traced to this early period of unhappiness and discomfort. The idea has been put forward also that parent-child relationships may be established during the months when the infant had colic and the mother wished she could be rid of him. This has not been my experience. In the few instances where I see these children as adolescents they appear to be no different from other children in their problems or in their relation to their parents.

FAMILY TENSION AS A CAUSE OF COLIC IN INFANTS

By John C. Cobb, M.D.

A study of colic in infancy was undertaken as part of the Yale Rooming-In Project. The longitudinal records of 98 infants who were study subjects were analyzed with respect to incidence, duration, and severity of colic. Forty-eight of the infants were classified as fussy or colicky and 50 as contented.

Because I had formed the clinical impression that allergy was an important contributing factor in the causation of colic, careful family histories were taken for all of these infants with particular attention to allergic disease in any member of either parent's family. An adequate family history was obtained in 95 of these infants. These data were analyzed both according to the incidence of allergic disease and according to the severity of allergic disease in family members.

Among the relatives of the 45 “fussy” or “colicky” infants 7.3 per cent had severe allergy, 17.7 per cent had mild allergy and 74 per cent had little or no allergy. Among the relatives of the 50 contented infants 7.6 per cent had severe allergy, 14.7 per cent had mild allergy and 77 per cent had no allergy. The family histories included a total of 957 relatives.

The 45 families of the babies who were fussy or colicky were divided as follows, in 7 families there was much allergy, in 30 there was some allergy and in 8 families there was little or no allergy. The families of the 50 contented infants were divided as follows, in 7 families there was much allergy, in 33 there was some allergy and in 10 there was little or no allergy.

These figures comparing the degree and frequency of allergy in the families of the two groups are remarkably similar. There is no statistical difference.

The colicky or fussy group was similar to the contented group also as regards details of feeding, birth weight, weight gain, sex and educational level of the mother.

Of the 48 colicky or fussy infants, family tension was adjudged to be an important

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contributing cause in 22, allergy in 6; both allergy and family tension together in 9; in 11 there was no apparent cause.

Allergy as a cause of the colic or fussing was assigned in the above 6 infants because in these the colic was markedly reduced by the removal of specific foods, either by limiting the mother's diet in the case of breast fed infants, or by changing the protein fed the artificially fed infants. The colic or fussiness promptly returned when the suspected food was again ingested.

Because of the multiple meanings, varied usages, and lack of clear definition of the term "colic," the term "paroxysmal fussing" is suggested, defined as the condition of an infant who, otherwise healthy and well fed, has paroxysms of irritability, fussing or crying lasting for a total of more than 3 hours a day and occurring on more than 3 days in any one week.

Paroxysmal fussing or colic in infants is possibly one of the earliest somatic responses to the presence of tension in the family setting. The particular degree to which any infant reacts is probably determined by constitutional factors.

REFERENCE


EMOTIONAL FACTORS IN THE ETIOLOGY OF COLIC IN INFANTS

By Milton I. Levine, M.D.

There is probably no practicing pediatrician who has not attempted to treat the so-called "colicky" baby. Changes in the formula, the type of nipple used and the size of the nipple hole, attempts at posturing the baby, giving warm water, barley water, fennel tea, sedatives, antihistamine drugs, and antispasmodics—all of these have been tried with varied degrees of success but none with spectacular success.

It is obvious from the numerous treatments advised that little is really understood as to the true etiology. Is it a reaction to some gastrointestinal allergy; is it due to poor feeding techniques, with subsequent swallowing of air; is it due to a fat or carbohydrate intolerance, or is it related to something more inherent in the physiological structure or emotional environment of the particular child?

It seems evident from the abdominal distention, the flexing of the legs, and the passage of flatus that there is undoubtedly abdominal pain. But what causes colicky babies to develop abdominal pain?

If one observes these infants he will note that in almost every instance the child can be categorized as a "hypertonic" baby. Such are the active, keyed-up infants so sharply differentiated from more relaxed and placid infants—often from birth.

These hypertonic infants react more acutely to their environment, to their unsatisfied needs or to outward stimulation. They react violently to sudden noises, they vomit and regurgitate easily, and they usually sleep shorter periods and less soundly than other infants.

On the assumption that this hypertonicity might be related to the colic, a study was instituted in 1947 in an attempt to determine: 1) if relaxation of the baby would cause a disappearance of the symptoms; 2) if there were unsatisfied emotional or physiological needs of the infant causing the child to react with increased hypertonicity and subsequent colic, and 3) if such needs were satisfied could the symptoms of colic be dispelled without resorting to other
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John C. Cobb
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