

PROGRESS IN PEDIATRICS

EXUDATIVE DIATHESIS—A REVIEW *

CARL G. LEO-WOLF, M.D.
BUFFALO, N. Y.

HISTORICAL

The idea of the diatheses is very old (His¹ and Krehl²). It played a prominent rôle in the medicine of ancient Greece, especially the school of Galenus, and it persisted up to the beginning of the modern scientific study of the natural phenomena, when exact examination took the place of philosophic speculation and when Virchow's cellular pathology and the widespread use of the microscope dislodged the constitutional theory.

At the beginning of the present century the German school of medicine resurrected these old theories, which had always been adhered to by the French, and medical writers in Europe, especially in these two countries, have given ample expression to the ideas of disposition and constitution. In pediatrics as well as in dermatology these theories have helped us to understand many a clinical picture which would otherwise have remained veiled.

THE DIATHESES

The term diathesis attempts to give expression to the internal relations of heterogeneous groups of diseases, due to individual conditions, which are usually congenital, often hereditary. In these physiologic stimuli cause an abnormal reaction and morbid phenomena under normal conditions of life.

At present we are able to recognize only certain groups of symptoms, to which we give the name of a diathesis; such as arthritis, lithemia, exudative diathesis, spasmophilia, status thymicolymphaticus, mongolism, infantilism, eosinophilia, some neuropathies, hemophilia; perhaps also epilepsy, chlorosis and the hypoplasias of the aortic system (His¹).

The French school of medicine recognizes the *diathèse arthritique*. This they regard as a disease of the intellectual classes, of those with sedentary habits, and therefore a disease of degenerating races.

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1. His, W.: *Geschichtliches und Diathesen in der inneren Medizin*, Deutsch. med. Wchnschr., 1911, xxxviii, 857.

2. Krehl, A.: *Med. Klin.*, 1911, vii, 752.

Comby³ considers arthritis as a morbid temperament which is dormant in childhood and does not appear until adult life; in childhood, however, the symptoms of the hereditary taint will be observed under the guise of imperfect nutrition, incomplete development, hypertrophies or hyperplasias, a defective arterial system, and an abnormal and easily vulnerable connective tissue.

Hutinel⁴ states that it is, at present at least, very difficult to define arthritis. It is not a disease, but a morbid temperament, a peculiar form of metabolism.

De Monchy⁵ thinks that arthritis and exudative diathesis should be clearly separated, even more so than has been done by Czerny.

Galup⁶ brings arthritis in relation to anaphylactic phenomena.

In English and American medicine we find under the name of lithemia the symptoms which French writers collect under arthritis, Rachford.⁷ Others, for instance Whitmore,⁸ describe under lymphatism the status thymicolymphaticus, or they recognize this latter condition only, as for instance Holt.⁹

The majority of the writers in the English language, however, fail to mention the diatheses altogether. This neglect is now beginning to be recognized. Cameron¹⁰ deplores this fact and shows the importance of the diatheses on infant feeding and infant mortality.

Dutch literature is also rather wanting on the subject of the diatheses. Some, like Sthemann,¹¹ refuse to recognize their revival, while others, like Gorter,¹² take a standpoint somewhat between the French and German schools.

3. Comby, J.: *Arthritisme*; Grancher et Comby, *Traité des Maladies de l'Enfance*, Paris, 1904, i, 770.

4. Hutinel, V. and Tixier, L.: *Arthritisme.—Etat lymphatique*. In V. Hutinel's *Les Maladies des Enfants*. Volume 2, pages 612 and 688, Paris, 1909, ii, 612.

5. de Monchy: *Diathesen bei Kindern*, reviewed in *Jahrb. f. Kinderh.*, 1911, lxxiv, 468.

6. Galup, J.: *Le lymphatisme. Diathèse d'anaphylaxie-immunité. Une conception générale des diathèses*, reviewed in *Ztschr. f. Kinderh.*, 1913, Referate, v, 668.

7. Rachford: *Lithaemia*, *Arch. Pediat.*, August, 1897: *Symptomatology of Lithemia*, *Arch. Pediat.*, September, 1897.

8. Whitmore, A.: *Lymphatismus in the East*, *Lancet*, London, 1911, clxxxii, 752.

9. Holt, E.: *Diseases of Infancy and Childhood*, Ed. 5, New York, 1910.

10. Cameron, H. C.: *On Diathesis in Infancy; a Plea for Its Closer Study*, *Brit. Med. Jour.*, 1914, p. 53.

11. Sthemann: *Konstitutionsanomalien bei Kindern.*, *Jahrb. f. Kinderh.*, 1911, lxxiv, 576.

12. Gorter, E.: *Ueber exsudative Diathese, Lymphatismus und skrophulöse Konstitution*, reviewed in *Jahrb. f. Kinderh.*, 1911, lxiii, 271.

Since the memorable paper of Czerny,¹³ published ten years ago, in which he first mentioned the name of *exudative diathesis*, many monographs have been published on the subject of the diatheses, and their importance in medicine has, by some at least, been fully appreciated.

Some German authors, like Pfaundler,¹⁴ consider it a mistake to confound diathesis with dyscrasia, and the symptoms of a diathesis with the diathesis itself.

Von Behring¹⁵ confines the term diathesis to only a small part of the disposition. He considers a diathesis as an individual, congenital, often inherited condition, in which physiologic stimuli cause an abnormal reaction.

Klotz¹⁶ considers the status lymphaticus to be an extreme type of exudative diathesis.

Sittler¹⁷ states that exudative diathesis is found so frequently in children nowadays that one might feel inclined to regard these symptoms merely as the physiologic reaction to the unhygienic mode of living now prevailing.

Pfaundler¹⁸ considers the diatheses of childhood, namely, exudative diathesis of Czerny, status thymicolymphaticus of Paltauf, infantile arthritism of Comby, to represent identical conditions, viewed only from different standpoints.

ETIOLOGY

Friedjung¹⁹ is a strong believer in Adler's theory of organic inferiority. Constitutional differences are then the reason why infants may fail to thrive under the best of care, even with well-regulated breast feeding; also why vastly different methods of artificial feeding may give either good or bad results in the hands of the same investigator.

Lederer²⁰ finds the cause of exudative diathesis in the water metabolism.

13. Czerny, A.: Die exsudative Diathese, *Jahrb. f. Kinderh.*, 1905, lxi, 199.

14. Pfaundler, M.: Kindliche Krankheitsanlagen (Diathesen) und Wahrscheinlichkeitsberechnung, *Ztschr. f. Kinderh.*, 1912, iv, (Orig.) 175.

15. v. Behring, E.: Disposition und Diathese, reviewed in *Ztschr. f. Kinderh.*, 1914, Referate, viii, 273.

16. Klotz, M.: Die Bedeutung der Konstitution für die Säuglingsernährung, *Würzburg. Abhandl. a. d. Ges. d. prakt. Med.*, 1911, xi, 181.

17. Sittler, P.: Die exsudativ-lymphatische Diathese, *Würzburg*, 1913.

18. Pfaundler, M.: Zur Lehre von den kindlichen Diathesen oder Krankheitsbereitschaften, reviewed in *Jahrb. f. Kinderh.*, 1911, lxxiv, 486.

19. Friedjung, J. K.: Die Ernährungsstörungen der Brustkinder und Konstitution, reviewed in *Ztschr. f. Kinderh.*, 1913, Referate, iv, 595.

20. Lederer, R.: Exsudative Diathese und Wasserstoffwechsel, *Ztschr. für angewandte Anat. u. Konstitutionsleiden*, 1914, 1, 233.

Steinitz and Weigert²¹ have made repeated metabolism experiments on two infants and they have found decreased nitrogen and fat metabolism.

Riesel²² found that out of thirty-five children whose bodily conditions were marked on their history charts as fat or pasty, twenty-six had most of the symptoms of exudative diathesis.

Maillet²³ considers the subcutaneous tissue to be of the greatest importance for the nutrition as well as the defense of the body.

Mendelsohn²⁴ is an adherent of Bouchard's²⁵ theory of the retardation of metabolism and of humoral hypo-acidity.

Pässler²⁶ has a rather remarkable, though not convincing, view of the etiology of exudative diathesis. He finds this, as well as other related diatheses, to be always caused by chronic streptococcus infections of the buccal cavity, especially caries dentium and pyorrhea. He claims that thorough cleansing of the mouth will cure even eczema.

SYMPTOMATOLOGY

Pfaundler²⁷ states the case very clearly when he says that some children show a peculiar frequency in the disturbances of their health, no matter how carefully they are guarded against the causes which are known to produce these attacks. This proves to him conclusively that these children possess in their organisms some peculiarity in the form of a special disposition, an increased readiness towards certain disturbances, a diathesis. He differentiates the manifestations of exudative diathesis as primary, secondary and concomitant.

Skin.—This being the one organ which will naturally show the changes due to exudative diathesis most readily and at the same time most clearly, has therefore been studied very closely.

According to Feer²⁸ eczema is the expression of a chronic constitutional abnormality. There is no acute eczema, only acute exacerbations. Acute dermatitis is mistaken for eczema, as is proved by the

21. Steinitz, F., and Weigert, R.: Stoffwechselversuche am Säuglingen mit exsudativer Diathese, *Monatsschr. f. Kinderh.*, 1910, lxxiv, 385.

22. Riesel, H.: Adipositas and exsudative Diathese, *Ztschr. f. Kinderh., Orig.*, 1911, ii, 325.

23. Maillet, F.: Le tissu cellulaire sous-cutané dans la défense de l'organisme de l'enfant, reviewed in *Ztschr. f. Kinderh.*, 1912, Referate, iii, 319.

24. Mendelsohn: Die Frage des Arthritismus, *Med. Klin.*, 1911, vii, 752; *Deutsch. Med. Wchnschr.*, 1911, xxxviii, 857.

25. Bouchard: *Maladies par ralentissement de la nutrition*, Paris, 1882.; Bouchard: *Traité de pathologie générale*, Paris, 1900, iii.

26. Pässler: Sind die sogenannten Diathesen Konstitutionsanomalien? reviewed in *Jahrb. f. Kinderh.*, 1914, lxxix, 500.

27. v. Pfaundler, M.: *Besondere Krankheitsbereitschaften (Diathesen) und Konstitutionsanomalien*, Feer's *Lehrbuch der Kinderheilkunde*, 1914, Ed. 3, p. 183.

28. Feer, E.: *Das Ekzem mit besonderer Berücksichtigung des Kindersalters*, reviewed in *Ztschr. f. Kinderh.*, 1913, Referate, iii, 66.

results of treatment. Eczematous conditions are not skin diseases *sui generis*, but merely the symptoms of a constitutional abnormality, often in connection with external stimuli. Scrofular eczema is not the sum of tuberculosis and eczema, but through the tuberculous infection of the organism the eczema acquires a changed character which gives it its specific appearance.

Bloch²⁹ sees in the diathesis a chemical allergy. To him the diathetic dermatosis is a reaction of the allergetic skin to accidental irritation, which latter may be endogenous or exogenous in origin.

Rachmilewitsch³⁰ found that slight injury to the skin followed by irritation of the same (by mustard) caused a typical reaction, not only in children with manifest exudative diathesis, but also in the latent cases, and in the new-born.

Mautner,³¹ on the other hand, finds no difference between healthy and eczematous children in their reaction to cataplasms or to bacterial irritation.

Hirschberg³² puts stress on the importance of heredity, disposition, disturbances of digestion and metabolism for the development of eczema, especially in children.

Schlesinger³³ found the weight of infants with universal eczema, and still more of those with localized eczema, especially during the first three months of life, to be higher than in other diseases of infancy.

Schkarin³⁴ never missed other symptoms of a constitutional abnormality in connection with eczema, such as exudations into the skin and mucous membranes, which influence the course of nutrition.

Moro and Kolb³⁵ consider that the inclination to intertrigo in early infancy, to urticaria later, and to reactive inflammations at school-age are due to a lability in the vasomotors.

Lymphatic Apparatus.—Czerny³⁶ considers the affections in the lymphatic glands in exudative diathesis never to be primary, but always

29. Bloch, I.: Diathesen in der Dermatologie, reviewed in Deutsch. med. Wchnschr., 1911, xxxviii, 857.

30. Rachmilewitsch: Hautreaktionen von Kindern mit exsudativer Diathese, Jahrb. f. Kinderh., 1913, lxxvii, 176.

31. Mautner, F.: Ueber Hautreaktion bei gesunden und ekzematösen Kindern, Ztschr. f. Kinderh., 1913, Orig., viii, 461.

32. Hirschberg, M.: Ekzem und innere Erkrankungen, reviewed in Ztschr. f. Kinderh., 1913, Referate, vii, 327.

33. Schlesinger, E.: Das Körpergewicht hautkranker, besonders ekzematöser Säuglinge, reviewed in Jahrb. f. Kinderh., 1908, lxxvii, 467.

34. Schkarin, A.: Ueber Ekzema bei Säuglingen im Anschluss an die Lehre von Diathesen im Kindesalter, Jahrb. f. Kinderh., 1914, lxxviii, 156.

35. Moro, E., and Kolb, L.: Ueber das Schicksal von Ekzemkindern, Monatsschr. f. Kinderh., 1910, ix, 428.

36. Czerny, A.: Exsudative Diathese, Skrophulose und Tuberkulose, Jahrb. f. Kinderh., 1909, ix, 529.

to be secondary to pathologic processes in the skin and mucous membranes. The condition of the lymphoid organs, the thymus, spleen, tonsils, intestinal follicles, is independent of that of the lymph-glands. Their hypertrophy is due to overfeeding which favors the depositing of fat.

Benfey and Bahr³⁷ studied thirteen patients, none of whom had infantile eczema or tuberculosis; the clinical picture of these was dominated by adenoids and by regional glandular swellings.

Blood.—Kroll-Lifschütz³⁸ regards eosinophilia as a coordinated symptom of exudative diathesis.

Helmholz³⁹ and Rosenstern⁴⁰ both find eosinophilia accompanying eczema.

Putzig⁴¹ has investigated a large material with the most careful methods and finds that healthy children have the same eosinophil count as have adults, whilst infants who later show signs of exudative diathesis have an increase in the eosinophils quite early. He concludes that eosinophilia is a symptom of exudative diathesis.

Aschenheim,⁴² on the other hand, considers eosinophilia as a special disposition or diathesis, which is not identical with exudative diathesis but frequently combined with it.

Respiratory Apparatus.—Czerny⁴³ sees a great similarity in the affections of the air-passages to those of the skin. His views differ greatly from those of the French school, who consider asthma and bronchitis to be due to arthritism or herpetism, as, for instance, Goilav,⁴³ Merkel⁴⁴ and Spolverini.⁴⁵ Some children suffer from repeated affections of the same parts of the respiratory mucous membrane and in the same manner. One child has pharyngitis several times a year, another follicular angina, a third an infection of the

37. Benfey, A., and Bahr, H.: Beitrag zur Beurteilung der Drüenschwellungen bei Kindern jenseits des Säuglingsalters und ihrer Beziehungen zum Lymphatismus, Ztschr. f. Kinderh., 1913, Orig., vii, 481.

38. Kroll-Lifschütz, A.: Zur Frage der Eosinophilie und exsudativen Diathese, reviewed in Ztschr. f. Kinderh., 1914, Referate, viii, 291.

39. Helmholz, H.: Eosinophile Blutkörperchen bei akutem exsudativem Ekzem, Jahrb. f. Kinderh., 1908, lxi.

40. Rosenstern, J.: Exsudative Diathese und Eosinophilie, Jahrb. f. Kinderh., 1908, lxi, 631.

41. Putzig, H.: Das Vorkommen und die klinische Bedeutung der eosinophilen Zellen im Säuglingsalter, besondere bei exsudativer Diathese, Ztschr. f. Kinderh., 1913, Orig., ix, 429.

42. Aschenheim, E.: Eosinophilie und exudative Diathese, Jahrb. f. Kinderh., 1912, lxxvi, 456; Ist die Eosinophilie ein Symptom der exsudativen Diathese? Ztschr. f. Kinderh., Orig., 1914, x, 503.

43. Goilav: Etude sur la bronchite liée à l'herpétisme, Thèse de Paris, 1889.

44. Merkel: L'asthme chez les enfants, Thèse de Paris, 1901.

45. Spolverini, I. M.: Sulla etiologia e terapia dell'asthma essenziale nei bambini, reviewed in Ztschr. f. Kinderh., 1914, Referate, vii, 221.

pharyngeal tonsil, a fourth pseudocroup, a fifth bronchitis diffusa. The different attacks are very similar, and we must therefore assume that the same local disposition exists as in seborrhea, the difference consisting only in the form of the reaction to equivalent pathologic irritation.

Digestive Apparatus.—Lingua geographica is according to Groos⁴⁶ most likely constitutional, and is found in the hereditary neuropathic type of individuals.

Lublinski⁴⁷ denies its connection with exudative diathesis.

Klausner⁴⁸ considers it congenital and consequent irritability of the mucosa of the tongue, and he states that dermatologists do not agree that it is part of the exudative diathesis.

Czerny¹³ however regards it as one of the first symptoms of exudative diathesis, which may at times be seen during the first month of life, but only in the living child.

The appendix was examined by Lieblein,⁴⁹ who found considerable hyperplasia of its lymphatic apparatus and very long appendices in six young people with pronounced lymphatism.

Langstein⁵⁰ could not find any pathogenic organisms in many cases of infants in whose stools he had noticed pus. These infants had the clinical manifestations of exudative diathesis, and he believes that in this a special disposition to intestinal symptoms exists, which will result in mucus in the stools in light cases, and pus in the severe ones. He sees in the hyperplasia of the intestinal follicles, which was first described by Czerny,⁵¹ the reason why infants with exudative diathesis react to noxae which do not affect healthy infants.

Genito-Urinary Apparatus.—Lust⁵² found in the sediment of apparently normal urine which he had centrifuged, epithelium and a few leukocytes as a sign of a process of desquamation in the urogenital mucosa in more than 50 per cent. of the children with exudative diathesis.

46. Groos, F.: Die Landkartenzunge, reviewed in Ztschr. f. Kinderh., 1913, Referate, vii, 54.

47. Lublinski, W.: Ist die Landkartenzunge erblich? Deutsch. Med. Wchnschr., 1910, xxxvi, 2343.

48. Klausner, E.: Ueber lingua geographica hereditaria, reviewed in Jahrb. f. Kinderk., 1911, lxxiv, 120.

49. Lieblein, V.: Zur Kenntniss der lymphatischen Pseudoappendicitis, reviewed in Ztschr. f. Kinderh., 1912, Referate, iii, 637.

50. Langstein, L.: Erscheinungen von seiten des Magendarmkanals bei exsudativer Diathese, reviewed in Jahrb. f. Kinderh., 1908, lxxvii, 613.

51. Czerny, A.: Zur Kenntniss der exsudativen Diathese, Jahrb. f. Kinderh., 1908, lxxviii, 513.

52. Lust, F.: Die Beteiligung der Schleimhaut des Urogenitalapparates am Symptomenkomplex der exsudativen Diathese, reviewed in Jahrb. f. Kinderh., 1912, lxxxvi, 99.

Beck⁵³ in his study of forty cases of his own confirms Lust's findings of desquamative processes on the mucosa of the efferent urinary passages.

Nervous System.—Saenger⁵⁴ considers the psychic element very important as supplementing the somatic disposition of exudative diathesis.

Czerny⁵⁵ lays stress on the close connections between the neuropsychopathies and exudative diathesis, though he does not look on this as causative but only as a combination. Frequently the education of the child has been faulty owing to the exudative diathesis, and thus the neuropsychopathies have been favored. This explains the remarkable results which have often been observed under psychic treatment in children with intractable eczema or asthma, sometimes also in processes originating in the nasopharynx.

Pfaundler⁵⁶ calls the attention of physicians to cases seen frequently in which the symptoms of the lymphatic constitution are combined with those of neuropathy to form what he calls neurolymphatism. In these cases the nervous manifestations, the severity of the reflexes, are of special importance; as, for instance, the spasmodic sneezing in coryza, the pseudocroup in laryngitis, the pertussoid in bronchitis, the asthma in bronchiolitis, severe colic and mucomembranous diarrhea in enteritis, enuresis in balanitis, blepharospasm in conjunctivitis.

Czerny¹³ explains clearly that the severity of the itching is dependent on the degree of irritability of the nervous system. The itching causes the children to scratch, and then the danger of a secondary infection and thus of an eczema is great. He warns physicians not to neglect the child's psyche over its body.

The Eyes.—Igersheimer⁵⁷ found in 70 per cent. of 152 children with phlycten a positive v. Pirquet reaction. He urges in these cases the treatment of the exudative diathesis, and he advises great care in keeping these children away from people suffering from tuberculosis.

53. Beck, C.: Die Beteiligung der Schleimhäute des Urogenitalapparates am Symptomenkomplex der exsudativen Diathese, reviewed in *Jahrb. f. Kinderh.*, 1914, lxxviii, 495.

54. Saenger, M.: Ueber die psychische Komponente unter den Asthmaursachen, reviewed in *Ztschr. f. Kinderh.*, 1912, Referate, iii, 244.

55. Czerny, A.: Zur Kenntniss der exsudativen Diathese, reviewed in *Jahrb. f. Kinderh.*, 1908, lxxviii, 634.

56. Pfaundler, M.: Ueber kombinierte Krankheitsbereitschaften oder Diathesen im Kindesalter, reviewed in *Jahrb. f. Kinderh.*, 1911, lxxiv, 601.

57. Igersheimer: Ueber die Beziehungen von Skrophulose, Lymphatismus, exsudativer Diathese zu den Erkrankungen des Auges, reviewed in *Jahrb. f. Kinderh.*, 1911, lxxiii, 271.

METABOLISM

Menschikoff⁵⁸ has investigated the metabolism of children with exudative diathesis and finds that they react easier to differences in the ingestion of chlorin, increases as well as decreases, and more so with manifest than with latent symptoms.

Bernis⁵⁹ and Kern⁶⁰ look on the change in the nitrogen metabolism as characteristic. The latter found that children with exudative diathesis have a delayed excretion of uric acid.

Czerny³⁶ is convinced that the metabolism of fat is disturbed. Finkelstein and Meyer claim to have found the reason for the changes in the altered metabolism of the salts.

CONNECTION WITH OTHER DISEASES

v. Hansemann⁶¹ states that many diseases develop on the basis of either acquired or congenital constitutional abnormalities, which consist in anatomic or metabolic changes. The composition of the body fluids and the activity of the cells form the medium through which the growth of the pathologic elements may be either favored or destroyed. Some causes, like colds, or general diseases, like gout or rickets, also age and inheritance, will cause a change in the composition of the body fluids.

Unterberger⁶² sees in the constitution a factor which is of paramount importance, especially in the development of tuberculosis, against which the action of the bacteria may be neglected.

Rozenblat⁶³ is doubtful about the connection between scrofulosis and exudative diathesis.

Czerny⁶⁴ clearly defines his standpoint when he writes:

The identical infectious agent does not produce similar clinical pictures in different individuals. This is due only partially to the quantity or quality of the micro-organism or its location in the body. The appearance of certain symptoms of infectious diseases and their course depends mainly on individual constitutional abnormalities. These may be either congenital or acquired; they may affect either single organs or the whole body.

58. Menschikoff, V.: Chlorretention bei exsudativen Prozessen der Haut, reviewed in *Jahrb. f. Kinderh.*, 1912, lxxvi, 99.

59. Bernis, A. L.: Répartition de l'azote urinaire dans quelques dermatoses dites diathésiques, Dissertation, Bordeaux, 1912.

60. Kern, H.: Ueber Harnsäureausscheidung bei exsudativen Kindern und ihre Beeinflussung durch Atophan, *Jahrb. f. Kinderh.*, 1913, lxxviii, 141.

61. v. Hansemann: Die Konstitution als Grundlage von Krankheiten, *Med. Klin.*, 1912, viii, 933.

62. Unterberger, S.: Die Bedeutung der Konstitution für den Verlauf der Krankheiten, reviewed in *Ztschr. f. Kinderh.*, 1912, Referate, iii, 411.

63. Rozenblat, H.: Scrophulosis, lymphatismus, diathesis exsudativa, reviewed in *Jahrb. f. Kinderh.*, 1910, lxxii, 648.

64. Czerny, A.: Die Bedeutung der Konstitution für die Klinik der kindlichen Infektionskrankheiten, reviewed in *Ztschr. f. Kinderh.*, 1914, vii, 354.

Engel⁶⁵ is of the opinion that scrofulosis develops on the soil of exudative diathesis, the infection with the tubercle bacillus being added to the constitutional abnormality.

THERAPY

Feeding.—Czerny³⁶ sums up his views on the connection between exudative diathesis and feeding as follows: The idea that milk and eggs are the best food for children is erroneous, and it is most likely a relic of the days when rickets and scrofulosis were regarded as diseases due to an insufficient supply of protein in the food. The general statement that woman's milk is the best food for infants is also wrong. We can only assert that the mortality amongst children at the breast is lowest. Many children do not thrive at the breast and show all kinds of symptoms while on this food. These disturbances are due to constitutional abnormalities, of which exudative diathesis is one. Thus, for instance, seborrhea faciei is due to the feeding which brings out the exudative diathesis, and one of the symptoms of this is seborrhea. The first two years of life are of the greatest importance as concerns the appearance of exudative diathesis.

Czerny¹³ further states that three points are of importance in the control of exudative diathesis, namely: (1) the kind of feeding; (2) the condition of the nervous system; (3) intercurrent infections. By treating this trio we can reduce the symptoms of exudative diathesis to a minimum.

Feer⁶⁶ believes that the congenital disposition and the mode of feeding should be considered as the causes of exudative diathesis. To fight the disposition these children must be fed sparsely; they must not get milk, butter, eggs or meat; they should have little sugar; they are allowed large amounts of fruit and vegetables.

Simpson,⁶⁷ on the other hand, denies the harmful effect of milk in infants with eczema, and he does not want to change the diet of the infant as long as it is thriving.

Finkelstein⁶⁸ is of the opinion that the relation between eczema and the mode of feeding and the gain in weight are by no means simple.

65. Engel: Die Skrophulose und ihre Behandlung, Med. Klin., 1913, ix, 2099.

66. Feer, E.: Ueber exsudative Diathese des Kindes, reviewed in Ztschr. f. Kinderh., 1912, Referate, i, 679.

67. Simpson, C. A.: Infantile eczema, Jour. Am. Med. Assn., 1912, lviii, 995.

68. Finkelstein, H.: Zur diätetischen Behandlung des Säuglings- und Kindereczems, Ztschr. f. Kinderh., 1913, viii, Orig., 1.

Steinitz⁶⁹ in his report from the Vegetarian Children's Home in Breslau, attributes to the diet his good results in keeping down the manifestations of exudative diathesis.

Variot⁷⁰ asserts that eczema is due to the "eczematogenous" qualities of mother's milk and that it may be cured by a change in the wet-nurse or in the food. Ibrahim, who reviews this paper, asks, however, why this milk was not tried on other babies who did not have exudative diathesis.

Czerny⁷¹ cites a very interesting experiment which proved to him that the clinical picture, which was formerly called scrofulosis, is a combination of the symptoms of tuberculosis and of exudative diathesis.

Climate.—Von Planta⁷² believes that the lessened amount of oxygen in the mountain air causes a change in the metabolism, and he therefore advises a long-continued sojourn of not less than one year.

Bockhorn⁷³ advises a sojourn of three months at the seashore for children with exudative diathesis.

Drugs.—Krasnogorski⁷⁴ proclaims himself an adherent of the theory of Eppinger and Hess, who attribute some of the symptoms of exudative diathesis to vagotomy, and he therefore recommends the administration of atropin in increasing doses.

Schreiber⁷⁵ has seen good results from the alkaline mineral waters, also arsenic periodically, and calcium glycerophosphate.

69. Steinitz: Ueber Vegetarismus und exsudative Diathese, *Jahrb. f. Kinderh.*, 1907, lxxv, 513.

70. Variot, G.: Beobachtungen über die Behandlung des Säuglingsekszems durch Milchwechsel, reviewed in *Jahrb. f. Kinderh.*, 1912, lxxv, 390.

71. Czerny, A.: Beitrag zur Leberthrantherapie, reviewed in *Ztschr. f. Kinderh.*, 1913, Referate, iii, 338.

72. v. Planta: Die exsudative Diathese und das hochalpine Gebirgsklima, reviewed in *Ztschr. f. Kinderh.*, 1912, Referate, i, 600.

73. Bockhorn, M.: Die exsudativ-lymphatische Diathese und die Prophylaxe, *Deutsch. med. Wchnschr.*, 1914, xl, 960.

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