

the inner side of the right knee, and in the course of 2 months the whole skin was gone from the right leg. On some days more than a square inch of skin died. The process usually began by serum under the epidermis at the growing point of the necrotic area; the cutis vera died in a few hours; when it was cut off granulations were found growing beneath. Eighteen months after the disease started the whole surface had skinned over. Some six months later the skin began to die again, and the patient's temperature was above 99 for 25 weeks, the highest being 104. Treatment consisted in quinin and iron throughout the illness. Opium was given at night and added to the lanolin ointment containing tincture benzoin. Boric acid in carbolic solution was used at first and iodoform was added later, and the edges of the wound were painted with hydrogen peroxid. At the onset of the second attack the sores were ionized by placing the positive electrode of a battery over layers of lint soaked in 2 per cent. zinc sulphate. The hydrogen peroxid and iodoform lotion, however, had a better effect. Persistence of high temperature, appearance and progress of the sore, and the fact that the first nurse had to leave because her hands became infected, suggested a bacterial cause, make the case peculiar. Syphilis and tuberculosis might be dismissed, as the patient and her children had never shown any tendency suggestive of either. Diabetes is, however, not excluded.

CHAPTER III.

THERAPY OF THE DERMATOSES.

Mercurial Baths in Child Furunculosis and Pemphigus.

A. Reiche¹ urges Lewandowsky's procedure of driving staphylococci from the horny dermic layers by profuse sweating. They are then killed by a bath of 1 to 10,000 solution of mercuric chlorid. The child is first given a hot bath, then the pack, with warm drinks, and, from 3 to 5 grains aspirin. The furuncles are opened and sponged in the bath, the body lightly rubbed. The child is then rinsed off, wiped dry, and dusted with talcum. This procedure is repeated for 2 or 3 days, the loss of fluids being compensated by plenty of warm drinks. The children tolerate the sweating and baths well. The furunculosis was cured by the end of one or two weeks. The general health improved much under the cautious diet. This treatment has proven successful even with frail infants having general furunculosis. The same method has been applied with excellent results in acute pemphigus of the newborn, supplemented by application of 5 parts ichthyol and 5 parts glycerin in 100 parts water.

Scarlet Red for Epithelial Granulation. J. S. Davis² has treated 60 cases with scarlet red ointments of 2, 4, 7, 8, 10 and 20% strength. The base was vaselin. Sterilization caused the color to darken, but this did not affect the stimulating power. Clean, healthy granulations should be bathed with boric solution and dried. If the granulations be unhealthy, hydrogen peroxid is used before boric solution. Free use of silver nitrate will down exuberant granulations. The skin surrounding the defect should be anointed with some bland ointment up to within 1 cm. of the edge. Since this has been done the irritation has been

(1) Therap. Monatshefte, May, 1909.

(2) Johns Hopkins Bull., June, 1909.

to a large extent eliminated. The scarlet-red ointment may be applied over the whole wound if it be small, or simply to the growing epithelial edges. Whichever method be chosen, it is best to apply the ointment on perforated old linen, to which the granulations will not adhere, and which allows the escape of secretions and thus prevents maceration. When applied to the edges, the old linen should be used in narrow strips with a thin layer of the ointment. Another satisfactory method is to apply a thin coating of the scarlet red ointment to the wound edges with a camel's hair brush, when the edges are dry. Then either cover with strips of old linen or expose to the air. This is useful in the partial skin-graft cases, and on small wounds, as the ointment can thus be placed accurately and the amount regulated. The portions of the wound not covered by scarlet red may be dressed as seems best, or may simply be exposed to the air under a cage. A light dressing of sterile gauze secured by a bandage completes the procedure.

The dressing should be removed within 48 hours, 24-hour intervals being preferable, and replaced by some bland ointment, such as zinc or boric ointment. After the same interval has elapsed the scarlet red dressing should be replaced. There were 60 cases treated. Of these 44 were males and 16 females, the youngest being 2 years old, and the oldest 76 years. Duration of the lesions, a few days to 15 years. The cases were grouped as follows: Partial skin grafts, 7 cases; ulcer following operation for infection, 10 cases; ulcer following burn, 11 cases; traumatic ulcer, 10 cases; specific ulcer, 8 cases; varicose ulcer, 7 cases; ulcer following Cotting operation for ingrown toe nail, 3 cases; bedsore, 2 cases; miscellaneous ulcer, 2 cases.

The general health of the patient seems to have some bearing on the stimulating effect of the scarlet red, which is distinctly less marked in nephritic and diabetic cases. The age, on the other hand, has little or no effect. The rapid-growing epithelium is thick and at first a bluish-red in color with an opalescent spreading edge. Venules of considerable size can be seen close to the surface. The color and the enlarged vessels soon disappear, however,

and the newly formed tissue rapidly assumes the color and characteristics of the normal skin. A section through an area thus healed shows practically normal skin. As a rule, after a short time the skin becomes freely movable over the underlying tissues.

The exact strength and combination of the ointment to be used on different types of wounds can hardly be dogmatically stated, as experience is necessary for this knowledge. However, a few general observations may be of advantage. The 8% ointment is used unless especially contraindicated. In some cases which were sluggish to the 8, 20% ointment has caused rapid stimulation to the edges. Davis does not advise the constant use of the 20% ointment, as on several occasions it has proved too irritating in spite of all precautions. It is of value now and then, although its action should be carefully watched. On several wounds which were nearly closed, the pure scarlet red powder was dusted on the uncovered area, after protecting the surrounding skin. It had a marked drying effect and caused no irritation. When the wounds are covered with unhealthy granulations, and the discharge is profuse and foul smelling, the scarlet red in iodoform ointment, or balsam of Peru, or blue ointment is very efficacious in cleaning up the granulations, and at the same time stimulating the epithelial growth.

Tincture of Diseased Maize in Psoriasis and Pellagra

J. J. Watson¹ reports a case in which a tincture of diseased maize given for experimental purposes to a psoriatic patient cured the psoriasis.

The author states that it is also of value in the treatment of pellagra. He reports that in 10 cases the following symptoms followed in varying combination the administration of tincture of bad maize: Diarrhea, increased appetite, soft feces, revulsion to food, weakness, lassitude, erythema, desquamation and skin lesions. There was also a pronounced effect on the heart and kidneys. There was diminution in the weight from 4 to 20 pounds. Two patients increased in weight 6 and 8 pounds. Many of these symptoms lasted 2½ months after the experiment

(1) N. Y. Med. Jour., May 8, 1909.

was discontinued. Six of the men were accustomed to alcohol. Two of these had no symptoms and 2 resisted more than the others.

Chronic Eczema of Infants is, according to J. Freer,¹ a constitutional disease which must be differentiated from dermatitis. The etiology has two factors, congenital predisposition and feeding. Two forms must be distinguished; one, weeping eczema of the head, the other, disseminated dry eczema. The first usually attacks well-nourished children with a pasty complexion. In addition to the hairy scalp, the ears, nose and cheeks may be affected by the eruption, and the hands and arms may likewise be attacked. Overfeeding and chronic constipation are the usual concomitants of this, the seborrheic form of eczema. Improvement and cure usually follow the change from pure milk diet to mixed diet at the end of the first year. The second variety of eczema occurs almost exclusively in artificially fed children. Such children are weak, pale and thin. The eruption, not as evident as in the first form, consists of scattered patches of dry, scaly, infiltrated lesions that may be found over the whole body. While local treatment must be used in every case to make the children comfortable, recovery depends upon changes in diet. Reduction of milk is the principal point. Carbohydrates must be given to make up the deficiency in the foodstuffs. After the fourth month of age the child can be fed on various cereal preparations and also given fruit juice. In later months, egg albumin must be avoided, as it is as badly borne as the milk proteids. Whey mixtures may be used in cases where the child is too young to take any other food but milk. The whey may be modified with sugar and cereal gruel, a diet with which Finkelstein had great success in the treatment of eczema in children.

Treatment of Impetigo, according to W. S. Gottheil,² should be pursued along the following lines: *Ordinary impetigo*—Remove crusts gently but repeatedly. (They contain pus cocci in abundance.) Disinfect base of pustules with tampons soaked in 1% bichlorid solution. Use a desiccating paste: sulphur 10%, zinc oxid 10%, kaolin

(1) Münchener med. Woch., Jan. 18, 1908.
(2) Med. Fortnightly, Dec. 14, 1908.

10%, in ungt. aq. rosæ, with perhaps 3 to 5% of ichthyol added. Or use white precipitate ointment, 1 to 3% for younger, and 5% for older children. *Generalized eruptions* (impetigo neonatorum and impetigo herpetiformis). Isolation; hot baths, especially with cort. quercus (500.0 to 4 liters of water) or starch baths; ointment treatment as for commoner forms; general symptomatic treatment.

Arsenic Substitutes in Dermatology. In the dermatoses¹ phosphorus and its compounds are useful as substitutes for arsenic, and in some cases are superior to this drug. In crops of boils, acne indurata or inveterata, and eczema of nervous origin, calcium phosphate or the alkaline hypophosphites are highly serviceable.

Excessive Scratching should always be discouraged,² as an indulgence in this practice leads to the formation of deep excoriations which, in turn, become themselves excellent culture media for pus-forming bacteria. In that manner it is not unusual to see subcutaneous tissues become infected and very serious conditions arise such as require very radical means to cause their recovery.

Senile Pruritus, according to M. Thibierge,³ is difficult to treat and most deceptive. Chlorinated water may be applied of the strength of 1 or 2%, spirit of menthol diluted with water, mentholated oil or Lassar's paste. An ointment useful as an application to the parts that itch painfully is:

R.	
Tumenol 5iiss
Zinc Oxid	
Starch 5ã3vi
Petrolatum 5iiss
M.	

No treatment is lasting. Recourse must be had to various means, gelatin baths being recommended. Internal treatment consists essentially of restricting the patient to a milk diet. The dechloridization is useful in certain cases, but it is difficult to continue for any length of time.

(1) Amer. Jour. of Derm., March, 1909.
(2) Amer. Jour. of Derm., May, 1909.
(3) Rev. Francaise de Med. et de Chir., June 25, 1909.

Lime Salts in the Dermatoses. B. Bellmann¹ has had good results in purpura, urticaria, herpes gestationis and senile pruritis from two-tablespoonful doses after meals of a 5% pure solution of calcium lactate. The preparation was without effect in angioneurotic edema, eczema, lichen ruber, habitual herpes or pemphigus.

Eucalyptus in Leprosy. H. T. Hollmann² advises eucalyptus baths and internal treatment as follows:

For medical baths.—Formula: Take of thoroughly cut eucalyptus leaves, $\frac{1}{4}$ lb; of Ohia leaves (mountain apple—*Jambos malaccensis*), $\frac{1}{4}$ lb; ground hematoxylon bark, and ground hemlock bark, each 1 ounce. This is tied in a small muslin bag. Directions: To each bath, place bag in 5 gallons of water, boil for one hour, of this take $2\frac{1}{2}$ gallons and add to the daily bath.

For internal use.—Take eucalyptus leaves, cut up thoroughly and place in still, cover with water and place on fire. From a 5-gallon still we get 3 gallons of distilled eucalyptus. Directions for using this distillate: Take $\frac{1}{2}$ teaspoonful in a glass of sweetened water three times a day. Gradually increase the dose until the patient is taking a tablespoonful three times a day.

Results obtained after 2 years' continued use of the bath and internal administration of eucalyptus: The glands of the skin are stimulated. The skin now presents a much clearer, cleaner, brighter, healthier appearance. It softens the thickened, indurated skin and underlying integument. The skin becomes softer and more pliable. "Leonine" facies become less marked. The 2 cases, one reported by Goodhue and the other by Hollmann, as showing marked improvement are now *not* the exception, but many more lepers show this decided improvement. Marked improvement appears in leprosy neuritic pains. This pain is almost intractable to remedial agents, but under baths and eucalyptus internally many are relieved to a great extent. The numbness of the hands and feet, a feeling as if the parts were asleep, becomes less marked in many cases. Eucalyptus also relieves the coldness of these parts. Itch, leprosy as well as parasitic, is cured.

(1) München. med. Woch., June 22, 1909.
(2) N. Y. Med. Jour., March 27, 1909.

Formerly there was an almost constant prevalence of one or the other variety of itch. To those who use this treatment, itch has become a rare disease or symptom. Many cases of leprosy excoriations, ulcerations, erosions and abrasions of the skin and mucous membranes are healed. The sores of whatever variety, except where the bone is affected, are stimulated, old scabs and crusts are thrown off and healthy granulations appear, and finally healthy rosy skin covers it over. Swollen head fever, first described by Goodhue in a previous report, has ceased to assume epidemic proportions, and has, in fact, largely disappeared. There have been *no* attacks in those using baths, etc. Leprosy fever, produced by exacerbation of the disease or perhaps by fresh invasion of the germ, has shown a decided decrease in the number of patients. Many have not had an attack since starting treatment 2 years ago.

It has not permanently overcome contracted fingers. It will only relieve the stiffness in the hands and fingers of those whose hands and fingers were stiff from leprosy hypertrophic changes, and this only when treatment is continued regularly. It will not cause leprosy tubercles to disappear. Those patients who show the most marked improvement have followed the bath by an inunction of a salve composed of:

R.
Oil of Eucalyptus,
Oil of Chaulmoogra, equal parts.
M.

Among those who have regularly taken the baths, and internally eucalyptus and strychnin, the death rate has been less than 5%, and less than 2% due to leprosy.

Polyvalent Staphylococic Stock Suspension in Dermatoses. According to H. R. Varney¹ polyvalent staphylococic stock suspensions administered in appropriate doses have a decided therapeutic value in a group of localized, rebellious infections of the skin. Their administration is practically without danger, bringing about prompt cessation of the active infection and immunizing the patient against a recurrence of the infection for a more

(1) Jour. Am. Med. Assoc., Aug. 28, 1909.

or less prolonged interval. Clinical observations act as guides to the time for reinoculation and the size of dose to be administered. The appropriate standards for size and frequency of doses have been previously established from opsonic estimations on laboratory patients with similar infections, and are not necessary for each specific case. Failure to immunize the patient artificially may be due to an abnormal condition of the skin, nonspecific bacterial suspensions, or incorrect dosage. Much time is saved in the use of stock suspensions by the elimination of opsonic indices and by the assistance derived from other therapeutic measures. Less suffering, less deformity, less danger of systemic infection and less liability to recurrence are the advantages derived from the use of bacterial suspensions as a therapeutic agent.

Atoxyl Dermic Reaction. According to Moro and Stheeman,¹ after repeated injections of atoxyl the skin reaction is not only more intense, but also appears more quickly than at first, and that there exists a notable parallelism between the primary atoxyl reaction and the cutaneous reaction of von Pirquet to tuberculin. This parallelism showed itself also in the degree of reaction, i. e., weak reactions to tuberculin corresponded in general to weak reactions to atoxyl and the reverse. The most marked primary reaction to atoxyl was met with in scrofulous children.

(1) Münchener med. Woch., July 15, 1909.

CHAPTER IV.

ACTINOTHERAPY AND RADIOTHERAPY.

Radium in Lupus Erythematosus is discussed by George Booth¹ who reports the case of an 11-year-old girl with a tuberculous maternal history. She was attacked by lupus on the bridge of the nose. X-rays were applied. The disease was arrested and eventually the part healed, with some loss of substance and consequent disfigurement. Whilst the nose was being treated, a second outbreak of the disease commenced a little to the inner side of the left leg, below the patella. X-ray treatment was applied unsuccessfully. As the disease was spreading, Booth decided to try the effect of radium bromid, placed on a small disc and covered with mica. The ulcerated surface was covered with thin oiled silk, and the disc was moved slowly over the surface for 20 to 30 minutes, once or twice a week, as was thought requisite. The treatment was continued for some time with excellent results.

X-Ray Treatment of Scalp Ringworm. For an extended discussion of this subject the reader is referred to the PRACTICAL MEDICAL SERIES, Vol. viii, 1909.

X-Ray in Erythema Multiforme. W. S. Lain² reports the case of a woman with extreme erythema multiforme, involving the extensor surfaces of the fingers, the hands and arms to the elbows. She had tried the usual internal eliminants and local applications without any subsidence of the symptoms. He began the x-ray Jan. 23, 1909, and continued giving treatments, each 10 minutes in length, on January 24, 25 and 28. By the last date the eruption had disappeared except for the brownish color. On February 10 there was a recurrence of all the former trouble at the same localities. He renewed the treatment

(1) British Med. Jour., April 3, 1909.

(2) Jour. Am. Med. Assoc., May 1, 1909.