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ESTABLISHMENT, MAINTENANCE, AND REINSTITUTION OF BREAST FEEDING *

J. P. SEDGWICK, M.D.

Professor of Pediatrics, University of Minnesota Medical School
MINNEAPOLIS

Persistent demand on the breast is a most important and continually neglected factor in the establishment, maintenance and reinstitution of natural or breast feeding.

Normally, the flow of breast milk in the puerperium is supposed to be brought about by the hormones set free just before the milk "comes in." I have had no personal experience in the establishment of lactation without a preceding pregnancy. Many dependable authorities, however, vouch for the possibility of such a phenomenon when proper demand is made on the human breast, either male or female. Pfaundler's report of a calf which was suckled by other animals and produced normal cow's milk may also be cited as supporting the correctness of the cases reported among human beings.

The premature infant is usually incapable of furnishing the physiologic sucking stimulus necessary to support the hormones. When the importance of the continued demand on the breast is underestimated, the breast feeding fails. This is entirely unnecessary.

In the method used in such cases in the University of Minnesota new-born clinic and my private work, no attempt is made, except in slight degrees of prematurity, to put the babe at the breast at first. Both breasts of the mother are expressed regularly five or six times daily.

The expression is carried out as follows: The breast is grasped about 1 or 2 cm. back of the colored areola, and a milking motion is carried out toward the nipples. The nurses and mothers soon gain a manual dexterity which is surprising. No massage of the breast proper is allowed, as it is of little, if any, value, and sometimes causes traumatic inflammatory reaction. If we consider the anatomy of the breast, we learn that the ducts which contain the milk extend but a short distance back of the areola. Any one who has ever seen a cow knows that the teats are milked and not the cow's bag, and yet we often find head nurses, physicians and even pediatricians giving instructions to milk or "massage" the breast gland itself. If our method is intelligently followed, it is possible to keep the mother of the premature infant from losing her

milk. I have seen some such mothers supply not only milk for their own babe, but also enough to supply a second infant.

I shall not discuss agalactia, as I have never seen such a condition and seriously doubt its existence. If the babe does not gain well at the breast, the trouble is practically always with the babe itself, or with the quantity but not the quality of the milk.

Let me cite a case in which the trouble was supposed to be with the quality of the milk:

I was called in consultation to see a baby who, at 8 weeks, weighed less than at birth. We weighed the baby before and after nursing. It received but 5 c.c. (one teaspoonful) of milk. The baby nursed unsatisfactorily; the breast gland was not being stimulated. The babe had hypothyroidism; for that reason it sucked imperfectly. Instructions were given to put the baby at the breasts regularly. The babe was weighed before and after each nursing. The breasts were then carefully expressed manually. The expressed breast milk was given to the baby and instructions were left to make up the caloric requirement with a simple milk mixture. Desiccated thyroid was also administered. The milk secretion increased rapidly, the babe began to suck better and gained in weight, and after a short period the complementary feeding was dropped.

When, for any reason, the breast milk supply is low, the amount that the child gets should be determined accurately by a balance, not by a spring scale. The child should be put to the breast and the infant's food requirement supplied by complementary, not supplementary, feeding, that is, the required amount of extra food should be given immediately after a nursing, not in place of a nursing. The pernicious practice of dropping a nursing and replacing it with an artificial feeding is one of the most frequent causes of the breast drying up and the loss of milk. The breast is not stimulated; it is, in fact, the best method of weaning the infant.

Breast feeding can also be established at a much later date by the same method:

I saw a babe at the age of 1 month that had never been nursed. It was possible to express a few drops from the mother's breasts. The mother was told that with her cooperation the breast secretion could be reestablished. The babe was put to the breasts regularly. Of course, the infant did not take the nipples well. The milk was carefully expressed after each nursing. The babe's caloric requirement was met with a simple milk mixture, given after the nursings, and the expressed breast milk. The babe was weighed before and after each nursing. After a week or ten days, the scales and expression showed a definite and progressive increase in the amount of breast milk secreted. At the expiration of a month of this treatment, when the infant was 2 months old, the child's gain in weight was satisfactory and, as the amount of mother's milk was sufficient, everything but the mother's milk was discontinued, and a successful lactation was carried out.

* Chairman's address, read before the Section on Diseases of Children at the Sixty-Eighth Annual Session of the American Medical Association, New York, June, 1917.

In the maintenance of lactation the same attention should be given to keeping up the demand as in the establishment of lactation. The amount of breast milk obtained by the infant should be determined and the child's requirements met by complementary, not by supplemental, feeding. The breasts should be evacuated at least five times in twenty-four hours.

The success of relactation or reinstitution of breast feeding by making a demand on the breast furnishes more evidence in support of the importance of the demand which is made on the breast.

Zlocisti made a definite contribution to the subject of "relactation," as he terms it. He reported the reestablishment of lactation in several cases after the lapse of weeks and even after ninety days. I have no doubt of the correctness of his reports. I have tried his methods of putting the father to the breast, but feel that under our present social conditions we shall have more general success by the method we have used. It is unnecessary to give a list of cases at this time, but I cite one instance of success as typical:

A short time ago, I saw an infant, aged 4 months, which was having convulsions, spasmophilic in character, on unnatural feeding. The child had not had the breast for nine weeks. It had been taken from the breast because of illness of the mother. She had just returned from the hospital, in which she had had severe erysipelas followed by antrum trouble. The mother and babe were immediately taken to the hospital where the nurses had been properly trained in milking. The babe's spasmophilia was controlled by the daily administration of sufficient dosage of calcium chlorid, 75 grains daily, followed later by phosphorus in cod liver oil. The mother was assured that with her cooperation the milk could be brought back. The breasts were stimulated regularly by placing the babe at the breast. The babe refused to take the nipples at first. The milk was carefully and thoroughly expressed and the babe's nutrition was maintained by complementary feeding. For several days the results were discouraging, as but 3 or 4 drops were obtained. The number of drops gradually increased. Then the amount grew so that the product could be recorded in cubic centimeters. Lactation was finally established.

Confidence and technical skill are necessary in such cases. The end sought is, however, of enough importance to demand that the attending physician should exert as much patience and have as much skill as we expect of the surgeon who undertakes a major surgical procedure.

I have intentionally omitted reference to the other aids to the establishment, maintenance and reestablishment, and to the literature in order not to befool the main point of making the demand on the breasts. I do not pretend to have offered any new discovery.

We know enough now, from a physiologic standpoint, to save the breast milk for most of the babies that are now deprived of it. It has become a question of getting the information to the profession and the nurses and the public. It is largely a question of psychology now and not of physiology.

An Unbusinesslike Nation.—The merchant accepts past experience as a guide to the need of future supplies; the salesman counts on publicity and education to create a demand for his wares. Shall our cities or our nation ignore their greatest asset and fail to count the daily loss of lives as inexcusable? And yet—to our shame, be it said—we, who claim to be a civilized nation, have still so cheap a notion as to life and death that we are without a national registration law or uniform state laws demanding the reporting of births and deaths.—Haven Emerson, M.D., "Preparedness for Health."

THE TECHNIC OF WETNURSE MANAGEMENT IN INSTITUTIONS*

ISAAC A. ABT, M.D.

CHICAGO

A large number of the babies brought to infants' hospitals suffer from gastro-intestinal disease caused by food disturbances. Most of them are given hospital attention after various attempts have been made to correct the disorders by food and medicine. Consequently the condition of these babies, on admission into the hospital, may be correctly described as serious. Most frequently they are toxic, either from disease or food, usually from both, so that the problem of detoxication is the immediate and pressing indication. After undergoing the short preliminary period of starvation, these desperately sick infants require not only a detoxicating agent, but food as well to sustain life. For both these purposes, nothing can

TABLE 1.—DAILY QUANTITY OF MILK EXPRESSED BY WETNURSE R. F.*

Day of Month	Oct. oz.	Nov. oz.	Dec. oz.	Jan. oz.
1	42	39	34	36
2	38	37	42	38
3	43½	35	34	36
4	36	37	37	37
5	34¾	36	38	34
6	33½	38	38	33
7	40	37	38	37
8	37	42	35	35
9	35½	36	39	35
10	40	36	34½	39½
11	42	36	36	37½
12	43	36	37	38
13	41	35	40	39
14	42	38	41	38
15	37½	36	34	43
16	49	34	37	35
17	45	35	40	35½
18	45½	36¾	35	33
19	46	37	35	33
20	40¼	37	38	37
21	40½	41	36	38
22	43½	38	37	33½
23	41	40	28	45
24	39½	36½	26	35
25	40	38	38	34½
26	40	38	31	35
27	41	35	27	26½
28	41	38	29	24
29	42	37½	31	22
30	43	36	31	22
31	36½	..	30	22
Totals	1,256 (39.25 qt.)	1,112.5 (34.76 qt.)	1,086 (33.94 qt.)	1,067 (33.65 qt.)

* Total amount for four months, 4,521.5 ounces (14.6 quarts); average daily amount, 36.84 ounces; largest daily output, Jan. 23, 45 ounces; previous occupation, telephone operator; primipara; married.

compare in value to properly suited doses of breast milk. An infants' hospital, which necessarily must receive the babies who have been most neglected and who require the most expert treatment, should consequently have at hand an ample supply of breast milk.

Although there is in Chicago at present no directory for wetnurses such as exists in New York and in Boston, we rarely have any difficulty in procuring wetnurses for the Sarah Morris Children's Hospital. The various maternity hospitals and foundling asylums cooperate with us, and are glad to secure positions for their inmates, since wetnursing will not separate them from their babies.

It has been found advisable to select women whose ages range from 20 to 30 years, although more depends on the qualifications of the individual than on her age. A nurse of phlegmatic temperament and good morals is preferable, though it is needless to say that moral

* Read before the Section on Diseases of Children at the Sixty-Eighth Annual Session of the American Medical Association, New York, June, 1917.