BULKLEY (L.D.)

ON THE MANAGEMENT

OF

INFANTILE ECZEMA,

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MANAGEMENT OF INFANTILE ECZEMA.

"To be a successful practitioner in the treatment of eczema, a medical man must be an accomplished physician; to manage the local treatment with success, he must also be an able surgeon."—Wilson.

By infantile eczema is here understood cases of this disease occurring in children of five years old or under, although writers have not generally been very definite in fixing upon the time of life at which it ceases to be properly so called. There are reasons, however, for classing all cases of eczema occurring during the first five years of age together, and for considering them under one designation, whereas no objections can be reasonably raised to such a procedure.

The periods of life are conveniently divided into decades and half decades, and if we look at the statistics of a large number of cases of eczema, we shall find that the first decade of life presents a very much larger proportion of cases than any other; by far the larger share of cases in this decade will be found in children of five years of age or under. Thus, of two thousand and thirtythree cases of eczema, five hundred and twenty-four came within the definition of infantile eczema, or 25.7 per cent.; the per centage in private practice being sixteen, and the dispensary average being thirty per cent. This proportion would be increased very largely did not a certain number of patients, with infantile eczema, find their way to the children's department of the dispensary, while, of course, multitudes of cases are never treated at all, owing to the impression so prevalent, both among the laity and the profession, that it is either dangerous or useless to treat this disorder. The layman fears lest some harm may come from the disease being "driven in," which fear the physician sometimes fosters, from ignorance, or from carelessness and unwillingness to cope with the case. The little sufferer from eczema, therefore, is left to bear his trials unaided, with the hope that with each change in its physiological conditions the disease will pass away. Thus, the eruption being called "milk crust" during nursing, the assurance is given that it will cease when it cuts its teeth. When this stage is arrived at, and the eruption is aggravated with each accession of a tooth, the eruption takes the name of "tooth rash," which will cease when certain teeth are through. These come, and yet the disease persists, little being done to check or modify it, and so on. I have seen multitudes of cases which had lasted one, two, three, four, or more years, and in one instance, a characteristic moist eczema, a veritable milk crust, which had remained on the head from earliest infancy to twelve years of age; and in another case, a gentleman of thirty-one years of age, had had the same on the legs since the first year of life.

Now we by no means deny that the eczema of infancy is very intimately associated with the milk and with the irruption of the teeth, but we do start with the proposition that it is not necessarily a result of either the partaking of milk or of the formation and breaking through of the teeth, but that it always and invariably signifies an error of some kind, which medical thought should avert; and, that it is, like any other aberration from health, a condition of affairs which medical skill should remove.

Infantile eczema presents certain features different from the phases of the disease which are seen in adult life, and these features, which are dependent upon the structure and quality of the skin of children, are such as almost to render it another disease, and to call for quite different management, at least in most cases, from the same eruption in adults.

The expression, "The management of infantile eczema," was chosen as a title instead of "The treatment of infantile eczema," because it was wished to impress the fact that the disease is of such protean shape, and the etiological facts so varied, that it is difficult to speak of the measures to be employed in its cure as a treatment, inasmuch as they are better considered as management of the patient in all the relations of life, than as routine treatment to be given simply because the eruption eczema is present.

We will, therefore, begin with the etiology of the disease, as we understand it; and in considering this, will rather state practical facts from experience than cite authorities.

Infantile eczema is by no means an hereditary affection, that is, in but a small proportion of the cases are the parents, one or both, the subjects of the same: and conversely, parents may have eczema, while their infants escape. It is true, however, that many parents with a strong eczema tendency often have children thus affected, although they themselves need not have the eruption at any particular time when the child happens to have it. It need hardly be stated that eczema is never acquired by contagion, although the laity will often thus believe.

The fact cannot be denied that a majority of infants with eczema appear to be in perfect health, indeed may be apparently healthier than the others in the family who have not the eruption; they are not infrequently of a ruddy color, have good appetites, with regular action of the bowels, and parents are with difficulty convinced that there is some error beyond the simple skin lesion. And yet I feel confident in affirming that exceedingly careful medical investigation will always discover something to be corrected besides the disorder of the skin.

In nursing-infants with eczema, I very commonly find that the mother is in the habit of consuming large quantities of tea, or perhaps beer or ale, or takes wine pretty freely, or, perhaps she is taking only chocolate or milk, and these disagree with her, causing dyspepsia; or she is constipated, or her urine shows disorder, indicative of derangement of digestion or assimilation. Now if these elements exist, if the mother's secretions, as from the bowels. kidneys, skin, liver, etc., are not healthy, certainly the secretion of milk is not healthy, and thus it can provoke disorder in the child. In the case of nursing-infants with eczema, therefore, my attention is always turned first to the mother, and I believe I can say that in an enormously large percentage of cases, if not always, I find errors of assimilation and disassimilation in the mother, which must first be corrected before we can hope for or expect great and permanent benefit to the child. It must never be forgotten that a patient may have extensive oxaluria as almost the sole indication of mal-assimilation, other than a general tired feeling, etc. I never allow mothers nursing eczematous children to take any fermented liquors, and generally cut off the quantity of tea drank, especially if it is used in excess: milk I conceive to be the best food upon which the mother may form milk, and seldom do I fail to have it used freely. If it is not well borne at first, the habit of taking it can be acquired: frequently it is necessary to add a little alkali, and I commonly use the liquor potassæ, ten to fifteen drops to the tumbler full of milk.

In not a few instances the milk furnished by the mother is absolutely too weak to sustain the child properly, and we must either provide other nourishment or improve the mother's health, or both. I have very frequent occasion to prescribe for the mother, giving tonics, alkalies, etc., and it must be borne in mind that the mother may require oily matter, as codliver oil, as well as the child.

Where the nutriment from the mother is weak we may supplement it with codliver oil, which I continually give, even to very small children with eczema: or, where it can be had, I believe that cream should certainly be given to the infant with eczema whose nurse-mother is in poor health and furnishes milk insufficiently rich. Or, again, oil may be administered by inunction, either cod-liver, linseed or sweet almond oil being used; for eczema is decidedly a disease of mal-nutrition, in every subject from the youngest to the oldest.

I see many infants with eczema who are being fed very erroneously, either in conjunction with nursing or in lieu thereof, and a change in diet often assists the management of the case wonderfully. Milk I believe to be the proper nutriment for children under one year of age, and yet very few of those which I see are thus fed. Most of them are taking too large quantities of starchy food, corn starch, farina, etc., and in many instances far too much sugar is given with the food. These elements all require attention in the management of infantile eczema, if we really desire to cure the patient, that is to effect a permanent removal of the disease.

I need hardly speak of the grosser errors of diet sometimes observed in these patients, other than to mention that I constantly find among the poorer classes, children of the most tender years, or even months, who are allowed to partake of anything or everything used by adults which they may crave, and that it is not at all uncommon to find children with eczema, even less than a year old, of whom the parents say with perfect naiveté, that they are "very fond of tea." It would seem as though such evils could not prevail among the better classes, but we have only to remember that the nurses to whom so much is often committed, all come from these lower, ignorant classes, and unless they are watched and directed otherwise, they will practice just as they have been brought up at home. Moreover, if time permitted, I could give instances where very intelligent persons were feeding patients with infantile eczema in a most outrageous and inexcusable manner.

Constipation is a very frequent accompaniment of infantile eczema, though the reverse state, diarrhœa, is occasionally met with; either and both are evidences of mal-assimilation. For the constipation of children I use lactopeptine, in doses sufficient to produce the desired effect. It is to be given directly after eating, and may be repeated once or more after each meal, if necessary. It is very conveniently administered in suspension, as in orangeflower water, though children often rather like to have it dry on the tongue. In the beginning of a case, nothing that I know of suits so well to unload the bowels, and make an impression on the eczema, as Wilson's treatment, of calomel, in doses suited to the age and condition of the child. Under a year I generally give six and a half centigrams (one grain), well rubbed up with sugar, or a little bi-carbonate of soda, the dose being increased by about three centigrams (half a grain) for each additional year of life. This powder may be repeated, if necessary, every other day, and I prefer to have it given in the morning, rather than at night, that the effects may be better watched, and that any uneasiness occasioned thereby may not disturb the night's rest. Often the powders need be given but once or twice a week, or even as occasion demands. Any irregularity of the bowels, and especially any tendency to pulmonary congestion, should at once be treated by one of the powders.

Where the tendency to constipation is not overcome by these means, the food must be changed, and even in very small infants, I have oat-meal or cracked wheat added to the food, in the way of a pulp, made by rubbing thoroughly boiled meal through a fine sieve. Other modifications of diet may of course be necessary, but cannot be entered into here.

Sometimes in the desire to avoid starchy foods, animal food will be given in much too large proportion, and I have seen very young children stuffed with beef-tea, beef-juice, or extract of beef, to an alarming extent. In one instance I believe the child died from this, together with brandy, which was freely given. In the more acute forms the diet should be light and unstimulating, and the organs of digestion assisted, as will be mentioned later; in every case there is more or less inactivity of the processes of assimilation and disintegration.

Coming to the medical treatment of infantile eczema, we find that remedies certainly have a very great influence in the disease. Calomel has already been mentioned, and if rightly used, it is capable of very much good. Young children also bear alkalies very well, and will improve in general health as well, under them. In nursing-infants I generally give the mother acetate of potassa one gram (fifteen grains) or so, three times daily after eating, with nux vomica and a bitter infusion. I do not know if it passes through the milk in any way, but it certainly benefits the child very much. Lime water is of good service, though I do not use it nearly as much as many. I am very fond of giving the child Vichy water with the milk, using it rather freely, and when the bowels are constipated I have a syphon of Kissingen water and one of Vichy provided, and have them used conjointly, in quantities sufficient to relax the bowels a little. Children also do very well with a few drops of liquor potassæ added to the milk, say from two to five drops to the tumblerful, according to the age.

Where there is a good deal of restlessness at night, and the skin rather dry and hard, I give the acetate of potassa, three or four times daily, in doses of from six to thirty centigrams (one to five grains), in five cubic centimeters (a teaspoonful) of the liquor ammoniæ acetatis; if there is much arterial excitement this is improved by the addition of a drop, or a part of a drop, of the tincture of aconite.

Children bear arsenic remarkably well. Some time ago I reported a number of cases of infantile eczema, where the disease vielded in a very short time to Fowler's solution (liquor potassæ arsenitis), given alone; and since then I have had further proof of The remedy was given in cinnamon water, and of such a strength that each five or ten drops represented one of the arsenical solution. They were then given this in such a quantity that a child a year old began with a drop three times daily of Fowler, and the dose was gradually increased by one-fifth of a drop until two, three, or even more drops of the arsenical solution were taken thrice daily, or until there was some diarrhœa; the dose was then lessened. Under this plan the eruption quickly paled, and soon ceased, with little or no local treatment, and with few, if any, dietetic or hygienic directions. But I have never felt it wise to recommend this plan, or to practice it very largely, for fear of possible evil results from the free use of so powerful a remedy. It is well to know that arsenic can and will exercise such a power, certainly in some cases, for I hardly think this could be relied on as its uniform effect—the cases were more or less selected.

In combination with other measures, however, arsenic should seldom if ever be neglected in the treatment of eczema; after the first year of life I make very considerable use of it in combination with the wine of iron, much as in the ferro-arsenical mixture of Wilson, which he lauds so highly.

The French arsenical mineral water, the Eau de Bourboule, is often of considerable service in infantile eczema; the dose for adults is from half to one tumblerful, with the meals; children may take a small wineglassful alone or mixed with the milk.

Besides alkalies, cod-liver oil, and arsenic, iron should never be forgotton in infantile eczema; wine of iron, the ammonia-citrate and tartrate of iron, and dialyzed iron, are especially applicable. Rabuteau's tasteless syrup of iron is also valuable, and very acceptable to children. I also make considerable use of the syrup of the hypo-phosphites of soda, lime and iron, and am more and more pleased with its effects. I do not use the syrup of the iodide of iron as much as do some, for I have seen it very often ineffectually employed by others.

In dispensary practice very many children with eczema receive the standard rhubarb and soda mixture, which contains about six centigrams (a grain or so) each of rhubarb and soda in five grams (teaspoonful) of peppermint water, and they are very commonly greatly benefited thereby. I think this well-tried combination is too much neglected in private practice, for the substitution of more agreeable, but often less serviceable remedies.

The extract or tincture of viola tricolor has been recently revived, as a remedy in infantile eczema. I have no great experience to offer on the subject, as I have generally found the other measures here recommended to be quite sufficient. The older French writers speak very well of it.

It is a little difficult, to give in a few words, the exact indications for the various remedies I have mentioned, and perhaps intelligent judgment will best decide, if it is borne in mind that it is the *patient* rather than the *disease* which we are to treat internally. The indications are more those suggested by educated thought, directed to restoring the system to perfect health, than to special remedies called for by the disease in question.

There are, however, tolerably clear lines of distinction between

classes of cases which call for an alkaline and depurative treatment, and those where cod-liver oil and more powerful tonics are at once demanded. Thus, in the full, ruddy-faced child, with an eczema tending to give a dry, red surface, very itchy, or perhaps exuding considerable serum when washed or scratched, a full tonic course of treatment would certainly aggravate the complaint, especially if the child came of gouty stock. Light purgative and alkalies would be followed by amelioration of the itchings, a lessening of the cutaneous congestion, and subsidence of the disease. On the other hand, the pale, strumous looking child, in whom the discharge tends to crust up into yellow masses, will be benefited by iron, arsenic, cod-liver oil, etc., at once. But this latter child, if care be not taken, may soon have the organs of life choked by the sudden influx of material to which it is unaccustomed, and will require the cooling treatment of an occasional purgative, possibly also alkalies.

Calomel is the better purgative for the first class of cases; rhubarb, castor-oil, etc., are better suited for occasional use in the second.

But of course no hard and fast lines can be laid down, and there will occur many cases which cannot be clearly put in either category. Not unfrequently we give tonics and builders-up of tissues with one hand, while with the other calomel, grey powder, alkalies, etc., are administered. It must also never be forgotten that the full-blooded arthritic case first described, will at a later period require the tonic course; for eczema is a disease of debility, whether there is a temporary and false appearance of hyper-activity of the system or not.

There are those who regard eczema as a purely local disease of the skin tissue itself, independent of any systemic relations; but it is hardly necessary to argue the untenability of this view, which has been abundantly shown elsewhere.* Certain it is that eczema in children has many constitutional relations, and while in certain cases the eruption may be largely or entirely removed by local remedies, its complete extinction must be by dietetic, hygienic, and medicinal measures as well.

It must ever be borne in mind, however, that the skin certainly is subject to acute inflammation, from purely local causes, as when croton oil is applied, or poison ivy, etc., and that in infants harsh

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usage may abrade and inflame the skin; all this is quite different from true eczema, and reasonable care, judgment, and experience, will readily distinguish the cases of each.

While the general measures advised for eczema infantile have not differed so very greatly from those which are required in other conditions, and while emphasis has been laid on the fact that it is the patient rather than the disease which is to be borne in mind for treatment, on the other hand, in the local management of the disease there is need of special experience and knowledge. It is in the local treatment of diseases of the skin, and especially of eczema, both in infant and in adult life, that wisdom is required to make just the right application; for a wrong one will pretty certainly not only do no good, but positively do harm.

The experience, both of the special and general medical profession, has undoubtedly given to the oxide of zinc ointment the palm for universality of use, and that perhaps rightly. But he is poorly able to treat infantile eczema who knows only oxide of zinc ointment, and that as it is directed to be made in the pharmacopæia. The officinal ointment is prepared with lard, which has twelve and a half per cent. of tincture of benzoin and sixteen and two-thirds per cent. of oxide of zinc (a drachm of tineture of benzoin to the ounce, and eighty grains of oxide of zinc). Now I have repeatedly seen this irritate tender skins, to which, if otherwise prepared, a zinc ointment was soothing. In the first place I never use lard in ointment, if it can possibly be avoided: my preference is for the coldcream, the unguentum aquæ rosæ, which is made from almond oil, spermaceti, and bees-wax. This may possibly become rancid, but has but slight tendency to do so; it, as well as other excipients, should be watched, as a rancid oily matter is exceedingly irritative to a diseased skin. The unguentum petrolei or cosmoline, or the glycerite of starch, is preferable to the lard, but the rose ointment is really the best of all.

The strength of sixteen and two-thirds per cent, of oxide of zinc (eighty grains to the ounce) is frequently too great, and I seldom employ more than twelve and a half per cent. (sixty grains to the ounce), and far more often but six and a quarter per cent. (thirty grains) in infantile eczema. I do not benzoate the ointment, as I find this sometimes irritates.

But there are many other measures suited to different states of eczema in children which are far more serviceable than simple zinc ointment alone. The old fashioned tar ointment is a remedy which has fallen into unmerited neglect. As directed in the pharmacopæia, of equal parts of tar and suet, it is much too strong for application to a child's skin, or to any inflamed surface; but when diluted with three times its quantity of rose ointment, with six and a quarter to twelve and a half per cent. of oxide of zinc (half a drachm to a drachm of oxide of zinc in the ounce) it forms one of the most valuable anti-prurities possible in eczema. Made thus it can be applied even upon a very young child and with the happiest effects.

Bismuth sub-nitrate forms a very good ointment for infantile eezema, used in a strength of six and a quarter to twelve and a half per cent. (half a drachm or a drachm to the ounce). Tannin also acts very happily when there is a dry, red and somewhat scaly surface. Likewise a weak white precipitate ointment.

In the management of infantile eczema very different results are obtained according to the mode in which applications are made to the diseased surfaces. In general, ointments should be spread upon cloths and laid upon the affected portions, if there is any tendency to exudation. More harm is often done by the efforts of the attendant to rub on the ointment than gain is had from the application itself. If laid on with a cloth all this is avoided; the dressing should, of course, be renewed occasionally.

In the management of infantile eczema, attention should also always be paid to the use of water by the attendants, for most erroneous methods and ways are constantly practiced, and the exciting and continuing cause of eczema in the young, as well as the old, will not infrequently be found in the use of water; sometimes, also possibly, in the soap employed. The child, then, in whom eczema is developing, should not be freely washed, as if in health; but if washed at all, the water should be properly medicated. I generally have it only wiped off, as much as cleanliness actually demands.

If a bath has to be given, I have a mixture of carbonate of potash, carbonate of soda, and powdered borax made, of which from four to eight parts are used to one thousand (two to four teaspoonfuls for each gallon of bath water), together with about half that proportion (from two to four teaspoonfuls) of dry starch. This is used without soap, and on taking the child from the bath, it is immediately dried without friction, and a proper medicament

at once applied. If there is tendency to the development of acute papular eczema, the whole surface should be well powdered after drying; as, with lycopodium powder.

The practice of many is to wash the parts directly affected with eczema; or as I have known the advice of the physician, it was to keep the part well washed and clean. Now this is impossible, at least in eczema in children, which is at all acute. As often as the surface is washed, the outer, lightly-formed epidermal cells, are removed before they have acquired any firmness, and the process of repair is hindered thereby. My constant direction is not to wash a part until I direct it to be done, and in many cases that is very seldom. Occasionally the mass of accumulation becomes so great that the ointment does not penetrate it, and a single washing is of the greatest value, in allowing the astringent to come down directly upon the affected surface. I always direct that the application be made in the quickest time possible after the washing, otherwise a new coat of exudate has formed and hardened, and the medicament lies on top of it, and fails of its end.

In children, I seldom have parts which are at all acutely involved in the eczematous process, washed more than once or twice a week; sometimes not at all for a much longer time, if necessary. Occasionally, when the crusts are quite thick, as upon the scalp, we have a very valuable agent which will penetrate them, viz., codliver oil, whose value as a local application in eczema, is by no means small.

A word may here be said in reference to the use of poultices in eczema, especially in eczema infantile. In the almost five hundred and fifty cases of eczema in children under five years of age, of which I have notes, I believe I can count on the fingers of the hands the number of poultices which have been applied by my directions; I almost never use them, and yet it is the commonest thing for me to hear of others directing them to be used, and, I believe, generally to the detriment of the case. Very rarely, when there is a thick crust which refuses to come away with ointment or oil, a single poultice may be applied for a night, the crusts removed in the morning, and the ointment at once reapplied. Sometimes a second poultice may be required, but very rarely more, and I never have the scalp or other eczematous surface treated continuously with poultices, as is frequently advised.

When eczema has lost its very acute elements, and when under such treatment as has been mentioned, we find that it refuses to yield, we may, as in the adult, resort to stimulation, and this, if applied correctly, will often furnish the best results. I not infrequently use the compound tincture of green soap of Hebra, composed of equal parts of the oil of cade, green soap, and alcohol, and find it of great value. If it is too strong, and gives much pain in the application, it can be diluted with a little water at the time of using. The surface is to be quickly, but firmly, rubbed with a cloth dampened in it; it is then dried off, and the appropriate ointment, immediately applied. When this is used it is far better always to have the ointment laid on a rag, as the extra friction of an application with the finger or otherwise may be just too much.

This compound tineture of soap is a very valuable anti-pruritic, and will offtimes arrest the itching excellently. I have not yet mentioned an ointment which is used by many for this purpose, and that is zinc ointment, with twelve and a half per cent. of oil of cade (a drachm to the ounce), rubbed into it. I formerly employed this largely, but for three or four years have used the combination of the ointment before described, and much prefer it. The addition to the ointment of twelve and a half per cent. of tincture of camphor, or a corresponding quantity of powdered camphor (a drachm of tincture of camphor, or a few grains of powdered camphor in the ounce) often arrests the itching well.

Stronger ointments are sometimes called for in infantile eczema, but the danger is rather in the direction of using too strong applications than too weak, for we must ever remember the exceedingly tender, delicate organism, with which we have to deal. When there is thickening in localized patches, which proves obstinate, we may often get absorption from one of the mercurial ointments, and I use a good deal the unguentum hydrargyri oxidi rubri, diluted with three times its quantity of rose ointment; but even this I have repeatedly seen to be too strong, exciting fresh papular eruptions. The citrine ointment, diluted three, four, or more times, will also be well borne where patches are chronic and infiltrated.

I have by no means exhausted the subject, nor have I given all, or even most, of the remedies and measures which are of daily service in overcoming infantile eczema. To endeavour to do this,

and to give indications for the use of each remedy which would be unfailing, would be far beyond the scope and possibilities of the present short paper. The intention was not to exhaust the subject; nor to furnish formulæ for practice, as these may be found in many good text books.

The desire of the writer was rather to direct attention to what he deems wise to call the management of infantile eczema, rather than its treatment. The object of the paper is to show that arsenic and oxide of zinc ointment are not the only weapons to be employed against this very frequent and very distressing disease; to show that as it depends upon many causes, the measures for its relief must be multiform. Also it is desired to call attention to its frequency, and to the neglect with which it is so often regarded by the physician, and consequently by the laity; likewise to the fact that its cure should be and will be, if properly accomplished, followed or accompanied by improvement in the health of the patient; and that, therefore, there is absolutely no danger in curing infantile eczema. Finally, the object of this paper is rather to elicit discussion for a further elaboration of the subject.

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