

℞
 Hydrarg. Chlorid. Mitis, gr. xxx.
 Mucilago. Tragacanth, ʒj.
 Aquæ Calcis, ʒviiij.
 M. This may be used pure or diluted.

Weak solutions of lactate or subacetate of lead, saturated solutions of boric acid, lead and opium wash, are all appropriate to acute eczema and are more or less dependable.

This combination of ichthyol will be found beneficial:

℞
 Ichthyol. ʒj.
 Zinc. Oxid. ʒj.
 Glycerin. ʒss.
 Aquæ, ʒiiij.
 M. Ft. lotio.

Bulkley recommends a solution of potassium permanganate, two grains to the ounce of water.

In circumscribed, acute eczema with weeping, painting the surface with a solution of nitrate of silver gr. x to spirit of nitrous ether ʒj will often promptly convert it into a more manageable squamous eczema. A solution of subacetate of lead and liquor carbonis detergens, each one dram, to an ounce of water, will serve the same purpose. Liquor carbonis detergens is made from tincture of soap bark, nine ounces, coal tar, four ounces. Digest for eight days and filter. It is the mildest of the tar preparations.

Dusting powders are useful in erythematous and vesicular eczema to soothe and protect the inflamed surface. Many powdered substances are used for this purpose, those in general use being flour, starch, the oleates and stearates, boric acid, talc, zinc oxide and magnesium carbonate. These may be used singly or several may be combined. The addition of carbolic acid or camphor to the powder increases its antipruritic effect. The following may be used:

℞
 Pulv. Camphor., ʒss.
 Pulv. Zinc. Oxid., ʒiss.
 Pulv. Amyli, ʒvj.
 M. Sig. Dusting powder.

When exudation has been checked with lotions or powders, ointments may be used. The medicaments may be incorporated with lard, plain or benzoinated, petrolatum, lanolin or cold cream. The last named should not be employed as an ointment base for a fluid as it already contains rose

water to the point of saturation. The ointments used in this stage of the disease must be bland and unirritating and should be made up of such remedies as oxide of zinc, boric acid, magnesium carbonate, ichthyol or small proportions of salicylic acid.

The diachylon ointment of Hebra is time-honored and meritorious. It should be used fresh and is thus prepared:

℞
 Ol. Olivar., ʒxv.
 Litharg., ʒiiij ʒvj.
 Aquæ q. s.
 Coque et adde Ol. Lavandul., ʒiii.
 Ft. unguent. Sig. Apply as a spread plaster.

Pastes also serve a good purpose in subacute eczema without much exudation. They are made from ointments by the addition of inert powders as starch, talc, infusorial earth, magnesium carbonate.

Lassar's paste, which is in general use, is composed as follows:

℞
 Pulv. Zinc. Oxid.,
 Pulv. Amyli, āā ʒij.
 Vaseline., ʒss.

To this may be added any of the drugs mentioned in connection with ointments.

Ihle's paste resembles Lassar's, with the addition of lanolin.

Pastes are spread on linen or gauze and applied to the affected part. They require to be changed less frequently, and are more cleanly and agreeable than ointments.

Local treatment of Chronic Eczema. Ointments are especially serviceable under these conditions and offer a formidable list from which to select.

The tarry preparations are particularly beneficial in the dry and scaly phases of the disease. Of the preparations of tar, *pix liquida*, *oleum rusci*, *oleum cadini*, are the most employed, and usually in the form of a five to ten per cent. ointment. Bulkley's *liquor picis alkalinus* (*pix liquida* ʒj, caustic potash gr. xv, distilled water ʒv; dissolve the potash in the water, add the tar slowly and rub up together in a mortar) is employed as a lotion, diluted in proportion of one dram to an ounce of water, in chronic eczema and old, thickened, itching patches.

Oil of cade may be used under the same conditions and is applied with a stiff brush. The oil of cade may be employed in solution in collodion, with a little castor oil added if the collodion is disposed to make the skin crack.

Pix liquida may be used in the same manner as the oil of cade but is more stimulating and requires the after use of a bland ointment.

Tar should always be used cautiously as it is not well borne by some individuals and may even produce general toxic symptoms.

Green soap is useful in chronic eczema.

In infiltrated, inveterate eczema the Vienna plan of scrubbing the part with green soap, following with diachylon ointment, will often serve to clear up the thickening. Though apparently harsh, the method is often followed by surprisingly good results.

Other remedies for chronic eczema are preparations of mercury, calomel, red and white precipitate, fifteen to thirty grains to the ounce, in ointment form, salicylic acid in ointment, paste or plaster, resorcin, ichthyol, iodine.

The strength of these preparations must be governed by individual requirements. It is best to begin with small proportions and gradually increase them.

Fixed dressings are employed especially in dry and scaly eczemas although their use is by no means confined to such cases. Erythematous eczema of the body is often effectively treated by these means. The glyco-gelatine devised by Unna is made according to the following formula:

℞	
Zinc. Oxid.	
Gelatin.,	āā ʒj.
Aquæ Destil.,	ʒiij.

The gelatine is melted over a water bath and the zinc oxide added.

Two per cent. of ichthyol is a useful addition, and other drugs may be incorporated.

The dressing is applied by first melting it over a water bath, then brushing it over the surface. When nearly dry, cotton should be freely dabbed upon the dressing, or it may be covered with a thin gauze bandage. It is designed to remain in position for several days.

Linimentum exiccans of Pick is designed for a similar purpose. It is composed of Acid. Boric. ʒss., Gummi Tragacanth. ʒj, Glycerin. ʒss, Aq. Bullientis ʒiij. Zinc oxide may be added to stiffen the preparation. It is used as a varnish but is not very comfortable.

Elliot has substituted for tragacanth in the above formula its derivative, bassorine. His bassorin-dextrin paste is composed of bassorin, one ounce and a half, dextrin, six drams, glycerin, two drams, and water sufficient to make three ounces.

Plaster-muslins are made by Beiersdorf, of Hamburg, under Unna's direction. The medicament is incorporated in the oleate of alum and spread upon a thin sheet of gutta percha backed with muslin. The muslins are divided into squares, each square containing a definite amount of

the ingredient. The most generally useful is the mercury-carbolic, which acts well in the treatment of circumscribed patches of chronic eczema. They are expensive and can be used only by the better class of patients.

Unna's salve-muslins are in effect spread plasters of elegant appearance and great adaptability for use on the extremities, but their price is a serious obstacle to their more general employment.

REGIONAL AND SPECIAL VARIETIES OF ECZEMA.

Eczema of Children. Owing to the delicate texture of the skin in infants and young children eczema is usually acute and of the erythematous or vesiculo-pustular form. The scalp is more frequently attacked than elsewhere, while next in frequency come the face, creases of the neck, flexures of the joints and ano-genital region.

A large number of infantile eczemas are undoubtedly due to disorders of digestion arising from over-feeding or injudicious feeding. Struma and debility are responsible for others, but there is left a not inconsiderable class in which all of these factors are absent and the origin of the disease remains obscure.

Treatment. The treatment of eczema of children must be directed on general lines, with such advice and admonition in the matter of diet as appears applicable to the case. The disease is aggravated by scratching, which is usually freely indulged in, as but few children are capable of resisting the impulse. Eternal vigilance on the part of the attendants is required to prevent the patient from undoing, by a sudden and furious scratching, the work so laboriously built up. It may be necessary to confine the hands by pinning together the opening in the sleeve of the dress, or even applying a plaster of Paris bandage around the elbow joints to limit the motion of the arms and prevent the child from reaching its face to scratch it. The finger nails should be kept closely cut.

The local treatment is not different from that laid down for adults except that special caution should be exercised in the matter of strength of the application as the skin of a child is much less resistant than that of maturer persons.

Eczema of the Scalp in Children. Eczema of the scalp in children is usually of the pustular variety. Pustules form, rupture and their contents dries in crusts in which the hair becomes entangled. When the crusts are removed a red, raw surface is exposed. The post-cervical glands are apt to be enlarged.

Pediculi are sometimes present and it is always advisable in this form of eczema to look for nits clinging to the hair shaft, the presence of these ova offering incriminating evidence even when the agility and wariness of the mother louse has enabled her to escape detection.

Eczema capitis in children ordinarily causes a transient loss of hair. The brown, adherent crusts (*crusta lactea*) found on the heads of infants

unless removed, or if removed too vigorously, may become the starting point of a genuine eczema.

Treatment. The crusts are removed with a solution of bicarbonate of soda or borax, or they may be softened with olive oil and slipped off. The remedies are then applied in the form of aqueous or oily lotions and ointments. Some typical lotions are the following:



Fig. 34.—Seborrhœic Eczema (Unna).

℞	Acid. Salicylic.,	gr. xv.
	Glycerini,	ʒss.
	Aquæ Rosæ,	ʒij.

Saturated watery solutions of boric acid.

Resorcin, two grains to the ounce of water.

These are serviceable in acute eczema; later ointments of tar, sulphur, salicylic acid, ammoniate of mercury are indicated. The strength of the ointment must be regulated by the degree of stimulation desired.

When pediculi and nits are discovered the hair should be shingled.

Eczema of the Face in Children. Eczema of the face in children is ordinarily of the vesicular or pustulo-vesicular variety; and is accompanied

by exudation and crusting. The itching is severe and there is not lacking abundant evidence of rough handling by the patient's nails.

Frequently the entire face, with the exception of the lips, lids and nostrils, is involved.

The orificial borders are sometimes concerned in a form of eczema of a moist or squamous type in strumous or debilitated children, which is quite distinct from the type of the disease under consideration and shows no disposition to assume its florid tendencies. It is sometimes called *strumous eczema*.

Treatment. The crusts are removed and soothing, drying lotions applied. Ichthyol in watery solution five per cent. strength, calamine and



Fig. 35.—Eczema of Face and Scalp (Unna).

lime water, carbolic acid solution 1:100, or lotio nigra (calomel and lime water) may be used.

Lassar's paste is useful when the exudation is checked.

Ointments containing a small percentage of tar or salicylic acid are serviceable when exudation is scanty and moderate stimulation is required. The ointment may be spread on the woolly side of cotton flannel, cut as a mask and held in position by strings tied behind the head.

Diachylon ointment must be remembered in this connection. Fox advises the official unguentum zinci oxidi.

Eczema of the Face and Scalp in Adults. Eczema in these localities, especially the former, is usually of the seborrhœic variety and will be considered more fully under that title.

Erythematous eczema is common on the face and is usually acute. When, instead of disappearing, it remains to assume the chronic form, the

skin becomes dusky-red, thickened, deeply-lined and slightly scaly. The ears are frequently involved and become swollen, thickened and leathery. The meatus is narrowed by swelling and the walls of the auditory canal are thickened and scaly. This condition may also affect the membrana tympani and produce impairment of hearing.

Itching is usually intense.

Treatment. The face should be protected against exposure to cold and wind. Calamine and lime water may be used during the day, and ichthyol 1:8, at night. Stearate of zinc is serviceable as a dusting powder to protect the skin, and Pick's varnish may be used for the same purpose. Liquor carbonis detergens in varying proportion is also beneficial.

Chronic cases require stimulation, the stronger tar ointments being especially valuable. Painting the face with glyco-gelatine at night and removing it in the morning, and anointing the face with cold cream is a plan that often proves effective.

Eczema of the auditory canal will frequently yield to applications of nitrate of silver (gr. x to ʒj), followed by mild salicylic ointment.

Bier's congestion method has been successfully applied to eczema of the face. It consists in passing an elastic band around the neck tight enough to produce a certain amount of congestion, but not enough to impede respiration.

Eczema of the Hands. The hand is a very frequent seat of eczema, where it may manifest itself under several forms.

In "occupation" eczema, the skin of the palms is thickened, more or less scaly and fissured. From elasticity of the skin the hand is held in a half-closed position. The whole palm may be involved in eczema of the hand, or the eruption occur in circumscribed patches. The finger tips alone, or the tips and sides of the fingers, may be concerned. In the former the palps of the fingers near the nail become hard and fissured.

Another variety, commonly vesicular, may coexist with eczema elsewhere and generally proceeds from digestive disturbances.

There is also a neurotic type which displays vesicles situated along the course of the cutaneous nerves; and a gouty type which is circumscribed, scaly and itchy.

Unna regards eczema of the hands as a frequent concomitant of seborrhœic eczema elsewhere.

Treatment. The treatment of "occupation" or "trade" eczema consists in removal of the cause. If this is not feasible, some effort at protecting the hands must be made. Rubber gloves, or kid gloves with the tips of the fingers cut off, offer some protection and should be worn where the nature of the patient's occupation admits. Pick's varnish or salicylic acid in collodion may be used.

In eczema of the dry, thickened type, keratolytic agents and stimu-

lating ointments are required. Liquor potassæ, or salicylic acid, twenty to eighty grains as a spread plaster, or a twenty per cent. salicylic acid plaster, or the same drug in collodion, may be applied to remove the thickening. Tar in the form of a strong ointment of the oil of cade, or pix liquida, is frequently of great service, as is also ammoniate of mercury, twenty grains to a dram to the ounce of cold cream.

Vesicular eczema of the hand is treated with a saturated solution of boric acid, black wash or a solution of resorcin, five grains to the ounce of water. These applications should be followed by a mild ointment such as diachylon or zinc ointment.

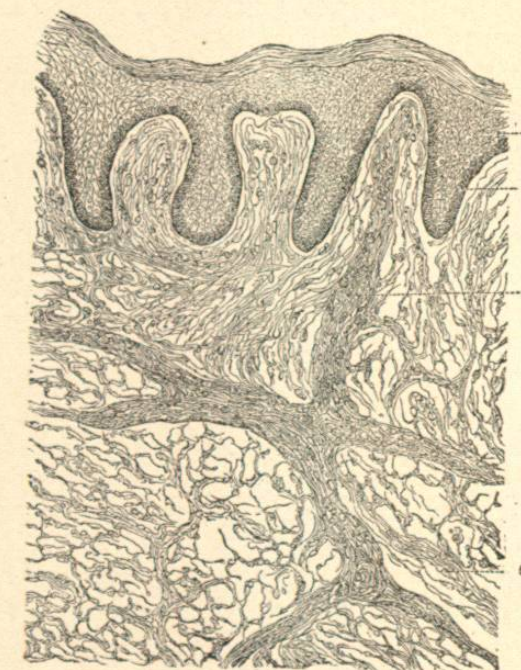


Fig. 36.—Section of Skin from Chronic Eczema (Schamberg). a, Epidermis; b, Rete malpighii; c, Pigmented cells and enlarged papillæ; d, Cellular hyperplasia around bloodvessels; e, Diffuse cell infiltration.

A good plan of treatment is to rupture the vesicles, then apply a solution of liquor plumbi subacetatis, liquor carbonis detergentis, each one dram, rose water, one ounce. This will check the exudation, after which a paste containing ten grains of salicylic acid to the ounce is spread on gauze and the parts bandaged.

Arsenic is valuable internally for the neurotic type of eczema of the hands.

For gouty eczema, Startin's mixture will be found admirable. It is as follows:

R

Quinin. Sulph.,	gr. xxiv.
Magnes. Sulph.,	ʒvj.
Ferri Sulphat.,	ʒj.
Acid. Sulphuric. Dil.,	ʒij.
Tinct. Nucis Vomicae,	ʒij.
Syrup. Pruni Virgin.,	ʒj.
Aquæ ad,	ʒiv.

M. Sig. Teaspoonful in water after meals.

Eczema of the Nails. The nails are usually secondarily involved, one or more of them being affected, rarely all. The nails lose their lustre, become rough, uneven and as the disease progresses, thick, shortened and brittle. Occasionally they may be shed.

The treatment is largely that of eczema of the hand with which it is associated, especially when the former occurs at the tip of the finger or the root of the nail. Painting the nail with a solution of silver nitrate, thirty grains to the ounce, or with a ten per cent. alcoholic solution of pyrogallol, in each case followed with salicylic or resorcin ointment, will sometimes succeed in relieving the condition.

Eczema of the Genitals and Anus. Eczema of the genitals occurs in both sexes. In women the labia are the usual site, though the eruption may extend upward to the mons veneris, or laterally to the thighs, or posteriorly to the perineum and anus.

The eruption is generally of the erythematous, papular or squamous type and dry, though at times the exudation may be very great. In protracted cases the skin becomes reddened, swollen, lined, infiltrated, thickened and fissured.

Itching is often intense and constant rubbing and scratching may establish the habit of masturbation, with its attendant train of ills.

Diabetes with decomposition of saccharine urine, or from the disposition of the disease to induce low forms of inflammation, is a cause and this fact should be borne in mind and an examination of the urine made in every case of genital eczema in women.

Albuminuria is also a predisposing cause, while, locally, irritating vaginal discharges, friction from opposing surfaces, venous congestion from pressure by uterine tumors or pregnancy, may give rise to an eczema.

In men the penis and scrotum are concerned, with or without involvement of contiguous parts. Here, as in women, the eczema is of the erythematous, papulo-pustular (of the scrotum) or squamous variety. It is usually dry but may be moist, the discharge at times being so profuse as to soak through the dressings and soil the clothing. The skin in well established cases, is red, thickened, leathery and slightly scaly. The folds of the scrotum are deepened, the bottom of a fold sometimes escaping

while the raised edges are attacked. The itching is often very severe, at times disabling.

Eczema of the anus may be limited to the margin or represent an extension from neighboring parts. It is of the thickened, infiltrated, fissured variety when at its maximum development. The itching is marked and the fissures painful, especially during defecation. An ill-smelling moisture is frequently present which gives to the parts a sodden, macerated appearance. Constipation and hemorrhoids favor the occurrence of the disease.

Treatment. The constitutional treatment of eczema of the genitals and anus is that of the provocative cause.

Locally, black wash, calamine and lime water lotion are both useful in the acute stage. Weak solutions of ichthyol or boric acid lotion applied hot are also serviceable. Hot water alone gives temporary relief to itching.

The tarry preparations are useful in the subacute and chronic stages. Unna recommends resorcin, glycerine, each five parts, alcohol, one hundred parts. Dilute with three parts of warm water and apply on absorbent cotton, covering it with rubber tissue.

Nitrate of silver painted on at intervals, followed by Lassar's paste with the addition of ichthyol and carbolic acid, is to be recommended.

In eczema scroti a suspensory bandage should be worn.

Eczema of the anus is an uncommonly obstinate affection and will often prove resistant to treatment. In the acute cases the same treatment is applicable as in eczema genitalium. Chronic cases require stimulating ointments of mercury and tar. The X-rays have proven beneficial in eczema of the anus but care will have to be taken to avoid causing azoospermia from exposure of the testicle. When the eczema is acute, hot boric acid solutions, followed by an antipruritic dusting powder, will afford some relief. An ointment of tar or oil of cade, or one containing ten per cent. of orthoform may be tried. A saturated solution of nitrate of silver in sweet spirit of nitre has proven curative. Brønson's antipruritic solution, composed of carbolic acid, liquor potassæ, each one dram, and linseed oil, one ounce, may be brushed on after the parts have been carefully dried. Carbolic acid will not act as a cauterant in this proportion when combined with linseed oil, but must be used with some caution where the skin is delicate.

Grindon recommends the following:

R

Cocain. Hydrochlorat.,	
Morphin. Hydrochlorat.,	āā gr. xv.
Ichthyol.,	ʒj.
Pulvis Amyli,	ʒijss.
Petrolat.,	ʒss.
M. Ft. ungu.	

Eczema of the Legs. Eczema of the legs is usually of the type of *eczema rubrum* or *eczema madidans*. Its favorite site is the lower anterior third of the leg, with the ankle. The skin is as a rule much thickened, sometimes elephantiasic. The surface is crusted and when the crusts are removed the skin beneath is raw, red, oozing and infiltrated.

Small cutaneous abscesses and larger ulcers which give rise to scars when the eczema is healed, are frequently accompaniments.

Varicose veins with consequent sluggish venous circulation often complicate the disease and are probably potent factors in its production.



Fig. 37.—Chronic Eczema with Elephantoid Thickening (Dyer)

Treatment. Removal of the varicose vessels is not infrequently followed by a disappearance of the eczema. In every case bandages, cotton, flannel or rubber, should be used to support the limb and aid return circulation. In cases with but little discharge, pastes of ichthyol, salicylic acid, tannic acid or precipitated sulphur act well, as does the glyco-gelatine fixed dressing. The latter will not serve well in hot weather as it tends to soften and become thin from heat and retained secretions.

As a *tour de force*, Hebra's plan of scrubbing the surface vigorously with green soap, then applying diachylon ointment, should be given a trial.

Rest in bed with the limb elevated should be practised whenever practicable.

Eczema of the Nipples. In this situation eczema is commonly of the fissured type, and occurring frequently in nursing women gives rise to much pain. Abscess of the breasts may be occasioned by infection through the fissures.

The cracks should be painted with nitrate of silver, ten grains to the ounce, or with compound tincture of benzoin. Orthoform (new) applied a short time before nursing and then wiped off will give some relief from pain.

Nipple shields are rarely successful.



Fig. 38.—Chronic Eczema of Leg.

It should be borne in mind that the region of the nipple is greatly affected by the *acarus scabiei*.

Eczema of the Lips is of the squamous or exuding variety. It may affect one or both lips. There is often a strumous element or a history of digestive disorders.

The treatment is not different from that of eczema elsewhere, except that poisonous substances are to be avoided. McCall Anderson recommends painting the lips with liquor potassæ, and washing them frequently in cold water. Frequent painting with compound tincture of benzoin will occasionally yield good results. An ointment of salol, five per cent., will be found helpful.

ECZEMA SEBORRHOEICUM.

Synonyms: Dermatitis seborrhœica.

Definition. Seborrhœic eczema is the name given to a class of cutaneous affections resembling eczema, but differing from it in certain clinical and morphological peculiarities. It was first described by P. G. Unna, of Hamburg, in a communication to the International Medical Congress held at Washington in 1887.

Symptoms. Seborrhœic eczema originates in the scalp and from thence by slow progression extends to other parts of the body rich in sebaceous

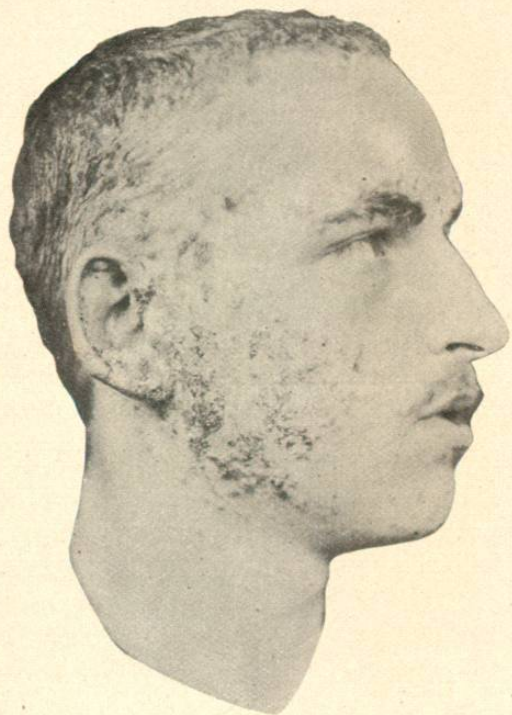


Fig. 39.—Seborrhœic Eczema of Face and Head (Unna).

glands and hair follicles, such as the eyebrows, beard, sternal region, axillary spaces and cruro-genital folds.

The eruption appears as a more or less diffused scaliness of the scalp, accompanied by some loss of hair. The hair is oily, dank and adherent from an excess of sebum, or dry, hay-like and lustreless. This condition constitutes what is known as dandruff and the loss of hair associated with it has received notice under the term *alopecia seborrhœica*.

In another variety of seborrhœic eczema the skin is more severely involved. The surface is hyperæmic and slightly infiltrated, the scales thick and greasy and surround the hair like a cuff. The eruption extends to the

hair margin where it may be seen entirely or in part encircling the head, *corona seborrhœica*, the *seborrhœic diadem*. In this condition the disease may spread to the face and ears.

In a still more advanced type the inflammatory feature becomes pronounced, with more or less tension, swelling and exudation. It extends to the ears and may produce fissuring at the auriculo-mastoid sulcus; from thence, especially in infants, it reaches forward to the face, neck, the scalp in the meantime tending to assume a state of dry scurfiness. This condition is essentially chronic, waxing and waning with the seasons and influenced to some extent by the condition of the general health.

Next to the scalp the mid-sternal region, especially in men, is the



Fig. 40.—Crusted Eczema (Unna).

favorite location of seborrhœic eczema. It is manifested in the form of one or more patches of greasy scales, seated upon a yellowish-red base and tending to assume a circular outline. The itching, except in hot weather and with active sweating, is slight. The patches are small, rarely ever exceeding the dimension of a five-cent piece.

Etiology. According to Unna seborrhœic eczema is due to the presence of the morococcus. It is mildly contagious. Unna includes under the name many more conditions than are generally yielded as properly belonging to seborrhœic eczema, yet the present state of our knowledge of eczema is too inchoate to admit of gainsaying him.

Treatment. The treatment of the milder forms of seborrhœic eczema of the scalp has been considered under *alopecia* (q. v.).

Lotions of resorcin, salicylic acid, and ointments of sulphur are among the most serviceable remedies. Sulphur ointment consisting of precipitated sulphur, one dram; cold cream, one ounce, may be used when there is no particular objection to its use on the part of the patient, and is often more effective than a lotion, as it remains longer in contact and does not have to be repeated at so frequent intervals. The ointment may be applied to the scalp along parallel lines and rubbed in well, avoiding, so far as possible, unsightly greasing of the hair.

For seborrhœic eczema of the face, lotions of ichthyol or salicylic acid are useful, as is creosote in an ointment or lotion. The following paste is helpful:

℞		
	Sulphur. Precip.,	ʒj.
	Zinc. Oxid.,	
	Pulv. Amyli,	āā ʒj.
	Acid. Carbolie.,	gtt. v.
	Ichthyol.,	gtt. xx
	Petrolat. ad,	ʒj.
	M. ft. past.	

Lassar's paste with the addition of five to ten grains of salicylic acid will generally relieve the eczema of the back of the ear.

For seborrhœic eczema of the chest this ointment may be rubbed in briskly twice a day:

℞		
	Hydrarg. Ammoniat.,	gr. xx.
	Acid. Carbolie.,	gtt. v.
	Unguent. Aq. Rosæ ad,	ʒj.
	M. et ft. ung.	

ELEPHANTIASIS.

Definition. Elephantiasis is a chronic, non-contagious disease characterized by intermittent febrile attacks, each attack being attended with inflammation and progressive hypertrophy of the skin and subcutaneous tissue of an extremity or the genital organs. There is an enlargement of the lymphatics of the parts affected, pigmentation and warty growths.

The disease is common in tropical and subtropical countries.

Symptoms. The disease begins with a rigor, followed by fever and sweating, the so-called elephantoid fever.

The local symptoms appear as an erysipelatous inflammation of the extremities, the scrotum, labia or breast. The lymphatics are swollen and tender and the neighboring glands somewhat tumefied. The local disturbance subsides but the swelling does not disappear.

These attacks occur at regular intervals until the part affected becomes chronically swollen, œdematous and hypertrophied. The skin is immensely thickened, its surface rugous, deeply-pigmented and studded with warty growths. There is more or less fissuring, with the escape of a foul-smelling, mucilaginous discharge. Eczematous inflammation with ulcers is often superadded.



Fig. 41.—Elephantiasis (Dr. Ohmann-Dumesnil).

The general health is not as a rule notably affected, though the patient may be disabled from the weight of his encumbrance.

Etiology. The etiology of elephantiasis is obscure. Adults suffer more than children and the dark races more than the white. It is a disease of hot, moist climates and is especially frequent in Samoa. Manson and other observers regard the disease as due to a microscopic thread worm, the *filaria sanguinis hominis*, the same parasite that occurs in lymph scrotum. These

offer obstruction to the lymph channels which leads up to the morbid changes.

Pathology. The disease shows an immense hypertrophy of the skin and subcutaneous tissue. The corium and subcutaneous tissue are greatly thickened and tough; the lymphatics dilated and filled with a mucilaginous fluid; the bloodvessels are enlarged, as are sometimes even the nerves and bones. There is considerable degeneration and occasionally areas of calcareous infiltration are observed. In the male subject the genital organs, penis and testicles, though imbedded in the hypertrophied mass, remain normal. Hydrocele is, however, not uncommon.

Treatment. Removal to a different climate may arrest the disease in its early stages. In the acute stage quinine or Warburg's tincture may be given. Tonics are required during the course of the disease.

When elephantiasis is developed, bandages are to be applied to the affected part and absorbents, such as preparations of mercury, iodine and the like, are used. Galvanism is indicated. Surgical treatment may be employed in some instances and consists in amputation, excision or arterial ligation. Eczema and varicose ulcers are to be treated according to the usual methods.

EPIDERMOLYSIS BULLOSA.

Definition. Epidermolysis bullosa is a rare, cutaneous affection characterized by the occurrence of bullæ and vesicles which arise from a trifling injury. The disease is usually congenital and occasionally hereditary.

Symptoms. The bullæ vary in size from a pea to a goose egg, are more or less well filled and occur upon parts of the body most exposed to traumatism. The contents is at first clear but soon becomes cloudy and then blood-stained. The bullæ rupture, dry into crusts and rapidly heal. The appearance of the bullæ is somewhat intermittent; at times they are very numerous, at other times, few.

The disease is less marked in winter.

The skin of the palms and soles is much thickened and calloused.

The lesions are produced by the most trifling injury. A patient of the writer's, a young student at a military school, always found that a crop of bullæ followed upon wearing his sword belt.

Pathology. Elliot regards the disease as due to an acquired or hereditary exaggerated irritability of the cutaneous vascular system. Engman and Mook found a practical absence of elastic tissue in the papillary and subpapillary regions of the derma, and a sparse distribution and deformity of it in the deeper layers. The capillaries and lymphatics, lacking this support, the tissues become sodden and the epidermis is readily loosened from the underlying structures.

Treatment. So far as cure is concerned treatment is not satisfactory. Arsenic has a beneficial effect, but does not cure. Inert powders form the

best dressing for the lesions. Lanolin aids in relieving the stiffness of the hands from palmar thickening.

Prognosis. The disease continues through life but tends to become milder with advancing age.

EPITHELIOMA.

Synonym: Skin Cancer.

Definition. Epithelioma is a malignant disease of the skin of slower growth and more superficial than carcinoma.

Varieties. There are three clinical varieties of epithelioma, the superficial, the deep and the papillomatous.



Fig. 42.—Epithelioma Developing from a Cicatrix.

Superficial epithelioma is usually flat or discoid in contour. It is situated as a rule upon the upper two-thirds of the face and appears as one or more firm, smooth, reddish, waxy, tubercles or elevations. The lesions tend to flatten in the centre, producing a rounded, rolled edge, like a disc of parchment or a bone button set in the skin. Sooner or later the surface of the growth becomes slightly scaly, the scales being lightly adherent and when removed cause punctate hemorrhage. Eventually crusts form in the centre of the growth, the result of drying of thin, viscid secretion. Ulceration ensues, spreads peripherally and follows a leisurely course, sometimes remaining practically stationary for years, eventually taking on more or less rapidly a malignant phase.

When fully developed the appearance of the ulcer is characteristic. It is irregular in outline, edges raised, waxy and semi-translucent, the floor is uneven, covered with a thin, viscid secretion and bleeds easily.