise to them be at once detected, and appropriate treatment employed, the most serious consequences may be apprehended.

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In these cases, the first step necessary is to discontinue the suckling altogether: half measures will never answer. Sometimes it is proposed by the patient, or her friends (more usually the latter), to compromise the affair by feeding the child partly on spoon meat, and allowing him still to take the breast, though less frequently than before.

This plan I uniformly object to, for the following reasons:—

1st. Because the mother will not be likely to recover so long as she continues to suckle at all.

2nd. Because her milk being necessarily of a bad quality, it cannot be expected that the child will derive benefit from it; but, on the contrary, there is every probability that his health will suffer by using diet of such an improper description.

The obvious dependence of the foregoing symptoms upon debility will, of course, at once suggest to practitioners the nature of the treatment to be adopted: which should be such as is calculated to invigorate the system generally—namely, the administration of tonics, &c.

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Bark and its various preparations, especially the sulphate of quinine, with the occasional use of warm aperients (sedulously avoiding the more violent purgatives), will be found eminently successful; whereas, cupping at the nape of the neck (which I have seen prescribed for the headache), and other depletory measures, have proved as manifestly injurious.

'Every disease productive of great weakness is increased by the state of the system which follows child-bearing. Of this description are consumption, dropsy,' &c. In these cases it is evident that the process of lactation, by adding to the debility already present, must prove highly injurious, and consequently should be always avoided.

I have already noticed the effects which are produced upon the milk by the influence of mental emotions on the part of the mother, as well as by the recurrence of the periodical appearance; and since these are chiefly injurious to the child, by depraving its sustenance, their further consideration will be deferred till the next chapter.

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With respect to the remaining topic—namely, the occurrence of miscarriage from suckling—I am convinced that it is by no means an unfrequent accident, though its real cause is perhaps rarely suspected, having only met with one patient who considered the mishap in question to have arisen from keeping her child too long at the breast. Having already, I trust satisfactorily, explained the manner in which abortion is produced by the act of suckling, I shall conclude this part of my subject with the relation of a case that occurred in private practice, which so strongly corroborates many of the observations in the preceding and following pages, that I shall offer no apology for its introduction: more particularly, since the lady herself to whom it refers has benevolently expressed a wish for its publication, in order that those who become acquainted with the facts there detailed may be prevented from undergoing similar unnecessary sufferings:

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CASE.

Mrs. A—, a lady of delicate constitution, about twenty years of age, three or four months subsequent to the birth of her first child, began to find her milk gradually lessen in quantity; it had also much changed from its previous appearance, resembling at the time just stated, a yellowish, turbid serum. Her child became emaciated; and diarrhœa supervening, my professional services were required. My advice was, that the child should be at once weaned, and a suitable wet-nurse, if possible, procured—neither of which suggestions, as will shortly appear, were followed. I urged the necessity of this measure more particularly, because Mrs. A— was daily getting thinner and weaker; she also complained of great pain in the head and back, and of an increasing dimness of sight, which made her fear she should become blind; but the mother-in-law of my patient being, unfortunately, of opinion that pregnancy in the latter would not again occur during the continuance of lactation, recommended that the child, although chiefly supported upon spoon-meat, should occasionally be allowed to take the breast; and this plan, notwithstanding the wish of Mrs. A— to the contrary, and my own remonstrances on the subject, was adopted—the effects of which were to increase the mother's ailments, as well as those of her infant. Things went on thus for some time longer, when I once more endeavoured to persuade Mrs. A— to follow my advice, observing, that by an opposite line of conduct she was not only injuring her own health, but that of her child, neither of which, I assured her, in my opinion, would be re-established till the latter had been weaned. I expressed also my complete incredulity as to the non-recurrence of pregnancy in consequence of her infant remaining at the breast; and I added—'It is my firm conviction that if you be pregnant, or should happen shortly to become so, you will miscarry.' About a week after this conversation she was suddenly seized with flooding, and what I had predicted took place. She now left off suckling, and in about a month, under suitable treatment, completely got rid of all her former complaints: the child also immediately began to improve.

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The present case clearly proves that the process of lactation will not *invariably* prevent the occurrence of pregnancy, since Mrs. A— became in this state, notwithstanding she continued to suckle her child: and I think few will be so hardy as to doubt that it was the cause of her miscarrying: more particularly when I mention that, at a future period, the same lady, during my absence abroad, being once more persuaded to try whether she could not avoid becoming pregnant (which was very much to be desired, on account of her delicate state of health) by continuing to perform the duties of a nurse, again suffered all the distressing symptoms before described, and again miscarried.

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This case, finally, affords evidence of the evil consequences often produced in children by impoverished and unhealthy milk; and of their speedy disappearance when the exciting cause—namely, deteriorated milk—is no longer afforded.

CHAPTER III.

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On the various Diseases which frequently arise in Children from Lactation, especially when protracted.

Having thus briefly considered some of the disorders to which women are subjected by performing the first duty imposed upon them as mothers, I shall next advert to those which are very frequently observed in their children from being suckled during too long a period; or in consequence of the nurse's milk becoming either simply impoverished, or of a positively injurious quality.

These diseases are numerous, and some of them serious, among which may be enumerated the following; namely, vomiting, diarrhœa, general debility, scrofula, tabes mesenterica,—rickets, convulsions, epilepsy,—and lastly meningitis, or that peculiar inflammation of the investing membranes of the brain which gives rise to the effusion of serum, constituting the well known and very fatal disease termed by medical practitioners Hydrocephalus, or Hydrencephalus, and popularly Water on the Brain.

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The disease last mentioned being by far the most important, and that chiefly referred to in the following observations, I shall commence with a brief statement of the conclusions which my experience has led me to form respecting it; they are the same I made public four years ago^[E], having since that time seen no reason to make any alteration in them. I believe,

1st,—That if children be suckled for an undue length of time^[F], they will be liable in consequence to be affected with meningitis^[G], or inflammation of the investing membranes of the brain.

2dly,—That should they not become affected with the disorder in question during or soon after the time they are thus improperly suckled, they will nevertheless acquire therefrom a predisposition to cephalic disease at some future period of their lives.

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3dly,—That children who are suckled for an undue length of time, when labouring under other diseases, will be much more liable to have the head secondarily affected, than children brought up in a different manner.

4thly,—And lastly, that the same effects will take place in infants if suckled by women who have been delivered an undue^[H] length of time; although the infants themselves may not have been at the breast for too long a period.

CASES IN ILLUSTRATION OF THE FOREGOING VIEWS.

I.

Cases of Meningitis^[H] supervening upon protracted suckling.

CASE I.

— Wilshire, aged two years seven months, died of '*Water on the brain,*'—suckled twelve months.

CASE II.

— Park, aged one year ten months, died of '*Water in the head,*'—suckled fourteen months.

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CASE III.

Prince V—, aged two years and a few months, died of *Hydrencephalus*,—suckled until his death. In this case I was consulted a short time previously, and recommended the breast-milk to be withheld—my advice was not followed.

CASE IV.

Emma Lane, aged two years, admitted at the Infirmary for Children for *Meningitis*,—suckled one year and eleven months.

CASE V.

The mother of the preceding suckled another child '*a very long period,*' and it died of '*Water on the Brain.*'

CASE VI.

Edmund Power, aged two years, *still at the breast*, admitted for *Chronic Hydrocephalus*: the head is of great magnitude; fontanelles open: superficial veins large and prominent.

CASE VII.

Sophia Hamley, aged one year two months, *still at the breast*, admitted for *Meningitis*.

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CASE VIII.

William How, aged one year six months, admitted for *Meningitis*,—suckled thirteen months.

CASE IX.

David Hepburn, aged two years six months, admitted for *Meningitis*,—suckled two years four months.

CASE X.

Samuel Hanks, aged one year nine months, admitted for *Meningitis*,—suckled one year eight months.

CASE XI.

Amelia Hill, aged two years six months, admitted for *Meningitis*,—suckled one year nine months.

CASE XII.

— Hughes, died of '*Water in the head*,'—*suckled fourteen months.*

CASE XIII.

— Ferreira, aged seventeen months, died of '*Water in the head*,'—*suckled until its death.*

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For the five following cases I am indebted to the kindness of Mr. William Griffith, an intelligent surgeon of Eaton-street, who, having some time ago been apprised of my peculiar views, has since directed his attention particularly to the subject. They completely confirm my opinions, and will have more weight with the public than any additional evidence I could adduce from my own practice.

In the letter inclosing these cases, Mr. Griffith writes thus—'from the observations I have been enabled to make, I am led to believe that disease almost invariably follows protracted suckling. I may add in conclusion, that I perfectly concur with the views which you entertain on the subject.'

CASES XIV. XV.

'— Jackson, residing at —, aged two years six months, who had been kept *at the breast twenty-two months*, was in a dying state when I was requested to see her. The pulse was preternaturally slow—great stupor—dilatation of the pupils, and diastasis of the bones of the head. In six hours from the time I first saw her she died, and the mother was desirous that the head should be examined, having lost a child previously, in what she considered a similar manner. On removing the scalp I found the cranium very much enlarged and altered in shape. Between the tunica arachnoides and pia mater, there was a quantity of water effused;—the sides and upper surface of the brain were exceedingly soft. In the lateral ventricles there were from six to eight ounces of water. In answer to a few questions I asked the mother, she stated that her former child was, during the *first ten months* of its life, *a plump, healthy infant,—after that period he altered,—the stomach, bowels, and head became affected*, and, in the course of a few months, he manifested similar symptoms to those which proved fatal in the case of his sister. He was *suckled for twenty-one months*, and *died* at the age of *twenty-seven months*. The mother of these children has one other child alive, and at my urgent request it was weaned at *nine months*,—it is now *seventeen months old, and in excellent health.*

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CASE XVI.

'Mrs. A—, of —, had a little boy who at *ten months old* had nine teeth, which were cut with little or no difficulty:—*at this time he was in good health,—he was allowed the breast until nineteen months, and at the expiration of three months more, died of Hydrocephalus.*

CASE XVII.

'Mrs. T— lost a child of Hydrocephalus, and has an infant *now at the breast seventeen months old*;—the little patient is frequently suffering from *cerebral disturbance*. I have repeatedly advised the mother to wean it—she objects, and gives the usual reason for allowing it to remain at the breast—viz., that she does it to *prevent becoming again enceinte.*

CASE XVIII.

'This day, (August 13, 1831,) a little child labouring under *cerebral disease* was brought to me for advice, and he appeared certainly in a most pitiable state; he is *two years four months old* and is *now at the breast*,—I do not think it possible for him to survive many days.'

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II.

Cases of Meningitis, arising at an after period, in consequence of protracted suckling.

CASE XIX.

Francis Page, aged six years, admitted for *Meningitis*,—*suckled one year.*

CASE XX.

Henry Taylor, aged six years, admitted for *Meningitis*,—*suckled fourteen months.*

CASE XXI.

Julia Brown, aged three years, admitted for *Meningitis*,—*suckled thirteen months*.

CASE XXII.

James Neil, aged seven years six months, admitted for *Meningitis*,—*suckled fourteen months*.

CASE XXIII.

Eliza Park, aged six years, laboured under *Meningitis*,—*suckled fourteen months*.

CASE XXIV.

Charles Dale, aged five years; admitted for *Meningitis*—*suckled thirteen months*.

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CASE XXV.

Sarah Strickling, aged four years; admitted for *Meningitis*—*suckled one year and six months*.

CASES XXVI. XXVII. XXVIII.

The mother of the last mentioned child lost three previously, with '*water in the head*:'—all these were suckled *more than eighteen months*.

CASE XXIX.

George Speering, aged four years; admitted for *Meningitis*—*suckled one year and six months*.

CASE XXX.

Ann Archer, aged seven years; admitted for *Hydrocephalus*—died—*suckled three years*.

CASE XXXI.

Cornelius Leary, aged six years; admitted for *Meningitis*—died—*suckled eighteen months*.

CASE XXXII.

Sophia Peverel, aged three years; admitted for *Meningitis*—*suckled two years*.

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CASE XXXIII.

Maria Turley, aged four years; admitted for *Meningitis*—died—*suckled one year three months*. This child had laboured under a previous attack, from which she recovered under my care.

CASE XXXIV.

Robert Selkirk, aged three years six months; admitted for *Meningitis*—*suckled thirteen months*.

CASE XXXV.

The mother of the preceding child lost another of '*inflammation of the brain*.'—This was *suckled more than one year*.

CASE XXXVI.

Eliza Ferreira, aged five years; admitted for *Meningitis*—*suckled one year seven months*.

III.

Cases of Meningitis in Children who had been suckled an undue length of time,

CASE XXXVII.

Arthur Lane, aged one year four months; admitted for Pneumonia, with *an affection of the head* [Pg 35]
—*suckled fourteen months.*

CASE XXXVIII.

Sarah Ward, aged three years; admitted for Hooping-cough—*head much affected*—*suckled one year and ten months.*

CASE XXXIX.

Thomas Donovan, aged two years two months; admitted for Hooping-cough, with *an affection of the head*—*suckled twelve months.*

CASE XL.

Count — — —, aged about two years, came under my care, being then at the breast. The head was large, fontanelle open—superficial veins more apparent than natural. By my advice he was directly weaned, and rapidly improved in health and appearance (the only medicine given being occasional doses of castor oil). About twelve months afterwards, in consequence of an imprudent exposure to cold, he was attacked with Bronchitis, and Meningitis supervened. Leeches were applied to the head, and other depletory measures actively employed, which were followed by recovery. [Pg 36]

CASE XLI.

— Sloggat, aged thirteen months, died of *Meningitis* supervening upon Pneumonia—*suckled until the time of its death.*

CASE XLII.

John Scott, aged eleven months; admitted for Hooping-cough, with a *well-marked affection of the head*—*still at the breast.*

CASE XLIII.

— Scott, aged fifteen months,—died of 'Hooping-cough, with convulsions,' *being then at the breast.*

CASE XLIV.

Isaac Berwick, aged one year two months, admitted for Hooping-cough, *with an affection of the head*—*still at the breast.*

CASE XLV.

Frederick Cousins, aged three years four months, brought to me labouring under Hooping-cough, with Meningitis, which latter terminated in effusion. Calomel was then given every two hours, the stronger mercurial ointment rubbed upon the temples, and blisters applied to the head. The mercurial influence being established, a profuse discharge of urine occurred; the pupils which had previously been *permanently* dilated, became once more obedient to light; sensibility was restored, and great weakness appeared to be the only urgent symptom. The cough, however, now returned, the head became again affected, and the child sunk. Upon opening the head, about four ounces of fluid was found in the ventricles^[K]. This child was *suckled sixteen months.* [Pg 37]

CASE XLVI.

Sarah Swann, aged four years six months, admitted for Hooping-cough with convulsions, —*suckled one year.*

CASE XLVII.

CASE XLVIII.

Maria Hughes, aged two years, admitted for *Convulsions* supervening upon Hooping-cough —*suckled one year three months.*

CASE XLIX.

Thomas Benson, aged one year six months, admitted for Pneumonia, with *well-marked affection of the head—suckled one year four months.*

CASE L.

Mary Kenner, aged six years, admitted for Hooping-cough, with *well-marked affection of the head —suckled one year six months.*

CASE LI.

John Ennis, aged one year seven months, admitted for Bronchitis, to which *a decided affection of the head succeeded—suckled one year.*

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IV.

Case of Meningitis produced in consequence of the Child being suckled from its birth by a Woman who had at that time been delivered one Year.

CASE LII.

Ellen Willoughby, aged nine months, admitted for Meningitis; at present suckled by a woman who has been *delivered one year and nine months.*

With respect to the manner in which protracted lactation causes the complaint that forms the subject of these remarks, I formerly was undecided; but have now no doubt whatever of its arising *secondarily* from derangement in the functions of the abdominal viscera, occasioned by the depraved condition of the breast-milk.

It is universally allowed among medical men that irritations in the stomach and bowels will, through the agency of particular nerves, produce sympathetic irritation in the brain,—that peculiar action being thus elicited which terminates in the effusion of serum, constituting the disease named Hydrocephalus.—'The continued irritation of important or very sensible nerves is, perhaps,' says Mr. Burns, '*one of the most common causes*' (of Hydrocephalus); 'hence it may follow dentition, and *very often arises from a bad state of the chylopoietic viscera.*'

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It is also no less generally known that food of a bad quality or improper description will produce derangements in the digestive organs. Now, having already shewn that the milk when lactation is protracted becomes deteriorated, it plainly appears that such milk is capable of occasioning derangement of the chylopoietic viscera; and it being allowed that derangement of these viscera, from any source, may give rise to inflammation of the brain, I conceive it follows that protracted lactation must be admitted as one cause of such effect. This train of reasoning, therefore, from generally admitted data, seems to *prove that Meningitis, or inflammation of the brain, in children can be produced by their being suckled for too long a period, and that it is so produced I assert from repeated experience.*

[Pg 41]

An accidental perusal of Mr. Dendy's able work on the cutaneous diseases of children, published shortly after the appearance of my paper before referred to in the Medical and Physical Journal, has recently afforded me the pleasure of finding that the author had been led to entertain similar general views on the subject under discussion with myself; I have, therefore, taken the opportunity of adding that gentleman's testimony to my own, by quoting the following passage from his work above mentioned.

'It may be truly said, that *the infantine disease excited by milk of a deleterious, or simply impoverished quality, "grows by what it feeds on;"* and we shall witness the internal debility and the infantine disorder running their course together. Tabes is the natural consequence of this error; but its effect is evinced by the occurrence of other disorders. A defective degree of nutrition, as I have elsewhere stated, predisposes the system to become influenced by comparatively slight excitement; and thus, in addition to the direct excitement of disease, it

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becomes indirectly its predisposing cause. *Under its influence the serous^[L] and mucous membranes become readily the seat of inflammatory action.*

Those who feel a difficulty in relinquishing old opinions and adopting new views upon any particular subject, may perhaps ask how it has happened, if inflammation of the brain from protracted suckling be so common as the preceding observations and cases would appear to prove, that medical men of more advanced age and far greater experience than myself have not previously noticed the circumstance. I would observe, in reply, that until Harvey pointed out the circulation of the blood, no one ever suspected the existence of such a phenomenon; yet now the wonder appears to be, not that Harvey made the discovery, but that others had not previously done the same. Multitudes, it may be added, and among them the great Newton, had witnessed the fall of objects to the ground without thinking of the cause which produced their downward tendency; the propitious moment, however, arrived—the apple fell, and the philosopher was led to those deductions which have rendered his name immortal. So is it with observers of every class, from those most distinguished by intellectual superiority and its successful application, down to the humble writer of the present observations. Facts are continually passing before us unnoticed, till, from their repeated coincidence, or some accidental impulse, we attempt, and finally are enabled, to trace their origin.

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Thus, until the possibility of Meningitis originating from protracted lactation had been suggested, practitioners were, of course, unable to notice the fact—not from its non-occurrence, but because their unconsciousness of its existence must necessarily preclude the inquiries from which alone its cause could be determined. Hence a practitioner may have treated many hundred cases of water on the brain in children, without being able to attribute any one of them to protracted suckling; yet this is no proof that such cases did not happen, for, had he made the requisite inquiries, very probably many among them might have been found which had thus arisen.

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Another objection that may possibly be made to my views, is, that instances might be adduced where lactation had been persevered in for a very long period, without any ill effects supervening. That such frequently occur, there is no doubt; and with respect to them, I have merely to observe, that they do not in the slightest degree invalidate the correctness of my conclusions. As well might it be argued, that because persons have fallen from a very great height without sustaining any injury, or, because poisonous doses of various drugs have sometimes been swallowed without death supervening, that, therefore, there is no danger in jumping from a precipice, or in taking a virulent poison; or that death never occurs from these causes. Such cases, unless far more numerous than I imagine them, can only be regarded as exceptions to the general rule; and, consequently, do not lessen its authority, there being no rule without an exception.

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Some practitioners, with whom I have conversed on the subject, though willing to allow that protracted suckling, by depraving the milk, may be the means of occasioning Meningitis in infants during or shortly after the time they are supplied with this improper food, yet could not conceive how it can act as a cause of that disease at some future period; I do not myself, while attempting to account for it, discover any pathological difficulty.

In these cases it is very probable, that although the protracted suckling was not sufficient to produce actual Meningitis at its conclusion, yet that it so weakened the system in general, and the brain in particular, as to render the latter especially predisposed to inflammatory action; and that we have reason to suppose this not only possible, but probable, from analogy, cannot be denied, since it is known that scrofulous children, in whom there is great laxity and debility of habit, are inordinately liable to be affected with Hydrocephalus, or Water in the Brain.

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'Dr. Perceval observes, that of twenty-two cases of which he kept notes, *eleven were certainly strumous children, and four were probably so.*' 'From my own observations,' remarks Dr. Cheyne, 'I should think this proportion a very moderate one. When a whole family is swept away by Hydrocephalus, I suspect *it is intimately connected with this strumous taint.*' The testimony of Sauvages may also be adduced, who says, 'Novi familiam cujus infantes circa sextum ætatis annum omnes periire ex hoc morbo, *Scrofula huic effusioni ansam præbente.*' The brain, in consequence of this local debility, may become affected from causes which otherwise would, perhaps, have produced no injurious consequences whatever; and hence it is, that when labouring under other diseases, and especially Hooping-cough, those children who have been suckled too long appear so very liable to have the head secondarily affected. It is worthy of notice, that among the cases which have been detailed in the foregoing pages, were fourteen in whom affection of the head supervened during the progress of other diseases, and in ten of them the disease was Hooping-cough.

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The treatment of Meningitis arising from protracted suckling will not differ from what is proper when it has been produced by other causes; except that the depletory measures should not be carried to so great an extent, as it must be remembered that the disease is existing in constitutions *already debilitated.*

It should consist generally in the application of leeches to the temples—cold lotions to the head—purgatives, and blisters placed behind the ears, the discharge from which is to be kept up by means of irritating dressings—these afford the surest chance of subduing the malady, and in many instances, if employed sufficiently early, will have the desired effect. It is, of course, almost superfluous to observe, that weaning, if the child be above nine months old, must be immediately enforced; or, if considerably younger, the diseased or debilitated nurse ought to be exchanged for

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one who has a supply of healthy milk of a corresponding age. If such cannot be procured, the child must be brought up by hand; for, so long as it is allowed to imbibe the noxious milk, there is little hope, in my mind, of the medical treatment being of any great service; while on the contrary, it is encouraging to know that many infants previously manifesting symptoms of incipient Meningitis have completely recovered *soon after they were weaned*^[M].

When my attention first became directed to the subject, I was chiefly struck with the ill effects resulting to the child from *protracted* lactation, and hence supposed that cases of disease from suckling, when continued for only a moderate period, were rarely if ever met with. More enlarged experience, however, has now convinced me, that not only are ill effects occasioned in children when lactation is protracted to a very unusual extent, but that they occur sometimes, when its duration has been merely a few months beyond what I conceive is right. Besides which, we shall find that when from any cause whatever the nurse's milk becomes impoverished and deteriorated, even if this take place at an early period after delivery, the injurious effects already referred to may be produced in the child: for improper food, whether it be bad milk or any other inappropriate article of diet, is always calculated to derange the functions of the stomach, bowels, and other chylopoietic viscera, and in consequence to occasion disease.

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It matters not whether the mother be originally unhealthy, and thus her milk possess bad qualities; or whether from accidental circumstances, or her continuing to give suck too long it becomes so: in either case the same effect, namely, *deteriorated milk*, is produced, with the concomitant evils to which I have alluded. This view of the matter is corroborated by Case LII., in which true Meningitis attacked a child, aged only nine months, who, therefore, was not suckled *too long*,—but then the nurse of that child had been delivered *twenty-one months*, having suckled another infant previously:—hence we may reasonably conclude that her milk being from the beginning deteriorated, and unadapted to the age of the child, the ill effects in this case were produced at a much earlier period than usual.

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It will be observed that I have only given *one* instance of this latter description; but, on considering how very rare it must be to find any mother capable of abandoning her newly-born infant to the breast of a woman who has already suckled another child one year, any surprise that might be felt at the circumstance will, I am sure, immediately cease. It must also be noticed that only among the lowest grades of society do we find women so long after delivery performing the office of wet-nurse at all, and those who entrust their infants to the latter are often so peculiarly situated as to feel no interest whatever in the preservation of their offspring: indeed I cannot but suspect that, among such, criminal motives frequently lead to the adoption of the unnatural and baneful practice in question.

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I do not recollect to have seen a case of Meningitis from suckling except when this process had been *protracted*, either as respects the child or the nurse; though I by no means doubt the possibility of its occurrence under other circumstances: but I have met with numerous instances of other diseases produced by the palpable deterioration of the mother's or nurse's milk at various periods after delivery; in by far the greater number, however, of such cases, lactation had been continued for an unusual length of time.

Vomiting, griping, and diarrhoea, are so common among infants, and arise in general from causes apparently so evident, that, unless severe or of long duration, they rarely form the subject of minute inquiry. Hence these complaints are, perhaps, not so often attributed to deteriorated milk as they ought to be, although the fact of their occasionally originating from a morbid condition of this fluid, (and therefore from protracted lactation as one cause of the latter effect,) is too well established to be questioned. Dr. Underwood observes, 'has not every Physician of experience seen infants frequently thrown into tormina immediately after coming from the *breast of an unhealthy mother, or one who has but little milk?*'^[N] and Mr. Burns states, that if the usual periodical appearance should return, 'the milk is liable to disagree with the child, and produce vomiting or purging;' while Dr. Hamilton expressly mentions that diarrhoea is 'not unfrequently occasioned by the depraved quality of the nurse's milk.'

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The two former authors merely testify to the fact of diseases being produced by the milk, while the latter more explicitly mentions the cause from which they proceed.

Debility, Tabes Mesenterica, and Scrofula, may also be traced to the same origin, as every practitioner of experience must have repeatedly observed: so may that intractable disease, termed Rickets; and it is worthy of notice, that among the worst instances of this malady I have seen, were two sisters, *who had been suckled for a very unusual period*. Neither do I doubt the probability of Epilepsy being similarly occasioned; and although, I must candidly own, I cannot produce numerous cases in proof of the correctness of such hypothesis, yet I recollect that of a girl affected with this complaint, respecting whom the mother stated (and I recorded the fact at the time) that she had been '*suckled for two years;*' and, to use her own expression, had 'never been well since.'^[O]

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Convulsions arising from protracted suckling, or simply from the nurse's milk becoming deteriorated at any period, are very common, and I have kept notes of many such cases that have occurred in the course of my own practice; which, however, I abstain from here inserting, being anxious to prevent the present publication from swelling into a volume. Indeed, the occurrence of convulsions from this cause (diseased milk) has been mentioned by several of the best authors. Mr. North, in particular, (whose excellent work on Convulsions should be in the hands of every practitioner) observes—'It cannot be doubted that children suffer, that their health is destroyed,

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and the foundation laid for convulsive diseases, by *sucking unhealthy nurses*.' 'A predisposition to convulsive affections in children may be originally produced in consequence of their being suckled by a nurse addicted to the frequent use of spirituous liquors. In several instances I have known children rapidly recover their health when the nurse was changed, who had exhibited most of the premonitory symptoms of convulsions while they were suckled by a woman who indulged in the common vice of gin-drinking.' And Mr. Burns also makes the following remark—'Violent passions of the mind affect the milk still more;—it often becomes thin and yellowish, and *causes colic*, or even *fits*.' It is needless, however, to say more on this topic, since it is one which no longer admits of discussion.

The reader may now, perhaps, expect that I shall introduce a series of practical deductions from the foregoing facts and observations; but such is not my object upon the present occasion. I merely wish to call the attention of practitioners and the public to the subject of these pages, and shall thus discharge, as I conceive, an imperative duty to society. Having mentioned what I am induced to consider a frequent cause of inflammation of the investing membranes of the brain in children, my undertaking is completed. The Profession does not require, and the public would not be benefited, by the addition of lengthened therapeutical rules; for I am convinced, there is not a greater imposition to be found than the doctrine that non-medical persons can treat diseases with success by means of popular systems of medicine, '*practical*' treatises, &c. Such books have often done irreparable mischief—certainly much more harm than good; and so far from injuring the profits of medical practitioners (as some appear to suppose), have greatly added to the number of their patients.

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I avail myself also of this opportunity to enter my protest against the ill-judged and mischievous practice of those patients who confide upon many occasions in the opinion of their nurse, rather than that of their medical attendant, and who, in consequence, often injure themselves essentially by deceiving the latter. With respect to this mistaken preference, Dr. Dewes has well observed—'Let it not be hastily assumed that there is more safety in following the directions of a nurse than those of the physician, because she may have had some experience; for it must be quickly perceived that the calculation is much in favour of the latter, since the nurse can attend but twelve patients per annum, while the physician may visit many hundreds in the same period—besides, his knowledge of the laws of the human system gives him a very decided superiority.'

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In conclusion, it is right to observe, that protracted suckling being a custom much more prevalent among females of the lower orders than those of a superior rank, it must follow as a necessary consequence, that *Meningitis, and other disorders resulting from this cause, are proportionably less frequent in private than in public practice*. This remark, it is evident, should be remembered, in order to obviate apparent discrepancies which otherwise might appear irreconcilable with the opinions I have expressed. In the truth of those opinions I feel the most perfect confidence, and cannot but hope that their promulgation will hereafter prove extensively beneficial, since precautionary, and even therapeutical measures may be founded upon them, which, if uniformly adopted, will not only prevent much ill-health and suffering to mothers, but will also afford the means of saving many children from perishing by one of the most painful and fatal diseases to which they are subject.

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POSTSCRIPT.

[Pg 59]

Being anxious to obtain additional evidence with respect to the production of Meningitis in children by protracted suckling, rather from the experience of others than my own, I shall feel greatly obliged to any practitioners who will favour me (free of postage) with either facts or cases tending to corroborate the truth of the doctrine contained in the preceding pages; and should I be enabled publicly to avail myself of such communications, it is, perhaps, unnecessary to say, I shall not neglect the opportunity of expressing my acknowledgments to their respective authors. The intelligence and liberality characterising the members of the medical profession generally, preclude all apprehension on my part that the above appeal will be made in vain.

NOTES

[Pg 61]

Note A (page 1).

A dark-green substance of variable consistence, contained in the bowels of infants at birth.

B (page 4).

I beg leave to observe that I make these statements with some confidence as the result of personal inquiries instituted a few years ago among the patients of two of the Lying-in Establishments of this metropolis.

C (page 8).

Since the above was written, a friend who lectures on Chemistry in the metropolis has kindly promised me his valuable assistance in making the experiments here suggested.

D (page 10).

In two cases where suckling was protracted to *three years*, the subjects of this baneful practice did not equal in size an ordinary child of half their age. One of them became idiotic, and afterwards died of Hydrencephalus, under my care; the other was affected with Tabes Mesenterica,—the result I did not witness—but believe the disease terminated fatally.

E (page 25).

Vide Medical and Physical Journal for August 1827.

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F (page 25).

That is, any period beyond nine or ten months.

G (page 25).

Meningitis,—I use this term as being more pathologically correct than *Cephalitis*, which I formerly adopted.

H (page 26).

See the above conditional sense in which I employ this term.

I (page 26).

It is a curious fact, which I believe has not been noticed by any other writer, that female children labouring under attacks of Meningitis are sometimes affected with leucorrhœal discharges. I have met with several cases of this description: the children also of women subject to leucorrhœa will often, at an early age, be found affected with the same disease. Hence it would appear that leucorrhœa is occasionally hereditary.

K (page 37).

It is unquestionable, notwithstanding the scepticism of some practitioners on the subject, (whose opinions are entitled to deference,) that *recovery may take place, under appropriate treatment, in cases of Meningitis, even after effusion has unequivocally occurred*. Preceding authors have noticed this fact, which I can confirm by my own experience. Practitioners cannot be too frequently reminded of it, and warned not to despair of success even in the last stage of Hydrencephalus.

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L (page 42).

For the information of the *unprofessional* reader, I beg to observe, that the membranes of the brain are *serous membranes*.

M (page 48).

It will be observed hereafter, that Mr. North has experienced similar beneficial effects from the course above recommended, in cases where *convulsions* have been caused by *diseased milk*;—a strong corroborative coincidence.

N (page 52).

I believe that where the milk is greatly diminished in quantity, it will also be found deteriorated in quality.

O (page 53).

In the communication above referred to from Mr. Griffith is the following:—'Mrs. A. has a family of four children, all of whom she suckled for a period varying from *seventeen* to *twenty-two months*:—*not one of the four is healthy*.'

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