is a disease almost confined to fleshy persons or to the young who are naturally active and perspire freely, and it occurs in situations in which perspiration is abundant.

The infection begins in the depth of an integumentary fold and spreads outward to where the folds separate, dying out as it advances, and leaving behind a dirty, brownish, discolored surface, so that it is only at the active margin that the fungus may be demonstrated. The disease rarely spreads above Poupart's ligament, but it frequently runs back along the fold that exists in fat persons between the perineum and the thigh, and thence up along the internatal fold. These situations are favored evidently because it is in them that the fungus finds warmth and moisture, and also sufficient air for it to flourish. That it requires air as well as moisture is shown by the fact that it is at the edges of the integumentary fold, and not in its depth that the disease remains for years localized. It may even form patches down the inner side of the thigh where the irrigation from the sweating in the groins is often abundant. On the foot, the disease tends to remain active between the toes, and to spread by a margin on the forepart of the foot. This activity between the toes is probably due to the warmth and abundant moisture of this region. It is likely that in the present case the disease began, as the history indicates, in the crotch, and that sores or particles of the fungus fell down inside the drawers and stockings, and so reached the forepart of the right foot, where it found a soil suitable for its growth.

Castellani's observations in Ceylon on eczema marginatum are interesting as showing the effect of heat and moisture in the development of the fungus—the popular name for the disease there is "dhobi itch," and the patients become spontaneously free on going from the warm humid plains to the cool mountains, to reacquire the trouble on returning to the plains.

In order to cure the disease, this fungus has to be destroyed, and Sabouraud points out the drugs to be used, and their mode of application. The main reliance is to be placed on chrysarobin ointment, in the strength of 1 per cent. or more.

The treatment in the case reported here was begun by curetting up the edges of the lesion and the hard scales, and then painting well and intimately into the skin once a day a 1 per cent. tincture of iodin. After painting on the iodin an ointment was employed consisting of equal parts of zinc oxid, lanolin, and almond oil.

The lesions did not yield, however, until a 12 per cent. salicylic acid ointment was applied.

When in this way a good denudation of the epithelium was secured, a 10 per cent. chrysarobin ointment was well rubbed in.

It is noteworthy that even after the skin was denuded of its hard epithelial covering, the application of this chrysarobin ointment did not trouble the patient. It effectually killed the fungus, however, and cured the disease.

Glossite Losangique médiane. Brocq and Pautrier[9] call attention to a hitherto undescribed glossitis, which, judging from the number (17) of cases they have seen, must be fairly common.

The location of the disease is remarkably constant: it is always to be found placed in the median line of the middle third of the dorsal surface of the tongue, immediately in front of the lingual V formed by the circumvallate papillae.

The form is that of a lozenge, with the longer axis placed antero-posteriorly, and the angles somewhat rounded. The two axes are usually 15 m.. and 10 mm., respectively. It is sharply defined, and forms a marked contrast with the normal mucosa of the tongue, inasmuch as it has a smooth, shining, pink, light-red, or even bright-red, mucosa, devoid of papillae. In some cases there are opalescent points, or a generalized opalescence, which suggests an early, very superficial sclerosis. The surface usually is smooth, but occasionally a few small mammilations occur. These are, as a rule, of the same smooth, pink appearance, but may be yellow, and evenly distributed or grouped.

To the touch the lesion feels slightly indurated, particularly the mammilations. The mucosa is less supple

(9) Annales Derm. Syph., Jan., 1914.

than normally, of a coarser texture, and gives the impression of a beginning sclerosis.

Subjectively, the lesion is painless. Many of the patients had sought advice for other troubles, and a number were discovered by the authors after they had begun a systematic search for the lesions among their patients. Hence, it is difficult to determine the average duration, but the time varied from a few months to seven years in six of the cases.

The treatment was of little avail. The mercurials were pushed, but no opportunity for a trial of salvarsan presented itself.

Histologically, there was found an absence of papillae, superficial parakeratosis, and an irregular hyperacanthosis of the mucous membrane. There was an infiltration of the derma, in part diffuse, in part grouped in nodules, very dense, and poorly delimited, together with a sclerosis.

No suggestion is made concerning the pathogenesis.

Sporotrichosis in the Mississippi Basin. In a recent statistical study, Hamburger reviewed the reported instances of sporotrichal infection in man occurring in the United States during the past fifteen years. Of the fifty-eight cases recorded, all were of the cutaneous variety, and of the fifty in which the seat of primary infection was stated, the organism gained entrance at some point on the hand or forearm in thirty-eight. The geographic distribution of the cases was of interest. Fifty-four of the patients became infected while residing somewhere in the region comprising the Mississippi River basin. Since the publication of Hamburger's first paper of the ten cases reported by Newman, Rhamy and Carey, Sutton, Adams, Ravogli, Cooke, Miller, Hamburger, and Wilder and McCullough, nine were from this territory.

Despite the publicity given this disorder by the numerous examples that have been reported, many instances of sporotrichal infection undoubtedly escape recognition. Judging from a rather extensive correspondence with physicians throughout the Middle West, R. L. Sutton[1] says that there are few practitioners of

(1) Jour. Amer. Med Ass'n., October 3, 1914.

wide clinical experience who have not at some time encountered one or more cases of this disease in their practice. Unfortunately, however, not all are in a position to keep closely in touch with current medical literature, and consequently there are many busy practitioners who have never even heard of sporotrichosis. In eight months Sutton saw or was consulted concerning five clinical cases. In only one case was a positive culture obtained. All healed uneventfully with potassium iodid. The writer concludes that cutaneous sporotrichosis is a comparatively common disorder in the Middle West. In every suspected case a bacteriologic test should be made as early as possible, otherwise the employment of powerful antiseptics, such as iodin, may render cultural examinations negative, even though the fungus be still present. In the majority of instances, the symptomatology of the affection is so characteristic that a mistake in diagnosis is hardly possible if one is at all familiar with the disease.

Sporotrichosis of the Eye. W. H. Wilder and C. P. McCullough[2] give a good review of the recorded cases and a careful study of a new case. They find that infection of the conjunctiva by sporothrix causes a marked congestion of the membrane, particularly the palpebral portion, the fornix and the semi-lunar folds. The bulbar portion is not so frequently infected. Numerous follicular prominences appear in the palpebral conjunctiva and in the fornix. Small yellowish nodules, varying in size and shape, develop rapidly in the conjunctiva, and these may ulcerate. When opened, the contents of the nodules do not escape rapidly as from small abscesses, but seem to be of a gummy consistence. These little nodules developed so rapidly in the case they observed that on the second day new ones presented that had not been seen the day before. Secretion is rather scanty and hardly sufficient to stick the lids together at night, but lachrymation is rather abundant. The eyelids are somewhat edematous and thickened, and palpation shows a well-marked induration of the subcutaneous tissue.

(2) Jour. Amer. Med. Ass'n., April 11, 1914.

Enlargement and tenderness of neighboring lymph glands is also present.

Subjectively, there is a sensation of a foreign substance under the lids, and so much discomfort that use of the eyes is almost impossible. The discomfort comes on rapidly after the infection. The two cases of laboratory infection (that of Fava and the present one) and the absence of a history of trauma in the other cases, seem to show that the sporothrix is able to penetrate the normal conjunctiva. It also appears from the reports of cases that infection of the eye may be secondary to a generalized sporotrichosis. Probably in most of these cases the infection is ectogenous, but the suspicion that it may be endogenous is aroused by the case of La Personne, in which, after a violent iridocyclitis and perforation of the eyeball, sporothrix was obtained from the contents of the bulb.

That general symptoms may arise from a primary lesion of the eye is indicated in the case by the fever, leukocytosis and pains in the bones of the extremities.

Some of the clinical features of this infection are common to other conditions. Lymphadenopathy would be present with chancre of the conjunctiva, but in the initial lesion of syphilis it is very unusual to have such multiple erosions or ulcerations, and scrapings from such an ulcer would probably show the characteristic spirochete. Tuberculosis of the conjunctiva would probably not be so rapid in its course, and it would be a week or more before the caseous tuberculous nodule would break down and form the ulcer, whereas in sporotrichosis the little ulcers develop in a few days. Parinaud's conjunctivitis presents more points of similarity, and it is possible, as mentioned by Morax, that cases of sporotrichosis may have been mistaken for Parinaud's conjunctivitis. In the latter, the vegetations on the conjunctiva are different from the follicles and the yellowish nodules of sporotrichosis. The adenopathy in Parinaud's conjunctivitis points to a severe infection, but all attempts to isolate an organism from the lesions have failed. Recently, however, Verhoeff has observed in such conditions an organism like leptothrix. On the other hand, the diagnosis of

sporotrichosis is easy if scrapings from the nodules or ulcers are inoculated on appropriate mediums and left at from 18 degrees to 20 degrees C., for the organisms appear in from three to ten days. The presence of Gram-positive, spore-like bodies in a direct smear from the conjunctiva should suggest sporothrix.

A Case of Sporotrichosis. This case is reported by L. A. Dermody and C. McMartin.[3]

Mrs. G. G., aged 35, born and residing in Nebraska, with family and past history of no importance, noticed in November, 1913, what she termed a "red welt," pea-sized, oblong and painless, on the dorso-lateral surface of the middle finger of the left hand. She can recall no trauma immediately preceding the lesion or at any time previous.

In from four to seven days after the appearance of the "welt," suppuration took place. The pus had no unusual color. One week later the patient noticed a red line extending up the extensor surface of the forearm as far as the elbow. This red line remained one week, gradually faded, and along the exact course it had taken she noticed a number of nodules just beneath the skin, not painful, from the size of a large shot to that of a cherry. These nodules extended about halfway up the arm above the elbow, following definitely the course of the superficial lymphatics. There were never more than twelve or thirteen nodules. At this time she consulted her physician (about three weeks after the appearance of the initial lesion on the finger). The nodules were gradually growing larger and assuming a purplish color, but were not painful, nor had they suppurated. The physician incised the lesion on the finger, evacuated some pus, and applied a moist dressing. Three weeks of this treatment gave no benefit, and the patient felt that she was growing worse.

When seen in December, 1913, by Dermody and McMartin, the nodules were opened, curetted and cauterized with phenol, followed by alcohol. Temporary improvement took place, but at the end of two months the patient returned home with the areas of infection

(3) Jour. Amer. Med. Ass'n., September 19, 1914.

draining freely. Three months after this she returned with no improvement. No new nodules had developed.

As this time Dr. McMartin saw her and made a diagnosis of sporotrichosis. Cultures from the pus were made. A 2 per cent. glucose-agar showed at the end of five days a pure culture of sporotricha; spores predominated. A bouillon culture at the end of five days exhibited abundant grown; mycelium forms predominated.

On April 16, 1914, the patient was anesthetized, and a number of curvilinear incisions made, each one exposing two or three of the nodules. These areas were thoroughly curetted, the skin undermined, and the flaps stitched back, exposing the infected fields. One hour each day for three successive days the arm was exposed to the sun's rays. At the end of that time a healthy granulating surface had appeared and the flaps were loosened and sutured in place. The wounds were irrigated daily with 50 per cent. Lugol's solution, until almost healed. A daily dressing of Lugol's solution was also applied. Gradually increasing doses of potassium iodid were administered until 60 grains daily were being taken. At the end of three weeks the patient was allowed to return home, with the arm entirely healed, except for one small area, which was rapidly closing.

Vesicular Hyperkeratosis of Gonorrhea. Since Vidal first described, in 1893, a symmetrical, generalized hyperkeratotic eruption, associated with a gonorrheal arthritis and urethritis, many cases have been reported. In the course of a complicated blennorrhagia, a vesicular eruption appears, first about the plantar and dorsal surfaces of the feet, then about the hands, particularly the nails, which may loosen and fall. In rare cases, the eruption may develop elsewhere on the body. The vesicles soon disappear and the pointed hyperkeratoses characteristic of the disease develop and remain for extended periods, depending on the course of the original infection.

The healing of the exanthem with the termination of the urethritis, and the recurrence with a new infection,

leave no doubt as to the etiology, although as yet the organisms have not been found in the skin lesions.

The disease is most commonly associated with arthritis, and may remain for a year or more. When it appears, the prognosis for the arthritis is unfavorable. A few cases of a similar eruption have appeared simultaneously with joint involvement occurring years after the urethritis. These may have been a true gonorrheal exanthem.

The microscopic picture is that of an intensive inflammatory process, beginning in the uppermost epidermal layers, extending to the papillae and the rete, in which cavities are formed by the lifting up of the horny layers by the cellular exudate. Through the constant addition of new parakeratotic cell-layers, there result horny lamellae from the drying of the exudate.

Buschke and Michael[4] report three new cases of this interesting dermatosis. The local treatment consisted chiefly in applications of salicylic acid in petrolatum, and liquor carbonis detergens.

Tuberculosis of the Avian Type in Man. The question of the pathogenicity for man of the bovine and avian types of the tubercle bacillus has brought forth much discussion. The following case, reported by B. Lipschütz,[1] is, therefore, of much interest.

The patient was observed during a period of four years. When first seen, he was 16 years of age, and suffering from lesions (diagnosed as syphilitic) of the palate and uvula. When seen again two months later, the lesions had spread to the tonsils, nasal septum, and to the skin of the scapular region, in spite of antisyphilitic treatment, which, nevertheless, was continued. Two years later the clinical appearance had so changed that the following diagnosis was promptly made: *Lupus vulgaris nasi, labii superioris mucosae oris, palati duri et mollis, cutis brachii dextri et regionis scapularis dextrae.* There were, however, no typical tuberculous nodules, and from time to time subcutaneous abscesses,

(4) Arch. Derm. Syph., Vol. 120, 1914, p. 343.
(1) Arch. Derm. Syph., June, 1914.

which ran a rather rapid course, developed on the extremities. The condition of the patient gradually grew worse, because of the severe visceral disturbances, and the body finally came to autopsy.

The post-mortem examination disclosed a miliary tuberculosis, and the acid-fast bacilli were demonstrated in the viscera and skin in great numbers. Many of the bacilli were intracellular. The organisms, however, were only slightly pathogenic for rabbits and guinea-pigs, whereas in fowls typical tubercles promptly appeared.

From a study of this case and from the works of others Lipschütz concludes that all three types of bacilli may cause skin lesions in man; and since the bovine and avian types are frequently met with in domestic animals, precautions should be taken to guard against the infection of man by these organisms. The Riehl-Paltauf type of *tuberculosa verrucosa cutis* is a genuine inoculation of the bovine organism. On the other hand, *verruca necrogenica* is a lesion produced by an inoculation of the human type.

The case demonstrates the fact that it is not safe to depend upon inoculation of the guinea-pig for diagnostic purposes. In all negative, or doubtful results, fowls should also be used.

Generalized Herpes Zoster. George Pernet[2] reports such a case in a man 80 years of age. About three weeks before he was seen by Pernet he burnt his thumb with a match. A large vesicle formed, which was later opened and dressed. Not long after, however, it "festered," and about two weeks after the burn he had a hard chill, followed by severe pains about the upper left chest. The pains continued for a week before the herpes zoster appeared. The left upper part of the thorax, both front and back, the axillae, and the upper inner posterior surface of the left arm were the areas involved. The vesicles were numerous and closely aggregated, and some appeared as if they might go on to necrosis. The bands corresponded roughly to the third, fourth, and fifth dorsal segments. A large number of discrete vesicles were scattered over the trunk and limbs,

(2) Brit. Jour. of Derm., Nov., 1914.

but there were very few below the knees. There were lesions about the face and scalp, but none in the mouth. The temperature averaged about 100° F., and the patient appeared toxic.

There was an uneventful recovery.

Zona Conjugal. Two interesting cases of conjugal herpes zoster were seen by Ch. Audry.[3] Both man and wife had had furunculosis of the nucha about two years preceding. The furuncles of the husband had developed some time after the onset of the attack in the wife, presumably by inoculation.

The herpetic lesions of the wife occupied the region of the right third interspace and extended down the arm. The husband's attack appeared two months later and occupied the region of the right second interspace, the right side of the neck and the deltoid.

Both patients were otherwise in good health.

Herpes Zoster After Salvarsan. The occurrence of herpes simplex after salvarsan has been frequently observed, and recorded by Watanabe, Fugitani, Bettmann, and others. Blaschko, Meyer, Müller, and others have reported cases of herpes zoster following similar injections.

Alfred Oettinger[4] reports a case of herpes zoster gangrenosus in a woman 51 years old, appearing after an injection of salvarsan. Later a similar eruption followed a second injection. It is evident that herpes, both zoster and simplex, must be considered as one of the reactions of the drug. The attack may recur in different areas with each subsequent infusion, and is independent of the size of the dose and the manner of administration.

Hexamethylenletratramin (Urotropin) in Dermatology. By the internal administration of 4.0 to 6.0 g. daily of urotropin, Otto Sachs[5] was able to demonstrate the splitting product (formaldehyd) of this drug in the vesicle contents of herpes zoster, erythema exudativum multiforme et bullosum, and in the crusts of im-

(3) Ann. Derm. Syph., May, 1914.
(4) Derm. Zeit., Sept., 1914.
(5) Arch. Derm. Syph., May, 1914.

petigo contagiosa. The Jarrissen test for formaldehyd was used.

The day following the use of the drug the lesions usually appeared accentuated, but only for a short time.

The possibility of influencing these dermatoses seems to be demonstrated by the appearance of formaldehyd in the exudates, the blood-stream, and in the cerebrospinal fluid.

In 82 cases of herpes zoster, 3.0 to 4.0 g. daily of urotropin caused the localized pain and the adenopathy to disappear in ten days without local applications.

In 29 cases of erythema exudativum multiforme, the itching, burning, and vesiculation ceased. The recurrence came after much longer intervals.

In 41 cases of impetigo contagiosa healing occurred in ten to twelve days without local treatment.

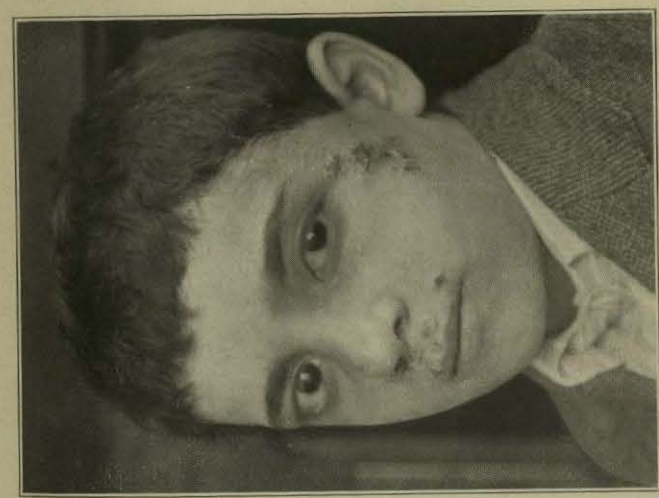
TREATMENT OF DERMATOSES.

Autoserum Treatment in Dermatology. In an interesting paper, read before the Section on Dermatology at the sixty-fifth annual session of the American Medical Association, W. S. Gottheil and D. L. Satenstein[1] reviewed the literature and gave a report of their experience with this comparatively new method of treatment.

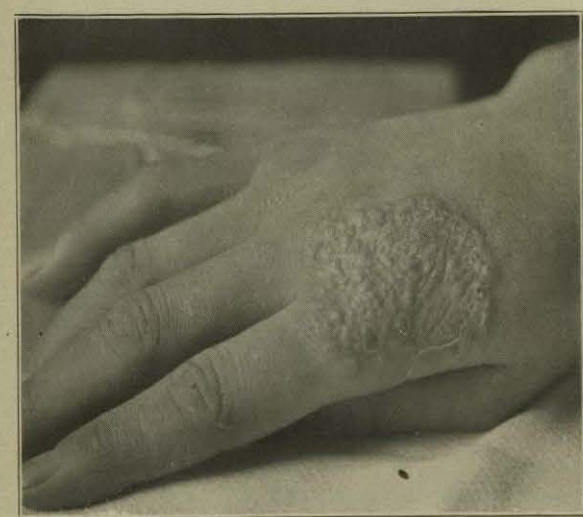
Veiel records a severe case of herpes gestationis, coming on very intensely toward the end of pregnancy, and resisting all treatment. He injected the serum of a healthy gravida, with temporary improvement. After a second injection of twice the amount there was a very marked improvement, rapid disappearance of the itching, and cessation of the bulla formation. Rübsamen had two cases, one of severe pruritus due to pregnancy toxemia, and the other a pustular herpes gestationis in childbed, which he cured by the injection of the clear blood-serum of healthy gravid women. Rongy has recorded good results in pregnancy pruritus from the same means. In these cases a foreign and not an autoserum was employed; and in the toxemic symptoms of

(1) Trans. Sec. on Derm., A. M. A., 1914, p. 124.

PLATE V.

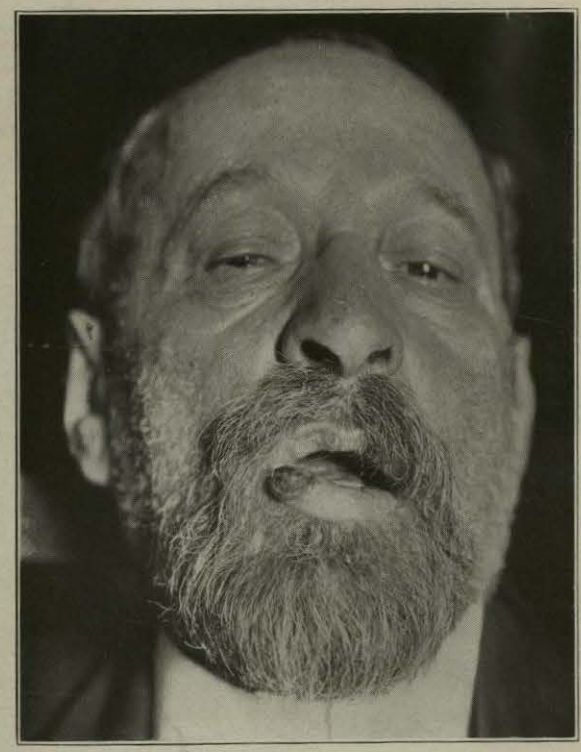


Herpes zoster and Herpes simplex (nasialis and labialis) co-existing in a young boy. Neuralgic pains at site of zoster lesions only.—*From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.*



Trichophytosis of the hand in a young woman; duration of disease, three weeks.—*From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.*
Collection of Dr. P. F. Shaffner.

PLATE VI.



Recurrence, without regional adenopathy of an epithelioma of the lip after excision, in a man 65 years old. At the time of operation of the regional glands were removed.—*From the Dermatologic Clinic, Post-Graduate Medical School, Chicago.* Collection of Dr. P. F. Shaffner.

pregnancy, including those appearing on the skin, the serum treatment seems to have definitely established its value.

Pretorius gives an account of a woman suffering from a severe chronic pemphigus, which he had long watched and treated. She was given 20 c. c. of blood from her husband; in eight days she was cured, and had had no relapse in eight months.

Spiethoff records good results in dermatitis herpetiformis, chronic urticaria, prurigo, psoriasis and chronic eczema from the autoserum.

Linser has used human serum (whether autogenous or not, Gottheil and Satenstein do not know) with brilliant results in a case of herpes gestationis. In four cases of chronic urticaria he reports startling and immediate results fifteen minutes after the injections; fifteen of his eighteen urticaria patients were cured by from two to three injections. Twelve prurigo patients were much improved by the injections, and, finally, from four to six months later, were nearly all cured. He obtained especially good results in pemphigus and dermatitis herpetiformis, and also in the eczemas of children.

Ullmann used autoserum injections in eighteen itchy dermatoses, without other treatment. In seven cases of dermatitis herpetiformis he obtained no results; in two cases of generalized eczema in children he obtained no results from the injections, but exceptionally good and quick results as soon as local treatment was instituted; three urticarias were improved, but not cured; four cases of pruritus were cured, and one prurigo was much improved.

Twelve cases were treated by Gottheil and Satenstein; six of very extensive general psoriasis, three of generalized eczema, two of pemphigus, and one of leprosy. The records have been published in the *Medical Record*, New York, 1914, Vol. LXXXV, 620. Since that time six cases of psoriasis, two cases of radiodermatitis, and one each of chronic urticaria, pustular acne with dermic abscesses, furunculosis and lichen planus have been treated. The process of treatment is rather troublesome, and, above all, takes care and time. In the busy hospital,

with many demands on the laboratory and house staff, it was difficult to arrange for the proper treatment of any long series of cases. In private practice other factors, such as the idiosyncrasies of the patients, and the question of expense, naturally interfered.

To those experienced in intravenous medication technique, this presents no difficulties, the only additional apparatus required being an efficient electric centrifuge and some platinum needles. The ordinary centrifuge will not do, since it is too slow and it would take too long to separate the serum thoroughly. An electric machine capable of making at least 4,000 revolutions a minute is required; this will thoroughly separate the serum in about half an hour. The tubes should be large enough to hold about 200 c.c. of blood; the authors employ four of about 60 c.c. capacity apiece. It being desirable to avoid all possible transfers of the blood and serum, the blood is drawn directly into the centrifuge tubes. A platinum needle of large caliber is used for the venipuncture; this is much smoother on the inside than the steel needles, and very much more fluid can be obtained before occlusion and, furthermore, the needle can be more readily and thoroughly sterilized in the flame. It is well to have one or two extra venipuncture needles in reserve, so that no time is lost in resterilizing, if necessary, and so that two needles can be introduced simultaneously if the flow is too slow.

The blood is allowed to clot thoroughly, which takes about ten minutes; the clot is then well broken up with a glass rod, and centrifuged at high speed. In the electric centrifuge at about 5,000 revolutions a minute this takes from thirty to forty minutes. In a slower, water-driven or hand centrifuge it would take much longer, which is an additional objection to the use of these appliances; the serum should be re-injected within about an hour after the blood is drawn. All utensils coming in contact with the blood or serum should be cool.

The amount of blood drawn has varied from 40 to 200 c. c., usually the latter amount, or an approximation to it; and the serum recovered has been from 40 to 45 per cent. of this quantity. The German investigators

usually employed from 25 to 60 c. c. of serum at a dose, some of them asserting that exactly the same results were obtainable from the smaller as from the larger amounts.

The serum recovered is injected into a vein, usually on the other side from that from which the blood is drawn, and the operation is completed. An ordinary salvarsan needle is used for the reinjection.

Over 250 of these autoserum injections were given without seeing, save in a single case, any contra-indications to their employment. The patients feel no effects at all either from the drawing of the blood or from the re-injection of the serum; they go back to their occupations as soon as the operation is completed. The one exception was in a very bad case of gangrenous radiodermatitis, in a case of leukemia in which the patient did marvelously well under the first four, but had a reaction, and chills followed by fever after the fifth and sixth, which were interpreted as attacks of serum sickness due to the sensitizing of the organism by the previous injections. No similar occurrence in any other case was observed.

Following is a brief summary of the results so far obtained:

The cases were eighteen in all, twelve of psoriasis, two of radiodermatitis, and one each of furunculosis, pustular acne and dermic abscesses, chronic urticaria, and lichen planus. The pustular acne was very markedly improved, and nearly cured; and the urticaria, lichen planus and furunculosis became much better while subjected to this treatment. One of the radiodermatitis cases was a gangrenous one, and the result here was not to be described as otherwise than astounding. The patient was apparently in a hopeless condition; he was constantly under opiates, could hardly get out of bed, and the sloughing ulceration had been almost unaffected by the various local and general measures that had been tried. The result of even the first injection was the rapid throwing off of the necrotic tissue, beginning cicatrization of the ulceration, cessation of the agonizing pain and the tenderness, and a rapid convalescence. This was the patient who had the symptoms of serum

sickness after his fourth injection; the treatment was stopped in consequence of it; at present the patient is perfectly well and attending to his business; the ulceration is three-quarters healed, healthy, and slowly closing up under ordinary surgical local treatment.

Only in psoriasis have the results been uniform, and extremely satisfactory. The authors have now twelve carefully observed cases, all of them of the severe and extensive type of the disease. Many of these patients had had psoriasis for many years, or all their lives, so far as they could remember; some of them had had repeated courses of treatment without any noteworthy results, or with partial or very temporary results; some had been treated for half a lifetime without benefit, and others had long given up all attempts to cure the disease. One and all were enthusiastic for the treatment, and one at least voluntarily asked for another course of the injections to prevent the possibility of a relapse.

These patients were given from four to six autoserum injections at intervals of from five days to one week, during which time they were not hospital patients or confined to bed, but could pursue their ordinary avocations. During this time also no local treatment other than ordinary baths and soap frictions were employed. In most cases the efflorescences became paler and less elevated, and showed signs of beginning retrogression. Then, at the end of the serum course, treatment with a weak chrysarobin petrolatum, 2 or 3 per cent. for the body, and an equally weak white precipitate ointment for the head and hands, was begun. In from three to eight days every lesion had disappeared, with but very little, if any, dematitis from the medication. This also has been the case with gigantic indurated plaques of years' standing, and with patients who have been treated *secondum artem* many times without effect, or who had had their bodies cleaned before at the expense of six weeks' treatment with 40 per cent. chrysarobin ointments, severe dematitis, and the administration of arsenic in very large doses.

Is it possible that the good results attained are due to the blood-letting alone? The thought has often struck the

writers, as it must have struck others, that the generations of acute observers and habile clinicians who practiced blood-letting in so many affections can not have been entirely wrong; they must have seen some good result in some cases, at least. And there is at least one case of psoriasis on record, to which Dr. P. Brynberg Porter has called attention, in which the late Weir Mitchell in his young days, being left in charge of a very bad case of psoriasis, and not knowing what to do, put the patient to bed and bled her every day, and cured her disease. Blood-letting alone, however, has been tried, and has not given results. The writers do not think that the benefits of the procedure can be ascribed to it.

New Method of Treatment of Lupus Vulgaris. This subject is discussed by M. L. Heidingsfeld[2], in a paper read before the section on Dermatology, at the 1914 session of the American Medical Association.

In 1911 Heidingsfeld published a short monograph covering a brief clinical experience with trichloracetic acid in concentrated form. Reference was made to the fact that this time-honored and more or less generally employed nose and throat remedy had received little favorable notice as a therapeutic agent in dermatology.

Lanz, in an article on the topical application of 20 per cent. trichloracetic acid by means of an endoscope in chronic urethritis, incidentally refers to the success attending its use in papillomas, warts and pigmentations.

In the monograph above referred to, Heidingsfeld set forth the success which attended the treatment of moles and circumscribed pigmentations, vascular nevi and telangiectases and warts and papillomas, with a saturated solution of trichloracetic acid, and incidentally mentioned that immediate, favorable results were also noted in lupus vulgaris and several other affections. He has continued to use this remedy with unfailing benefit in all cases of lupus vulgaris and tuberculosis verrucosis cutis which have come to his notice since then.

In spite of the innovation of many new and successful features in recent years, in lupus therapy, no single remedy or well-defined plan of treatment of lupus vul-

(2) Trans. Sec. on Derm., A. M. A., 1914, p. 52.