ON CERTAIN NEW METHODS IN THE TREATMENT OF DISEASES OF THE SKIN.

BY GEORGE THIN, M.D.

SEVERAL new methods of applying medicinal substances to diseased skin, which have been introduced into practice by foreign dermatologists during the last few years, deserve to be more widely known by English practitioners than is at present the case. Like all new methods of treatment, they have been much extolled in the first instance, and it will no doubt be found that they will not entirely replace the older and more tried methods; and that, like these older methods, they will occasionally disappoint. Still, there is enough that is good and lasting in them to warrant every practitioner in giving them his serious attention, as they will increase the resources at his disposal for the successful management of a class of cases which, experience shows, are only too likely to prove tedious, if not troublesome.

In the *Monatshfte für praktische Dermatologie*, vol. ii, no. 4, Oscar Lassar recommends for certain eczemas the use of paste instead of ointment. All practitioners who see much of eczema meet with cases in which the soothing effects of an ointment are much to be desired, but in which ointments of the most soothing kind cannot be borne. Occasionally, for example, zinc ointment, which is so largely used in this country, produces great irritation, and increases the inflammatory condition. For such cases, Lassar recommends a paste formed by slowly triturating vaseline with equal parts of oxide of zinc and starch. The paste thus formed differs from an ointment in being porous. It does not dissolve at the temperature of the skin, quickly dries on the part, and, when a little powder is sprinkled over it, remains adherent. The discharge from the skin, instead of being confined by an impermeable ointment, passes through the paste, which thus protects the inflamed organ from its irritating or decomposing secretions.

The beneficial action of salicylic acid in eczema is now well established, and Lassar's paste forms a convenient vehicle for it. It is used in a strength of 2 per cent. For a salicylic ointment, in the eczema capitis of children, Lassar's formula is: R Acid. salicyl. 1; tinct. benzoin. 2; vaselin. 50. M. Fiat unguentum. After the crusts are removed (conveniently done by softening with 2 per cent. salicylic oil), the scalp is rubbed with the ointment twice or thrice daily with the best results.

Unna, in the same journal (*Monatshfte*, vol. iii, nos. 2 and 3), widened the scope of treatment by pastes by giving a variety of formulae for their composition. Amongst others, he proposed the use of dextrine and gum-pastes. For a dextrine-paste, his formula is: Dextrini venalis; glycerini; aquæ, aa partes æquales; M. coque. (The boiling must not be too long continued.) His gum-paste is: Mucilag. gummi arab. 5; glycerini, aa p. 1; pulvis p. 2. M. Various substances found useful in eczema can be incorporated with these pastes. For example, an eczema-paste may be prepared as follows: R Zinci oxid. 50; acid. salicylic. 5; acid. carbolic. aa 2; mucilag. gummi arab. glycerin. aa 20. M. Fiat pasta.

Therapeutically, pastes occupy an intermediate position between powders and ointments, and their use is attended with special advantage, not only in cases in which ointments are badly borne, but in eczema of those parts of the body, such as the anal region and the axilla, where it is difficult to keep ointments properly applied. With Lassar's paste as a basis, any of the substances ordinarily incorporated with fats may be used.

Professor Pick, of Prague, has introduced a method by which the skin can be completely protected from atmospheric influences by the use of gelatine. In the *Monatshfte für praktische Dermatologie*, (Leopold Voss, Hamburg and Leipzig, volume ii, no. 2,) he published an article on the therapeutic uses of medicated gelatine in diseases of the skin, in which he has explained how gelatine can be used for this purpose. When ordinary commercial and clean white gelatine is allowed to absorb double its weight of distilled water in a water-bath, it forms an useful vehicle for the application of medicinal substances. When melted gelatine is brushed over the skin, and allowed to dry, it forms an impermeable coating, which remains for some time in position without any further dressing. A simple gelatine-dressing of this kind is especially useful in cases in which it is necessary to give protection to a large extent of the surface of the body; but it is especially as an excipient for various medicaments that Professor Pick recommends the gelatine-solutions. The substance which it is intended to use, whether it be salicylic acid, chrysarobin, carbolic acid, pyrogallol acid, iodoform, or naphthol, is well stirred into

the melted gelatine, and, when the gelatine cools, the resulting gelatine-cake contains the medicine in a known proportion. When the patient uses the remedy, he melts the portion of gelatine in a cup, which is placed in hot water, and applies the fluid gelatine to the affected part of the skin with a brush, and in a short time the layer of gelatine becomes solid. To prevent it from cracking, and to make it sufficiently flexible, especially in the region of the joints, it is lightly touched with a very small quantity of glycerine. Pick's formula for chrysarobin-gelatine is as follows. R Gelatine albe sicca 50; aqua distillatæ 100. Solve in balneo aquæ et admisce sub assiduâ agitatione chrysarobini 10. Miscellam seponere, refrigeratum detur ad chartam ceratam.

Notwithstanding the incontestable success of the treatment of psoriasis by chrysarobin (chrysophanic acid), the inconvenience attending its use, as it is ordinarily employed, has led to its being much less prescribed than its curative action warrants. The indelible staining of linen, in particular, renders it a very unpopular remedy with most patients. To overcome these disadvantages, Pick specially recommends the use of chrysarobin gelatine in the treatment of psoriasis. The patient is first well rubbed with soft soap in a warm bath, and then the gelatine is brushed over the psoriatic patches. After it has dried, the spots are touched with a very small quantity of glycerine. In severe cases this process is repeated every second day. In mild cases twice or thrice a week is sufficient. The changes which take place in the skin under this application consist in cessation of the desquamation from the affected spots, and in a diminution of the infiltration. The patches become at first quite white, whilst on their border under the overlapping gelatine the skin is of a violet colour. This is caused by the alkalies contained in the secretions of the skin being deficient in the psoriatic patches.

Pick recommends a 5 to 10 per cent. salicylic gelatine in squamous eczema.

Starting from Pick's idea, Messrs. Unna and Beiersdorf (see the *Monatshfte*, vol. ii, no. 2) worked out carefully the various proportions in which gelatine, glycerine, and water might be mixed in order to form suitable media for various medicinal substances, and published a table in which they specify the exact proportions which they had found most suitable for a large number of medicinal substances which are in use by dermatologists. They divided medicated glycerines into three classes—some containing 5, some 10, some 20 per cent. of gelatine. As examples: 10 per cent. of oxide of zinc may be combined with 5 per cent. gelatine, 30 per cent. glycerine, and 45 per cent. water; 5 per cent. chrysarobin with 5 per cent. gelatine and 90 per cent. glycerine; 5 per cent. salicylic acid with 10 per cent. gelatine, 40 per cent. glycerine, and 45 per cent. water. Herr Beiersdorf, of Hamburg, who has devoted much attention to the preparation of appliances for the skin, supplies a variety of medicated glycerines, the formulae of which he has published in the number of the *Monatshfte* to which I have referred.

Auspitz conceived the idea of substituting for gelatine, a solution of one part of purified gutta percha in ten parts of chloroform. The solution he calls *traumaticin*. This preparation adheres perfectly to the skin, and may remain unchanged from two to three days. It forms a coating thinner and more delicate than collodion or gelatine. By itself it is perfectly neutral to the skin, provoking no irritation.

Both traumaticin and gelatine—but the former more than the latter—exercise a certain amount of compression on the skin, and both may be applied to large portions of the body. Whilst the gelatine requires to be softened each time that it is used, traumaticin is always ready for immediate use, and remains free from the development of fungi; whilst, as is well known, gelatine if not rendered aseptic by the addition of some such substance as salicylic acid, forms a fertile soil for these growths.

In the treatment of psoriasis, Auspitz uses chrysarobin with traumaticin in the proportion of ten per cent. If the affection be very limited, a fresh application is made each day, but if a large extent of surface be involved, it is renewed once in two or three days. As in the case of the gelatine, the removal of the scales from the psoriatic patches is facilitated by the use of soft soap. In twelve cases published by Auspitz, the duration of the treatment only lasted from five to twelve days; and in one half of the cases, it did not exceed seven days.

Besnier (*Annales de Dermatologie et de Syphiligraphie*, vol. v, no. 1, Paris), who remarks that his experiences with the medicated gelatines of Unna and Pick had not been so encouraging as he had anticipated, expresses himself very favourably regarding the combination of gutta percha and chrysarobin recommended by Auspitz. The method, however, was modified by him, in use, as follows. After having removed the scales from the patches, he brushes over the surface with a mixture

of chloroform and chrysarobin in the proportion of 15 per cent. of the latter. In a few minutes after the chloroform is evaporated, the patch is infiltrated with pure chrysarobin; then with a large flat brush he applies a thick layer of traumaticin over and beyond the edge of the patch. The advantages claimed for this mode of application are, greater solidity of the coating, and the possibility of proportioning more exactly the energy with which the chrysarobin is applied to the patch to the degree of infiltration present.

But, in my opinion, surpassing in general utility the newer methods which I have just described, is the application to the skin of ointments prepared on muslin, as introduced by Unna, and described by him, in 1880, in the *Berlin Klin. Wochenschrift*, No. 35. "Der Salbenmull Verband ein Beitrag zur Behandlung des Ekzems." The inconvenience and discomfort connected with the application of ointments to the skin are so great, that their constant and every-day use is sufficient proof of the fact that they are indispensable. Considering that most of the patients on whom ointments are being used are leading active lives, it is evident that the constant application of any greasy substance, to a larger or smaller portion of the body, must be difficult as well as unpleasant. As a matter of fact, it is a common experience to find, when a patient is stripped, a portion of oily cloth in loose contact with the skin, as alone representing the layer of ointment which it was the intention of the practitioner should be kept thickly and closely applied.

There is no doubt that the unsatisfactory results of much of the treatment of eczema by ointments, is due to the difficulty which is experienced in getting the affected skin well covered with the unctuous application which is prescribed. To overcome this difficulty, Unna conceived the idea of incorporating stout unstarched muslin with a thick layer of ointment. As a basis for the ointment, mutton-fat seemed to him to be the most useful. This muslin-ointment, when closely applied and bound on the skin, secures, in Unna's words, "absolute rest to the integument, prevents rubbing by clothes, and excludes the atmospheric air." These muslin-ointments are prepared spread on one or both sides of the muslin, and consist of a large variety—amongst them being representatives of nearly all the ointments that are in use in the treatment of skin-diseases. To their great utility, I can strongly testify.

As, so far as I know, muslin ointments are at present only made in Hamburg, and patients cannot get them without incurring delay and trouble, I have not prescribed them in many cases in which I should have otherwise done so. In cases, however, in which the expected benefit from ordinary ointments was not derived, I have found the muslin-ointments, supplied by Beiersdorf, successful.² For example, in the case of a young boy who was afflicted with frequent outbreaks of papular and pustular eczema over large portions of the body, necessitating the frequent use of soothing ointments, the difficulty of keeping zinc ointment properly in contact with so large an extent of surface, in the active and restless patient, was found to be a great drawback, and the result of the treatment was, consequently, unsatisfactory. I bethought me of Beiersdorf's muslin-zinc-ointment, and its application was not only found simple and convenient by his nurse, but healed the eczematous eruption much more rapidly than had been the case when ordinary zinc ointment had been applied in the usual way. This better result was no doubt due simply to the fact that the muslin-ointment afforded a more complete covering to the skin than zinc-ointment did when it was spread on lint or linen by the nurse. The physical consistence of these muslin-ointments surpasses in applicability that of any ointment spread for the occasion on cloth.

Another example may not be out of place. A man has been recently under my care for a chronic slightly infiltrated eczema of the leg, the eczema being in the condition in which I should have expected speedy and satisfactory results from the use of soft soap and diachylon ointment applied in the customary manner, but the expected rapid cure did not follow; the want of success being due to the fact that the diachylon ointment spread on linen did not, in this case, afford sufficient protection. I prescribed diachylon-muslin-ointment³ spread on both sides; a change, which was not only a great boon to the patient, a busy man, who highly appreciated the saving of time which was gained in dressing his leg; but, to my gratification, was followed by a very speedy amelioration of the eczematous condition.

Another of Herr Beiersdorf's preparations—a muslin gutta-percha salicylic plaster—I can recommend with the warmest approval. I do

not know how these plasters are prepared, nor do I know whether Dr. Unna (to whose practical ingenuity we are indebted for the idea, and through whose writings they were brought before the profession) has published the formula by which they are made.⁴

To the action of these plasters in removing hard horny masses of epidermis from the soles of the feet and from the palms of the hands, I have already borne testimony in a paper read before the Clinical Society of London. Of their value in the treatment of scaly eczemas, more especially of the troublesome forms to which some people are liable on the fingers, I may now insist.

The curative action of salicylic acid in eczema is, of course, well known. The advantage of applying the remedy in the form of an adhesive plaster is very great. A piece of the plaster, of the size of the affected part, is closely applied to the diseased skin, and firmly fixed in its place by a few turns of a good adhesive plaster.⁵

It is left untouched for a couple of days, when it is again renewed by the patient. The salicylic acid exercises its full action, and the patient is almost unconscious of the remedy. Herr Beiersdorf prepares the plaster with various percentages of salicylic acid. His catalogue refers to a thirty-eight and a fifty per cent. strength of salicylic acid. I generally use the weaker; but in two obstinate cases of old infiltrated horny eczema in which the weaker strength had been first used, I found a markedly increased effect by the use of the stronger plaster.

ON THE ADVANTAGE OF AXIS TRACTION-FORCEPS IN THE LOW OPERATION.

Read in the Section of Obstetric Medicine at the Annual Meeting of the British Medical Association.

By J. HALLIDAY CROOM, M.D., F.R.C.P.,

Physician to the Royal Maternity Hospital; Assistant-Physician for Diseases of Women to the Royal Infirmary, Edinburgh.

THE subject of axis traction-forceps, their modifications, advantages, etc., has certainly received recently a very large share of attention. This, in my opinion, is not less than is due. It is obvious that the main advantage of such forceps is to be found at the brim. A large amount of evidence, in carefully recorded cases, shows that an accurate adjustment of traction in the axis of the brim has rendered delivery of a living fetus possible when previously craniotomy or a dead fetus were the only alternatives. Not only so, but in cases of flat pelvis, when version has hitherto been the recognised management, the axis traction-forceps have effected delivery satisfactorily, as in cases recorded by Barnes, Macdonald, and myself. This I conceive to be of much importance in cases of delivery in flat pelvis, because in many cases, before assistance is obtained, version is extremely difficult, if not impossible; and, until the introduction of traction-forceps, there was no resource but embryulcia.

In the present communication, I do not refer to the value of such forceps at the brim, but desire to emphasise their importance and advantage in the cavity and outlet. I wish to show that the low operation, or what is generally known as the short forceps operation, can be performed with greater advantage by axis traction-forceps than by any other of the known methods.

A short forceps case is one in which the head at its greatest diameter is within the brim, and where the os is fully dilated and the membranes ruptured. Delivery under such conditions may be required, under varying conditions, which it is not necessary now to enumerate; but take for illustration two common causes of delay—one on the part of the child, for example, malposition of the head; and one on the part of the passages, for example, rigidity of soft parts at the outlet.

First, then, in occipito-posterior presentations, which form a very frequent source of delay in the cavity of the pelvis, axis traction-forceps offer a distinct advantage.

1. In those cases which are the most common, when the occiput rotates forwards, they favour rotation, because, the blades being fixed

⁴ To my great regret, I was unable to publish the formula in my paper on the use of this plaster in the recently published volume of the Clinical Society's *Transactions*.

⁵ The adhesive plaster which I use for this purpose, is sold in boxes under the German name of *Heftband*. As it is very adhesive to itself, and only moderately adhesive to the skin, it has special advantages over the ordinary forms of adhesive plaster. When wrapped round a limb or finger, all that is necessary to fix it securely in its place, is that the one roll should overlap the other. It can be applied with great rapidity and certainty, and is particularly useful in bandaging parts of the body where an ordinary bandage could with difficulty be retained in its place.

² Herr Beiersdorf, Apotheker, Altona, Wohlers, Allée No. 40 (Hamburg). The subject is well worthy the attention of pharmacologists in England. Patients speak with so much approval of the convenience of prepared muslin ointments, that I believe they will pass, eventually, into general use.

³ I strongly recommend this application in subacute eczema.