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Address.

RECENT ADVANCES IN DERMATOLOGY WHICH ARE OF SERVICE TO THE GENERAL PRACTITIONER.*

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Four years ago,¹ when I last had the honor of presiding over this Section, my address was entitled "Notes on Some of the Newer Remedies Used in Diseases of the Skin." At that time I called attention to the very large number of new remedies which were continually presented to the profession, remarking that it was well "now and again to stop and weigh and try to estimate the value or worthlessness of the new and to see what of it should be added to our stock of old, and thus to recognize where true advance had been made." It is in this spirit that I again take up the matter, and I wish to present some of the more recent advances in dermatology, which are of service to the general practitioner.

In my former address I called attention to the fact, however, that it was not so much new remedies which are needed as it was better acquaintance with the diseases to be treated, and a more perfect knowledge of the means we already had; and also that in connection with newer remedies it is most desirable that very definite statements should be made, by reliable observers, of the exact conditions of use, and also the adverse results, as well as those which are favorable. I also remarked that as a rule general practitioners, I believe, were far more apt to try the newer remedies proposed than were those engaged in special practice. The specialist naturally weighs the true value of this or that new suggestion, and being fairly well satisfied with his present equipment, is less prone to rush into the new, except on very good evidence of its worth; and it may be added, much that is brought forward is often found to rest on very slender experience.

It would be quite beyond the possibilities of this address to attempt to cover the whole ground of recent advances in dermatology, and attention will be called only to such items as are likely to be of service to the general practitioner. We may, for the convenience of study, consider one subject under the three divisions of diagnosis, prognosis and treatment.

DIAGNOSIS.

Dermatitis.—Considerable progress has been made of late years in the way of recognizing various inflam-

matory conditions of the skin, under the general name dermatitis, and much that was formerly classed as eczema is now thus designated. All are now quite familiar with the dermatitis herpetiformis of Duhring, characterized by a variety of lesions, erythematous, papular, vesicular and bullous, which often very closely resemble eczema. The characteristic feature, however, is a grouping of the lesions and a recurrence of the attacks without any recognized cause. A recognition of the true nature of this often intractable disorder will often prevent much disappointment in the way of prognosis.

Dermatitis Medicamentosa.—Recent years have added very largely to the list of medicinal rashes or forms of dermatitis medicamentosa, and the number of drugs which have been observed to cause an eruption, in rare cases, is now very large. Time and space forbid dwelling on the features of the different appearances presented, but it may be interesting simply to mention the drugs which have been observed to produce skin lesions. These are aconite, antipyrin, arsenic, belladonna, boric acid, bromin, cannabis indica, carbolic acid, chloral, condurango, copaiba, cubebs, digitalis, iodine, jaborandi, mercury, opium, phosphorus, podophyllin, quinin, salicylic acid, santalin, sodium benzoate, strychnia, tar, turpentine, and perhaps some others. It is to be noted that the production of such effects is due to some idiosyncrasy on the part of the patient, for their occurrence is rare. It is well, however, for the general practitioner to bear the possibility in mind when eruptions of the erythematous type occur suddenly which do not quite correspond with well recognized affections.

Another form of dermatitis which recent advances have added is that due to the injury sometimes inflicted by the x-rays. This need not detain us here except to give the caution against a hasty favorable prognosis, for in many instances on record it has proved most rebellious, and in some cases has been attended with serious consequences.

Blastomycetic Dermatitis.—Still another addition has been made to the lesions classed under the same general name in the dermatitis blastomycetica, or yeast mycosis. This curious and rather rare affection resembles most the verrucose types of tuberculosis of the skin, but it is desirable to correctly diagnose it from these forms of lupus, as thorough and radical treatment offers very satisfactory prospects of cure.

La Grippe Rashes.—Very interesting additions to the list of acute erythematous skin lesions are those which have of late years been described in connection with la grippe; and often these will prove very puzzling to those not very well acquainted with diseases of the skin. In some instances the eruption is hardly distinguishable from measles, and in others it will be so confluent that scarlatina is closely simulated; sometimes it is impossible to determine the true nature of the eruption at once, and it is only by the concomitant symptoms that

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1. Jour. A. M. A., Nov. 28, 1896.

a probable diagnosis can be made. These la grippe eruptions are generally very short-lived, although sometimes they may persist and even recur, and from the catarrhal symptoms often present are not infrequently reckoned as second or repeated attacks of measles.

Erythromelalgia, which was described by Weir Mitchell in 1872, has attracted some attention of late years, and is shown to be sufficiently frequent to merit attention. It is characterized by a flushing of the skin, mainly of the extremities and ears, with at times considerable burning pain. Often a single toe may be affected in such a manner that walking is difficult or impossible. It is particularly interesting, as the condition may be strongly suggestive of gout, or even of erysipelas. The attacks may be of brief duration, or the redness may persist for a considerable time, with no appreciable alteration of tissue. It is due to a nerve disturbance, either paralysis of the vasoconstrictors or an excitation of the vasodilators, and may be regarded as exactly the opposite condition to that which obtains in Raynaud's disease.

The pre-mycotic stage of mycosis is an interesting phase of skin lesion, happily very rare, which has been clearly established of late years. Long before the tumors appear, which were formerly supposed to constitute the affection, there may be a period of erythematous eruption in patches and circles which ultimately lead up to the fully developed malady. These erythematous lesions may often resemble erythema multiforme or erythematous eczema and may be very puzzling. There is generally not very much itching or subjective symptoms, and only the brownish-red circles or patches of varying size, generally first on the body and limbs, which either may slowly subside or remain and develop into the slightly protuberant, and later ulcerating, granulomatous masses which lead up to the distressing and sooner or later fatal disease.

Tuberculosis cutis has also obtained a full recognition of late years, and though comparatively rare, it may at times be of considerable interest to the general physician. While lupus vulgaris is also recognized as due to, or at least associated with, the presence of tubercle bacilli, the name, "tuberculosis cutis," is most commonly given to the warty masses seen from time to time, principally about the hands and face. While lupus probably comes from the infection of the bacilli through the medium of the lymphatics and blood-vessels, the tuberculous cutis verrucosus has to do with primary local infection, and the disease tends to remain more or less local, or increases very gradually. When removed effectively the disease generally remains absent, a healthy cicatrix taking its place. It is most commonly seen in butchers, and also in anatomists, and in those having much to do with tuberculous patients, as in laundresses who have cared for their clothes.

Ringworm.—The advances in the study and knowledge of ringworm, while not yet resulting in any very startling improvement in therapeutics, should still be of interest to practitioners. It has been found that what has hitherto passed as a single disease probably represents a number of distinct affections due to parasites which may be quite different in their microscopic appearance, behavior under cultivation, and also in their clinical effects on the skin. A large share of the eruption on the heads of children is due to the small-spored fungus, which rarely attacks adults; while the forms of ringworm found on the other portions of the body are due to one or two different varieties of trichophyton,

which also readily affect adults. It is claimed that the varieties causing suppuration, as seen mainly on the bearded face, are derived from animals. It is interesting to determine, microscopically, whether the scalp disease is caused by the microsporon or the megalosporon, as the former is much more obstinate to treatment and a more unfavorable prognosis as to duration is necessary.

PATHOLOGY.

In the pathology of skin diseases there has still been considerable activity of research, and clearer views are obtained each year in regard to many affections.

Eczema has been the object of much consideration, and there have been several notable studies and discussions in regard to its true nature, while the old question as to its local or constitutional origin has been repeatedly considered. One writer (Larrede) has been very strenuous for a parasite origin of much that is called eczema, while another careful thinker (Leslie Roberts) argues strongly and rightly, as we believe, in the direction of the very great importance of the resistive power of the skin in the direction of nervous control.

Seborrheic Eczema.—Very great advance has been made in the full recognition of seborrheic eczema, with which the name of Dr. Unna will always be associated. While it is not definitely proven that it is due to a micro-organism, this is about accepted by most dermatologists, and the almost specific control of it by resorcin and sulphur is one of the most satisfactory advances in dermatology, which every practitioner may share.

Alopecia Areata.—Interesting and elaborate studies have been made by Sabouraud and others in regard to the pathology of alopecia areata and much evidence has been brought forward, both in writing and discussions in regard to its parasitic and its nervous origin, and the true nature of all cases of this interesting disease is not yet established. The opinion is prevailing more and more, however, that both views are correct, and that there are probably two affections, closely resembling each other, one caused by a micro-organism and the other of nervous origin. This is not at all surprising when we consider how closely many other skin lesions of quite different characters resemble each other, as lupus and tubercular syphilis, psoriasis and ringworm, etc.

Role of Pus Organisms.—Many studies have been made of late years in regard to the rôle of pus organisms in the production of skin diseases, and many have been very strenuous in regard to their pathologic influence. Elliot² has made a careful review of the literature, and his conclusions must be somewhat disappointing to the ardent supporters of micro-organisms as a sole cause of disease—for he finds that while the pyogenic organisms, the staphylococci and streptococci are in general the cause of suppuration, they are not the only cause. In a large proportion of cutaneous diseases, primarily or secondarily suppurative, no constant pyogenic serum organisms have been found and inoculation experiments have usually been negative or have failed. This coincides with what had been expected by those who take the broadest view of dermatologic medicine, and who realize that vitality and innervation play an important part in the production and cure of skin affections as well as those of other organs.

Dr. White, Jr., of Boston, has made some very interesting studies in regard to the rôle of staphylococcus in skin diseases, and while he demonstrates that the pus

2. Elliot: Jour. of Cutan. and Genito-Urin. Dis., February, 1900.

cocci were found in a variety of pustular lesions, he acknowledges that the form and variety of the lesions depend upon other elements. No one can rightly deny the power of micro-organisms to produce disease, for the results of aseptic surgery are incontrovertible, but there is great danger in connection with diseases of the skin lest local pathology lead to a neglect of the more important consideration of the soil on which the germs flourish; a striking illustration of the bearing of this remark is found in the change of opinion which has come over the medical world in regard to the relative importance of attention to the microbe in tuberculosis, as compared with the more important elements of the nutrition and hygienic condition of the patient. Pus organisms, as also an infinite variety of bacteria, are almost omnipresent, and when opportunity offers, pathogenic organisms do germinate and their toxin causes disease. But, on the other hand, the very omnipresence of these germs and the relative infrequency of their action certainly shows us that the truly wise physician should look to more than the local cause and seek to discover and remedy the underlying cause in each case. This points once more to the wisdom of the precept that it is often the patient who is to be treated rather than the disease by a specific name.

THERAPEUTICS.

Very much has been reported of late years in the line of therapeutics of diseases of the skin, and if one should adopt the various suggestions appearing in literature there would be a never-ceasing change of methods, which certainly would not be of service in the practical management of cases. It sometimes requires not a little determination to resist the apparently plausible assertions of writers in regard to the value of this or that new remedy or procedure. It must ever be remembered that cases of the same disease often differ very greatly in their behavior under treatment, and also that remedies or measures often succeed much better in the hands of the one who proposes and uses them than they may do when employed by another. Every workman knows his own tools, and better work can often be done by a skilled workman with poor tools than by a poorer artificer equipped in the best manner. From a very considerable experience with new remedies and old, I would therefore utter a word of caution against the too ready acceptance of "therapeutic hints" which are so overabundant in this day of intense restlessness in every field of human activity.

Newer Remedies.—In looking over my address of four years ago I find a number of the newer remedies there mentioned which have well stood the test of time since that date, and some which are there mentioned more or less favorably which I do not now advocate. I will not consume time in going over all these again, but may make a few remarks about some which seem appropriate.

Resorcin and ichthylol have more than held their own, and all that was said of them still holds good, and more could be added if desirable. I do not know whether much can be said in favor of thiol and tumenol, then mentioned; I seldom employ them or hear of their use, as I have never felt satisfied that they were better than ichthylol—if this can be obtained pure, which is often difficult. Alumol, betanaphthol, aristol and europen hold their own, and menthol is often of great value in controlling itching. Peroxid of hydrogen is used with increasing confidence in connection with many ulcerative conditions of the skin, and is also of value in chloasma,

and to bleach superfluous hair on the face or elsewhere, and appears to have a measure of effect in destroying the life of the latter. Camphor-chloral and camphophenique are still regarded as valuable antipruritics, and lanolin, vaselin, cosmolin, albolene, etc., are in constant use. The various dusting powders made from stearates, as also the dolomol preparations have their uses under certain conditions and are still regarded as valuable. The effort to produce adherent dressings to the skin, alluded to in my former address, has not been as successful as was hoped, and the results from plasters, gelatin dressings, etc., are not always as satisfactory as could be desired, although some of the prepared and medicated plasters serve an excellent purpose in certain chronic and hard conditions of the skin. Finally, medicated soaps, which were there alluded to, are slowly assuming their proper place in dermatology, which will never be a very large one; under suitable conditions they are of service, but in inexperienced hands there is more danger from their injudicious use than is commonly appreciated.

Phototherapy and X-Rays.—Among the newer therapeutic agents from which much has been expected perhaps the first which should be mentioned is that of light, as found in the x-rays and the so-called Finsen phototherapy. It is perhaps too soon to form a correct opinion of the real value of this means of treatment, and some of the earlier reports have been so extravagantly favorable that very strong hopes were raised that in this we had at last a successful means of combating that rebellious disease, lupus. But when we recall the enthusiastic reports attending the earlier use of Koch's tuberculin in lupus, and consider that now that method of treatment is practically discarded, there is reason to fear that the hopes now held out by this new method may also prove illusory.

It is hardly necessary here to describe the apparatus or the exact method of treatment, suffice it to say that it consists in means whereby the direct rays of the sun somewhat concentrated and deprived of its red or heat rays are made to impinge upon the affected area. Both the direct rays of the sun and those obtained from an electric arc-light have been used, and many reports have been given in which the disease has gradually shrunk away and disappeared. Whether the claimed cures will be permanent time alone will show, and as far as I can learn, there are not many dermatologists who are enthusiastic over the procedure. In the cases treated the patient has been subjected to the altered rays of light for several hours at a time, and daily sittings are generally required, while the treatment lasts over some weeks. The treatment has been especially developed by Finsen, of Copenhagen, and Dr. Hopkins, of Brooklyn, has installed an apparatus for this phototherapy, but I have not yet learned of any results obtained there.

Therapy of Lupus.—The x-rays have also been used for lupus, and a number of writers have reported cases of apparent cure, but it is yet too soon to be certain as to ultimate results.

In connection with this treatment of lupus should be mentioned the excellent results which have been reported by Lang, of Vienna, and many others, from the complete excision of the disease under perfect aseptic conditions, with subsequent treatment by plastic surgery or skin-grafting. The reported results are so satisfactory that there should be no hesitancy in accepting this as the quickest, and in many respects the most satis-

factory, method of dealing with certain cases of this most rebellious disease.

Treatment of Lupus Erythematosus.—The treatment of lupus erythematosus has also received considerable attention of late years, but unfortunately no very great advances have been made; although phototherapy has been reported to have yielded good results in this disease. Whitehouse has recently reported the cure of lupus erythematosus with the internal use of iodoform, one grain three times daily, and I have seen great apparent benefit from its use in this disease. The number and variety of local measures which have been recommended during the past few years show that we are yet far from having a certain remedy for the disease; all of them have the object of altering the vital relations of the tissues. One which is well worth trying, and which I have seen of service, is the local use of arsenic, either in the form of diluted Fowler's solution, or a solution of arsenious acid, beginning with two grains to the ounce in water and increasing the strength, so as to produce some moderate cutaneous excitation. After its use a mild, soothing lotion, such as that of calamin and zinc, is applied.

The current literature of the past few years is very full of suggestions of various kinds in regard to the treatment of very many of the common diseases of the skin, but unfortunately there are but few of them which are of such special and certain value as to warrant much detail here. We may mention a few of the most valuable.

Arsenic in Eczema.—Some writers have again brought up the almost specific control which arsenic will have over eczema in small children, when given freely and for a prolonged time, as the present writer showed some time ago; it seems to have less effect on the disease after the age of 5 years. The present writer would call especial attention to the value of milk in connection with the treatment of eczema if used in exactly the right manner, as detailed before the ASSOCIATION two years ago. In cases of neurotic eczema the results will often be very striking, if the method is accurately followed. This consists in taking a tumblerful of milk, slightly warmed, one hour before each meal, followed, if possible, by a rest of half an hour in a darkened room. The milk should be taken pure and alone, no atom of other food being taken with or soon after it, and care being exercised that the stomach is entirely free from food or medicines previously taken. When used in this way the milk acts as a powerful nerve tonic, and neurotic eczema will often yield much more rapidly and satisfactorily than without it.

Local Therapy in Eczema.—Very much has been written of late years in regard to the local treatment of eczema, and to even briefly enumerate the various remedies and measures which have been proposed would more than consume the time allotted to this address. Undoubtedly for the different stages and phases of this protean eruption very varied treatment may at times be required, but it seems suitable to utter a word of caution against the too ready acceptance of much that is prescribed.

Lassar's paste (zinc oxid, 3ii; pulv. amyli, 3ii; vaselin, 3i; m.), to which may be added camphor, salicylic acid or resorcin, 2 to 4 per cent., or even more, is certainly a very valuable addition to our means of combatting subacute eczema.

The various gelatin-glycerin preparations, applied so as to form a firm, adherent coating on the part, are still

extolled by many, but the present writer has not of late made great use of them. The following is one of the latest formulæ, which should be of service in certain conditions:

R. Gum tragacanth	3iiss
Gelatin optim.	3ii
Glycerin	3vi
Thymol	gr. ¼
Aquæ destil. q. s.	

Soak the tragacanth and the gelatin each in ten ounces of water over a steam bath for twenty-four hours, strain through muslin and make the final quantity up to twelve ounces with water.

Ichthylol, resorcin, salicylic acid and nearly every remedy used in dermatologic practice can be incorporated with this. It is applied like an ointment, or spread on with a brush lightly, and on drying gives a plastic, protective film.

Picric acid has been much praised of late, used in a saturated solution, pure or somewhat diluted, painted over acute and subacute eczema. It causes great smarting at first, which ceases, however, in ten or fifteen minutes, giving place to a sense of relief.

Pernanganate of potassium, in a 2 or 3 per cent. watery solution, painted over the parts and allowed to dry on, is also a valuable antipruritic, as pointed out by the present writer some years ago.

Treatment of Syphilis.—This has been the subject of much consideration of late years, and really very diverse views may be found given by reliable observers, but mercury is still the acknowledged remedy, with iodine as an adjuvant. The question is repeatedly discussed as to the date of beginning mercurial treatment, and the duration and regularity of medication, and while some argue for only symptomatic treatment, on the recurrence of specific lesions, the weight of judgment seems still to be in favor of early measures as soon as the diagnosis is definitely established, and prolonged treatment, even to three to five years, with occasional breaks.

The hypodermic injection of various preparations of mercury has had very strong advocates during the past few years, and thousands of injections in hundreds of patients are reported with favorable results, and this both in the early and late stages of the disease. Its advantages are that: 1, it is an active remedy which can be regulated perfectly; 2, it avoids disturbing the digestive tract; 3, it avoids publicity in using remedies; 4, it is sometimes surprisingly curative when other measures have seemed ineffective. Its disadvantages are mainly the pain and occasional inflammation and abscess. Each of the different preparations of mercury for hypodermic medication has its advocates, and the bichlorid, calomel, "grey oil," and salicylate of mercury are about equally supported by testimony.

A somewhat new method of applying mercury through the skin has been introduced by Welander, and is worth mentioning. Acting on the idea that a certain amount of the good effect in mercurial inunction arises from the inhalation of vaporized mercury, he has devised a method by which it is worn next the skin on the chest. This is in the form of a bag fifteen by twenty inches in size, which is worn like a chest protector. On the inner side about a dram of mercurial ointment is applied every day. A fresh bag is used every week or so, and the patient may bathe daily. It is said that absorption of mercury takes place very quickly in this way, with great benefit to syphilitic lesions, which might in-

deed be expected, as it corresponds closely to the method of treating infantile syphilis with mercury on the inner surface of the abdominal band.

A new preparation of iodine, iodolbacid, has been introduced which, given in doses of from 3 to 5 grains daily in capsules, is said to have been very effective in cases of syphilis where iodid of potassium was badly borne.

It would be interesting to continue a consideration of the therapeutic advances in dermatology which are of value to the general physician, but already the proper limits of this address have been overstepped and I must stop. But the subject is not all exhausted and there are many items which properly should be mentioned; and my only hope is that something which has been said may be the means of exciting a more lively interest in the subject of diseases of the skin, and may lead some one to more seriously seek to know and recognize this class of affections and their proper and best therapeutic measures. Dermatology is an inviting, though difficult, field, and there is certainly no short cut to its thorough mastery, but although all can not hope to compass it entirely, a reasonable amount of study and observation, with judgment, will enable the general practitioner to utilize many of the advances which are continually being made in this branch.

In conclusion allow me to say a few words in regard to the Section on Cutaneous Medicine and Surgery, which is a part of this great national organization of medical men. Since the beginning of this Section the effort has been, on the part of the officers, as far as at least as I have had anything to do with it, to make it such as would be of value to the general practitioner and to enlist his co-operation, both in the matter of the preparation of papers and attendance. This is not a gathering of specialists in dermatology; indeed, relatively few of the dermatologists of the country have ever attended any of its meetings. The American Dermatological Association is for such, as are also certain local societies. It is true that all the papers presented have not always been such as would greatly interest the general practitioner, nor is this the case in any other of the Sections. And yet, during all these years the skin section has been very poorly attended, and it has been hard to interest the profession in it. I speak of these things both for those now present and for those who may perchance read this later. Those of us who are well versed in the subject should, I think, not introduce too much of the rare and difficult, but rather topics which may be of general interest, and the same in the discussions. I would also have general practitioners present such matters as are of interest or difficult to them that they may be here discussed, and I would also have general practitioners take part in the discussions, even though they may not be able to vie with the specialist in accuracy or freedom of expression. I repeat it, that this Section should be the field where the profession can bring the difficult and knotty problems in dermatology and receive the aid of those perhaps more familiar with the branch.

DISCUSSION.

DR. H. C. YARROW, Washington, D. C.—I was particularly impressed with the remarks concerning the use of medicines by hypodermic injection instead of by the mouth. I have been using, for the last four or five years, in cases of constitutional syphilis, hypodermic injections, and have found sozo-iodol of mercury to answer best. I have used other preparations, but none which gave so little pain. If the part is rendered anesthetic, and care is taken to drive the needle deeply into the

tissue, the insertion may be accomplished without pain. Out of hundreds of cases in which I have used this treatment, to the exclusion of materials by the mouth, I have never had a bad symptom or abscess and very few cases in which I have failed to cure the patient. I am very glad to hear this matter mentioned, because if the members of the profession at large knew what great value there is in the hypodermic injection of mercury, according to my experience, they would largely abandon the use of remedies by the mouth. The proper mode is to commence with $\frac{1}{4}$ gr. and run the amount up according to the idiosyncrasy of the patient. I have given as much as 1.5 gr. at a dose without trouble.

A MEMBER—How often?

DR. YARROW—At the commencement of treatment in the way I have mentioned, it may be given twice or three times a week for several weeks. After perhaps four or five weeks, if the patient is doing well, it may be given only twice, until finally you give one hypodermic injection weekly, then one in two weeks, and so on. I never cease this treatment under two years. Certainly, in my hands, the results have been more gratifying than anything I have ever used.

DR. M. B. HARTZELL, Philadelphia—I wish to refer to the use of quinin in large doses in the treatment of lupus erythematosus. I do not recall who proposed it, but I have used it in a number of cases with good results. I have not cured any patient with it, but I have seen such marked improvement follow promptly on its use that I can not but believe it exercises a beneficial influence on the disease. I do not know any remedy given internally which produces such a beneficial and prompt effect. I have given 25 to 30 grains a day. There has been marked improvement up to a certain point, but later the improvement ceases. One patient told me that while she was taking the quinin, the eruption was held in check, but as soon as she stopped it, it spread.

DR. S. SHERWELL, Brooklyn, N. Y.—There is one point familiar to those reading dermatologic literature, and that is the result of Finsen's method of applying sun-rays, particularly in lupus vulgaris. One who studied the method under Finsen, was a member of his clinic and received unusual privileges, did not report favorably on it, but did on a mode of treating lupus by saturating pointed sticks in the acid nitrate of mercury and carbolic acid and then introducing them, thrusting them into the lupus patches and making a person look a little bit like a hedgehog. They are cut off at or about the surface of the skin, and then a plaster put on to hold them in position. I reach the same favorable results in my experience by curetting the lesions, and then applying still more lightly the nitrate of mercury and carbolic acid. I do not look upon lupus as an incurable disease.

DR. W. R. INGE DALTON, New York City—I desire to add my testimony to what the Chairman has said in reference to the treatment of eczema. I took note of his suggestion four years ago, and he mentioned at that time beta-naphthol, also jaborandi in combination with calomel. I combined all three, but used pilocarpin, the active principle of jaborandi, instead of jaborandi, and found it to be of vast benefit. Two years ago I heard Dr. Bulkley allude to this milk theory of his—one glass before each meal, and, I believe he stated at that time, a glass at bedtime. That mode of diet is simplicity itself, and very commendable, and when the patient follows the directions faithfully, as I have tried it in many cases, the result is very satisfactory.

DR. WILLIAM L. BAUM, Chicago—In the treatment of erythematosis I use applications of arsenic solutions, one-half of 1 per cent. solution of sodium arsenate. With this method, three cases which I have treated in the last five years not only have shown marked improvement, but in two the disease has not shown in the last year and a half. Regarding hypodermic injections in syphilis, I doubt whether anybody has used it more consistently and in a larger number of cases than I have in the last ten years. This treatment is certainly of great value in certain conditions where it is necessary to produce a profound result in a short time. I quite agree that the injections should be intermuscular. As to the necessity for rendering the point of injection anesthetic, with injection of bichlorid, it is not painful; the trouble comes after the patient has had his injection a short time. And there is no necessity for the appearance of abscesses after this injection. It is probably the most satisfactory and most successful in most patients.

DR. M. T. CORLETT, Cleveland, Ohio—I wish to corroborate what was said relative to lupus erythematosus. Last year, in the treatment of this obstinate disease, I followed out that treatment of large doses of quinin. The disease responds

readily to this drug, but to be successful it must be given in large doses. So I have found 30 grains a day necessary to produce marked effects. I have found also that it produces its effects only up to a certain point; I have yet to see a patient entirely cured. I have also found the local application of alcohol, which I have used for the last year or two, gives good results. With these applications I have accomplished better results than before in the treatment of lupus erythematosus. With regard to the treatment of syphilis by hypodermic injection of mercury, I agree with Dr. Baum, using it deeply injected, and I do not think it is applicable to all cases. I do not use it as a routine. The old methods by the mouth or inunctions—which in private practice is objected to by many—are better measures. But there are some cases which require quick treatment, and muscular injection is the best because in a few days one can get a decided effect. In many cases inunctions are not objectionable, and where the patient can be induced to follow out that treatment, it is also of value.

Original Articles.

HYPERACIDITY A CAUSE OF SKIN DISEASES.*

W. R. INGE DALTON, M.D.

NEW YORK CITY.

A year ago I wrote: "I have demonstrated to my own satisfaction that some skin affections are due to a nutritive disturbance, a defective degenerative metabolism, owing to which there ensues deficient utilization of nutritive substances conveyed to the tissues; producing a lethargic condition of the skin, an inefficient stimulation of the nerve twigs supplying the sudoriferous glands; that bacterial agencies cause septic and putrefactive changes in the alimentary canal and that inanimate toxins maintain selective affinities for the tissues, exerting their action upon the primordial protoplasmic groups of cells. I am inclined more and more to think that the bond which connects the diatheses of the dermatoses with gout, rheumatism, arthritis, diabetes, and asthma, is generated by indiscretion of diet—and *hic est muco thesis meæ*": *that the chyme passing in a hyperacid condition from the stomach, through the pylorus, into the second stomach, entails such increased labor upon the duodenum that its contents can not be rendered sufficiently alkaline for physiologic metabolism.*

Here is the starting-point—this acid dyscrasia, as I believe, the inevitable *fons et origo* of the pathologic lesions, which lead certainly to nearly all diseases of the skin, save the contagious exanthemata. The nidus is here furnished for the elaboration of the pabulum upon which the micro-organisms feed and propagate, thereby favoring organic fermentative changes throughout the ileum and large intestine, culminating in stasis of cellular action, cutaneous obstruction, and peripheral atrophy; visceral, cerebral, pulmonary, or cardiac lesions. The hyperacidity also inhibits the functional action of the glands of Lieberkühn and Brunner. The duodenum is the paramount reflex center for the entire intestinal tract; the pancreatic and biliary fluids pour into it; the par vagum connects it closely with the central nervous system; the solar plexus associates it with the sympathetic; the splanchnic, with the filaments of the spinal cord, as well as the thoracic center, and with the plexuses of Auerbach and Meissner—the one of the muscular coat, the other with the mucosa. It is here that iron is absorbed and taken up by the transport

cells, combined with albuminous bodies, to be carried into the circulation, and it is the receptacle for an immense amount of blood. These physiologic and anatomic endowments all demonstrate the supreme importance of keeping a watchful supervision, so that the functional action of the duodenum may not be impaired. It is rather coincidental that whenever there are extensive excoriations or lacerations, or burns, involving a large amount of space, there follows ulceration of this organ.

It is contended that the infection caused by bacilli goes from the tonsillar crypts directly into the circulation, but I hold to my theory as being more tenable—it is that the chyle is emulsified while undergoing pancreatic digestion in the alimentary tract, and these minutely-divided products transport the pathogenic germs immediately through the lacteals, without causing infection locally into the vena cava; the lymph of the lymphatic system, with the micro-organism enveloped in the chyle, goes directly through the thoracic duct into the left innominate vein, and from the innominate into the venous circulation, through the right heart to the lungs, setting up infection there, by retarding oxidation, or they pass on with the blood, to find access to the cutaneous system, where, if they find suitable culture-media (the nidus upon which they feed) their deleterious action commences; leading to an aberrant cellular activity, caused by changes in contiguous surrounding fluids, unless the phagocytes succeed in devouring them.

We meet with brilliant clinical results in the treatment of summer diarrhea in children—those cases where the stools emit a characteristic odor, showing albuminoid decomposition or acid fermentation, when we feed them upon a low percentage, pasteurized, highly alkaline fresh milk, *without exhibiting even one grain of medicine.*

There are other etiologic factors, such as the physiological process of reflex irritation, of dentition, hard fecal accumulations, pregnancy, epileptiform convulsions, shock, worms, phimosis, adenoids, etc., causing, temporarily, tendencies to morbid conditions of the skin, but the *causa causam*—the main etiologic element—I proclaim it boldly, is hyperacidity of the chyle in the duodenum; to this is due many ills to which the skin is heir. I have based my treatment upon this etiologic theory and have met with phenomenal confirmation of its efficacy, in my service at the Metropolitan Hospital, and in private practice, in the various forms of eczema, pemphigus, etc. I prescribe:

R. Naphthalin gr. i
Ipecac gr. i
Charcoal gr. iss
Calomel
Strychnia
Pilocarpin
Arsenious acid, aa. gr. 1/100

The naphthalin causes antisepsis and inhibits the action of micro-organisms through the ileum and large intestine, thereby arresting organic fermentative changes. The charcoal, besides being a splendid antiseptic, converts the anaerobic condition of putrefaction into compounds which are not destructive to the tissues: the mercury, whether it acts upon the liver or not, destroys the bacterial forms in the duodenum and jejunum and lowers the blood pressure, thereby accelerating capillary circulation, thus favoring digestion and obviating putrefaction; the pilocarpin and ipecac exerting, at the same time, their influences upon the sweat

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