moment, to the accomplished and energetic chairman, or to any one of the eminent medical men composing the committee on essays.

In the past much good has been accomplished by the labors of the chairman of this committee, and its members have demonstrated their devotion to the best interests of our profession by their valuable contributions to its literature.

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ORIGINAL ARTICLES.

THE CAUSE AND TREATMENT OF INFANTILE ECZEMA.

Read in the Section on Diseases of Women and Children, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

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Infantile eczema is one of the most common diseases of early life. It is always a distressing and frequently an obstinate affection, remaining for weeks or months; but as a rule, it is much more amenable to treatment than the eczema of adults. It may occur at a period during infancy, but it is most frequently observed during the first six months of infantile life, at the time of weaning, and during the process of dentition.

It may appear in a variety of forms. In some cases it is characterized by the development of a variable number of erythematous spots, or blotches upon the face, scalp, and other portions of the body. In others the eruption is purely papular; in still others it consists solely of vesicles situated upon a reddened inflamed base, or both lesions may be intermingled. The pustular variety is characterized by the formation of pustules of various sizes, either alone or commingled with vesicles, papules and vesico-papules. The disease may involve any or all portions of the integument, but it most frequently attacks the face, scalp, neck, chest, buttocks, and the upper and lower extremities. It pursues a variable course. The papular and erythematous forms usually disappear by resolution, but they may pass imperceptibly into the chronic squamous stage of the disease. The surface then presents a dull red infiltrated appearance, and is covered with a number of minute epidermic scales.

The vesicular and pustular varieties rarely terminate in resolution. As a rule, the vesicles and pustules burst within a few days after their development, exposing a raw weeping, bleeding surface, from which a sero-purulent fluid exudes, and dries into large firm yellowish crusts. When the scalp is the seat of the eruption, the hairs are matted together by the exudation, and the entire scalp becomes covered with yellowish masses, forming the condition known as crustalactea. As the disease progresses the irritation increases, so that the inclination to scratch the parts become almost irresistible, and patients tear the surface with their fingernails even

while asleep. This, of course, increases the exudation and enlarges the diseased area. After an interval of several weeks the morbid action may cease, spontaneous repair take place, and the crusts drop off, disclosing a healthy but somewhat reddened surface. Usually, however, unless appropriate treatment be instituted the disease passes into the chronic stage, and remains for months or years with occasional periods of amelioration and exacerbation.

Infantile eczema is due practically to one of four causes: 1. Insufficient or improper food. 2. Imperfect assimilation. 3. Deficient excretion. 4. External irritation.

Insufficient or Improper Food.—This is one of the most frequent exciting causes of the disease. If the mother's milk is scanty in quantity, or poor in quality, or altered in character by pregnancy, passion, menstruation, anxiety or disease, the nutrition of the child will suffer, and eczematous or other eruptions speedily appear. If the child is handfed, and given unsuitable and indigestible articles of food, or, if the cow's milk upon which it is nourished is so diluted with water as to be deprived of its value the same result will follow.

Imperfect Assimilation.—This is another potent factor in the production of the disease. The food may be perfect in all respects, but if owing to disturbances of the digestive tract a considerable portion of it is either rejected by vomiting, or hurried out through the intestinal canal before digestion, and assimilation are complete, the blood will become thin, the nervous system will suffer, and various cutaneous eruptions appear.

Deficient Excretion.—Deficient excretion is not as frequently chargeable with the development of infantile eczema, as it is with many other cutaneous disorders, but many stubborn cases spontaneously disappear when the normal functions of the various excretory organs are reestablished.

External Irritation.—This is frequently the unsuspected cause of numerous cases of infantile eczema. Among the common sources of irritation may be mentioned, woollen or flannel clothing, light clothing, dyed clothing, wet diapers, scratching, and the too frequent washing of the body and scalp with soap and water. The eruption is often aggravated by the use of quack preparations, or ointments recommended by obliging friends and neighbors.

Treatment.—The general principles upon which the successful treatment of infantile eczema must be based, are, to improve the nutrition of the patient, correct any disorder of digestion or excretion that may exist, and protect the affected surface from further irritation and endeavor to restore it to its normal condition. The measures to be employed in each case will vary with the cause of the disease, and the extent, variety and stage of the eruption. In some cases attention to diet and hygiene will be sufficient to effect a cure. In other cases local or constitutional medication will be required, while in obstinate cases both local and constitutional remedies must be employed. In mild cases of the erythematous or papular variety, in which the deficient character of the food supply is plainly appar-

ent, immediate improvement can often be obtained by simply giving a sufficient quantity of appropriate nourishment. There are several ways of accomplishing this. If the mother is nursing the child, and her milk is scanty or impoverished, she should be placed upon tonics and a liberal diet, and directed to give the child a definite quantity of cow's milk in addition to her own at stated intervals throughout the day. I have notes of several cases in which a rapid and decided improvement in the character and amount of the mother's milk, and a disappearance of the eruption from her child followed a liberal diet, conjoined with the use of the formulæ:

- R. Tinct. ignatiæ..... gtt. x.
 Tinct. serpentariæ..... ʒj.
 Tinct. cinchonæ..... ʒj.
 ℞. Sig. Teaspoonful in water before meals and at bedtime.

If, unfortunately, the infant cannot be nursed by its mother, the best substitute for its natural food is pure undiluted cow's milk, unmixed with any other substance whatever. More than thirty years ago Dr. N. S. Davis declared before this Association, that the practice of diluting the cow's milk given to infants was the direct cause of incalculable suffering and innumerable deaths. Careful observation has convinced me of the truth of Dr. Davis' assertion. Time and again have I been called in to see infants of from ten weeks to six months old, who were crying continually, pining away, and in addition were covered with various forms of eczematous eruptions. On inquiring what the little patients were fed upon, answers were one part milk and three parts water, one part milk, one part flour, and five or six parts water. In one case the unfortunate child was being slowly and unknowingly starved to death upon one part milk and eight parts water. My orders in every case were to at once give each child plenty of pure undiluted cow's milk and nothing else for food. For some I directed 2 grains of pepsin to be given in addition with each feeding. No other medication was employed or required, and in every case the eruption spontaneously disappeared in from a few days to two weeks.

In other cases it will be found that the trouble is due to the child being given potatoes, pies, pastry, pork and all sorts of table-food, preparatory to being weaned, or to assist it to cut its teeth. The child's stomach is unable to digest such food, its gastro-intestinal canal is disordered, and various eruptions appear that are charged to dentition. Dentition is a perfectly natural process, and in the overwhelming majority of cases is accomplished without any reflex or direct disturbance of the system. The cases of eczema attributed to it are numerous, but they are really due to errors of feeding and disorders of digestion.

Cases of infantile eczema, due to imperfect digestion and mal-assimilation, require to be studied carefully. Those in which there is a deficiency in the gastric juice, are benefited by the administration with each feeding of from $\frac{1}{2}$ to 2 grains of pure pepsin, or from 2 to 5 grains of lactopeptine. Nux vomica in doses of from one-quarter to two minims of the tincture three times a day is also valuable.

Minute doses of the chloride of iron, or of hydrochloric acid, sometimes yield better results than either pepsin or nux vomica. If diarrhoea exist, small doses of opium or Dover's powders, with an astringent tonic, like cinchona or geranium, will be of the utmost value. In some cases a change of air, as to the seashore or the mountains, will be the most effective remedy. Cod-liver oil will be found of especial value in all patient's that are debilitated, anæmic, or that present any evidences of the scrofulous diathesis. It may be given in half-drachm doses three times a day, or used as an inunction every morning. In many cases, no other treatment will be necessary. The syrup of the iodide of iron is also valuable. The dose will vary from five to twenty drops, according to the age of the patient. It may be given in any convenient medium or in combination with cod liver oil.

Quinine is also an effective remedy, especially in malarious districts and in cases in which the eruption manifests itself during the spring and autumn months. It may be given in the syrup of yerba santa, in doses of from $\frac{1}{2}$ grain to 3 grains once or twice a day. Very often in cases arising from gastro-intestinal irritation or complicated by constipation, marked and rapid improvement can be obtained from the use of minute doses of calomel, alone or combined with a small quantity of jalap resin.

- R. Hydrarg. chlor. mitis..... gr. j.
 Resinæ jalapæ..... grs. j.
 Sacchari albæ..... grs. x.
 ℞. Make 6 powders.

Sig. One powder every other day.

Podophyllin and leptandrin will also be found serviceable. Castor-oil is a time-honored and an effective remedy. Small doses of syrup of rhubarb or carbonate of magnesia are frequently beneficial. In acute cases accompanied by fever and an increase of the circulation, aconite is potent for good. It will be noticed that I have said nothing as to the use of arsenic in the treatment of the various forms of infantile eczema. The omission was intentional. Arsenic is sometimes requisite in the treatment of obstinate forms of eczema in adults, but in the eczema of childhood it is not only unnecessary, but frequently injurious. For many years I have not employed arsenic in cases of infantile eczema which have come under my observation. I would advise that arsenic be avoided in the treatment of infantile eczema, as its use is often productive of more injury than any benefit it may produce on the disease.

Local Treatment.—In cases in which the itching is a marked symptom, various soothing and anti-pruritic lotions and ointments may be employed. Those which I most frequently order are:

- R. Acidi carbolic..... grs. ij.
 Hydrarg. chlor. mitis..... gr. x.
 Ung. tinci oxide benz..... ʒj.
 ℞. Ft. ungt.

- R. Creasoti..... m iij.
 Aquæ..... ʒiij.
 ℞. Ft. loto.

- R. Chloral hydrat..... gr. v.
 Aquæ menth. pip..... ʒij.
 ℞. Ft. loto.

Applications of cold water, ice-water, lead-water and laudanum, or a saturated solution of bicarbonate of soda, will also be found grateful and calnative.

When the eruption has become subacute or chronic, and the integument is covered with crusts, it would be folly to expect any improvement until the diseased surface is exposed to view. The affected region should be covered with a starch poultice, or saturated with oil to loosen the crusts and scales, which must be carefully picked off. Various stimulating ointments may then be applied to the exposed, denuded surface, but care must be taken to avoid increasing the irritation and inflammation. The medicaments employed should be such as will constrict the capillaries and reduce the congestion, while they at the same time form a protective covering for the raw and oozing corium. The subnitrate and the oleate of bis muth and the oleate of zinc, either in powder or ointment form, are excellent applications for this purpose. The ordinary benzoated oxide of zinc ointment alone, with 5 grains of camphor to the ounce, is also serviceable. The following ointment will be found valuable:

R. Pulv. opii.....	gr. ii.
Acidi tannici.....	3ss.
Plumbi carbonatis.....	3j.
Olei anthemidis.....	gtt v.
Adipis.....	3j.

Another excellent procedure is to brush a 25 per cent. solution of the fluid extract of geranium over the surface after the scales have been removed. Diachylon ointment, weak tar ointment, cucumber ointment, weak salicylic acid ointment, and the ointment of the carbonate of lead, may also be employed with benefit. Harsh and irritating applications must be sedulously avoided, as they are certain to protract the disease. Cases due to external irritation usually require nothing more than the removal of the irritant and the application of a soothing ointment or lotion to the part affected. Tight, dyed, woolen or flannel clothing should be replaced by articles of wear composed of some less offending material. If wet diapers are at fault they should be removed as soon as soiled, the parts gently mopped dry with a soft cloth, and then dusted with zinc oxide, bismuth subnitrate, or lead carbonate, or painted with a dilute solution of geranium maculatum. If the eruption is due to the scratching and irritation consequent upon the presence of lice, the hair should be cut short, and any of the following ointments rubbed well into the scalp:

R. Hydrarg chlor. mitis.....	gr. x.
Acidi carbolici.....	gr. ij.
Ungt. zinci oxidi.....	3j.
R. Naphthlithol.....	gr. x.
Ung. zinci oxidi.....	3j.
R. Sulphuris sublimati.....	3ij.
Pulv. marantæ.....	3j.
Ungt. aquæ rosæ.....	3j.

Cases that are the result of the too free use of soap and water will usually spontaneously subside upon the suspension of the practice. An infant's body should be bathed every day in tepid or warm water, but soap should not be applied to its delicate skin more than two or three times a week.

TWO CASES OF TUMOR OF THE OPTIC NERVE.

Read in the Section on Ophthalmology and Otology, at the Thirty-Eighth Annual Meeting of the American Medical Association, June, 1887.

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Forty-three cases of tumor of the optic nerve have been reported, of which a large proportion have been sarcomata. Fibromata stand next in order of frequency. Scirrhus carcinoma and genuine neuroma have also been reported.¹ I have met two cases in my own practice, both of which were sarcomata. The following is a brief report of these cases. [The tumors were presented for examination.]

Case 1.—C. A. H., a lad æt. 7 years, residing in East Saginaw, Mich., was brought to me for consultation May 18, 1882. The father gave the following history: About a month previous he noticed that the right eye seemed larger, and that it was totally blind. It had not changed in appearance since the deformity was first noticed. He consulted an oculist, who was in doubt as to the condition. The boy had experienced but very little pain in the affected eye, and was free from headache.

I found the right eye totally blind and affected with slight exophthalmus. Tension normal. Left eye appeared normal, V. = $\frac{2}{8}$, Hm. = 0.75 D. Ophthalmoscopic examination showed the disc of right eye elevated and outline indistinct. The elevation of the disc was estimated as equal to about $1\frac{3}{4}$ mm. The lymphatic glands of the neck were enlarged, and the patient had the appearance of being affected with scrofula. No tumor could be felt on passing the finger into the orbit as far as practicable. The walls of the orbit seemed smooth, the eyeball being displaced about 3 mm. directly forward, its movements being unrestricted. From appearances I thought a tumor existed surrounding the optic nerve, but of what character could not be determined. The exophthalmus might be due to other changes deep in the orbit. If a tumor existed, the question arose as to whether it was malignant. The question also arose as to whether the enlarged lymphatics were due to scrofula, or were they evidence of malignant disease? I prescribed iodide of potassium and citrate of iron and ammonia, and requested that the patient be brought to me again in two weeks.

June 13, patient returned, feeling much better; appetite improved, and the enlargement of the lymphatics was much less. The outline of the right optic disc is less obscured, but the elevation of the papilla seemed about the same. I directed a continuation of the iodide and iron and added cod-liver oil and a bitter tonic to the medication. September 16, patient returned. Has discontinued medication since July 10. The optic papilla seemed more elevated, but the exophthalmus remained about the same. I advised a return to the previous medication, but after a few weeks, to substitute the syrup of iodide of iron in suitable doses for the iodide of potassium and citrate of iron and ammonium.

¹ Vossius. Archives of Ophthal., vol. xii, p. 294; also vol. xv, p. 133.