

scar tissue and adhesions without entering the peritoneum; and the incision was closed with one layer of silk sutures, and one layer of silkworm gut.

The convalescence was uneventful, and mother and baby were discharged well on Sept. 14, the baby weighing 7 lbs. 14 oz.

IV.

On Oct. 17, 1906, S. H. entered the hospital for the fourth time, apparently at term. She was not in labor, and no vaginal examination was made. Palpation disclosed a breech presentation, S. D. A.; the foetal heart rate was 142. After the usual preparation of the woman, section was performed by Dr. Green. The uterus was opened and closed as before, except that linen sutures were used instead of silk.

After an uneventful convalescence the mother was discharged well on Nov. 13, with her baby weighing 5 lbs. 9 oz.

V.

S. H. entered for the fifth time on Feb. 10, 1909. She was apparently at term, was not in labor, and was not examined vaginally. Palpation showed twin pregnancy, — one baby presenting the head, O. L. A., with heart rate 140, the other presenting the breech, S. D. P., with pulse of 164. After two days of preparation the woman was delivered by Cæsarean section by Dr. Green. The breech baby was delivered first, and weighed 5 lbs. 9 oz.; the baby presenting the head weighed 5 lbs. 4 oz.; and the placenta weighed 1 lb. 15 oz. The total weight of twins and placenta was, therefore, 12 lbs. 12 oz. The placenta was single, with one chorion and two amniotic sacs with complete median septum. The babies were both males. The incision was closed with two layers of linen sutures and one of silkworm gut. The woman was discharged well in three weeks, after a normal convalescence. The larger baby had gained 3 oz. over its birth-weight; but the smaller baby had not nourished as well, and was 8 oz. below its birth-weight.

It was a matter of interest at the time, that the fifth Cæsarean operation on this negress was performed on the birthday anniversary of the great President who emancipated her race in this country; and the mother announced her intention of naming her twins Abraham and Lincoln respectively.

The performance of Cæsarean section for the fifth time on the same woman is no longer a unique event, either in this country or in Europe. Indeed, since the case above reported, the writer has himself successfully performed another fifth section in the same clinic. But as far as I am aware no case has ever been reported in which six babies have been delivered by five sections on the same woman.

As was intimated in the early part of this report, it is the policy of the Boston Lying-In Hospital, in the Cæsarean operation, never to remove or impair the function of healthy organs for the purpose of preventing subsequent pregnancy. The attitude of the hospital on this subject does not seem to have met with general professional approval. Apparently an opinion is held by a majority of obstetric surgeons that it is unfair to a woman to subject her for a second time to the risk of the Cæsarean operation. It is not my purpose to discuss this subject at this time; those interested in the question are referred to papers and discussions in the Transactions of

the American Gynæcological Society for 1909¹; but it may be noted that under the policy of non-sterilization the two women who have each submitted to five sections have left the hospital with eleven healthy infants, and they themselves in excellent health.

There is another interesting feature in the case of the negress, S. H., whose utero-abdominal incision sloughed in her first convalescence. The result of this surgical misadventure was a firm, broad, high fixation of the uterus to the anterior abdominal wall, so that in four subsequent sections the peritoneal cavity was not entered, and convalescence progressed without untoward incident. Moreover, the abnormal position of the uterus, with the fundus reaching nearly to the umbilicus, produced no unpleasant symptoms. It therefore seemed to me legitimate to try the effect of producing a sufficiently long and broad artificial utero-abdominal fixation with a view to subsequent extraperitoneal section. I have, therefore, done this operation in two cases of young primiparæ, each with an absolute indication, after performing their first Cæsarean section. Both of these women were discharged in good condition with their infants, and I await a second section with interest. If my technique proves successful, these two women should be delivered by extraperitoneal incision repeated any number of times with a negligible risk.

A SUMMER SERVICE IN THE WELD WARD OF THE MASSACHUSETTS GENERAL HOSPITAL.

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THIS ward of twenty beds, built by private generosity, was opened in October, 1903, and has proved of great benefit to many patients who otherwise would have found great difficulty in caring for their peculiar, and often crippling, diseases. Secondly, this ward has been of great service to the community in isolating many highly contagious cases of syphilis until their open wounds have cicatrized and thus rendered them less dangerous to their neighbors. Thirdly, this ward has been of great value to its staff and to medical students, who have found within its beds practically all the common diseases in their severest forms, and most of the rarest dermatoses. These beds have been the means of keeping within the hospital these many patients whose diseases could, therefore, be observed and studied until convalescence or death completed the cycle of their disease.

The service last summer, extending from July 1 to Oct. 1, was a typical one in most respects and was marked by the appearance of many interesting dermatoses, so that it seems worth while, since in our case this has never been done before, to publish the record of the more common diseases and to describe in a few words the rarer ones.

¹ The writer's paper may also be found in the American Journal of Obstetrics, vol. lxx, no. 6, 1909.

CASE 1. *Syphilis*. Man aged twenty-three, laborer.

Two years ago chancre developed on prepuce. To-day both legs and thighs show numerous large ulcers, some of which have coalesced to form denuded areas covering large portions of the limb. Over the rest of the body are many scars, some keloidal, some pigmented, which vary in size from that of a ten-cent piece to larger areas occupying nearly the whole forearm and elbows. From the active lesions a foul-smelling pus was exuded.

Apart from the extensive destruction present in this patient his case is interesting because of the long time necessary to reproduce a whole and sound integument. Despite the use of the most varied hygienic, antisyphilitic, dermatological and surgical remedies, the man was in the ward off and on for nine months. This would have been a splendid case for "606," but unfortunately none was obtainable.

CASE 2. *Syphilis*. Woman aged twenty-three, housework.

A case somewhat similar to the last. Several ulcers were present, the largest of which dated back three years and was on the lower leg, measuring $5\frac{1}{2}$ by $4\frac{1}{2}$ by $3\frac{1}{2}$ inches. The woman was also pregnant and at the time of her discharge three and one-half months after entrance fetal movements were noticeable and the patient had gained 23 lbs. Nevertheless, mother and child died later at a state hospital.

CASE 3. *Psoriasis*. Woman aged forty-seven, housewife.

Eruption generalized over scalp, face and body. Disease began thirteen years ago, disappeared six years later during an attack of toxemia and reappeared six months afterward while under the influence of the grippe. The patient showed a marked idiosyncrasy toward salicylic acid, developing delirium and great weakness after the application over the whole surface of an ointment containing this drug.

CASE 4. *Granuloma Annulare*. Female aged eight.

Father has tuberculosis, only case in family. Scarlet fever two years ago, whooping cough last winter. Physical examination negative except for cutaneous eruption, which first appeared six weeks ago. To-day there is on the flexor surface of the left index finger, a painless oval ring $1\frac{1}{4}$ inches in diameter. The ring is elevated $\frac{1}{4}$ inch above the surface, is white, firm and elastic, and somewhat nodular. The center is probably at the level of the normal skin, and is free from abnormal signs except for a somewhat purplish color. Over the middle joint of the right index finger on the extensor surface is a circular line of papules, rather ill-defined, red in color, $\frac{3}{8}$ inch in diameter, the arrangement producing a ring-shaped eruption resembling its fellow on the left finger. The rings continued to extend peripherally, the larger one gaining $\frac{1}{4}$ inch in diameter, and some of the individual papules became delled and glistening. This advance continued for about six weeks and then x-ray exposures were begun, and at the end of a week distinct softening of the lesions had begun, although the periphery had continued to extend. Three weeks after the institution of the rays the lesions were level with the normal skin, but the extent of the previous process could be seen clearly by the color differences of the healthy and the abnormal skin.

HISTOLOGY. (BIOPSY.)

Epidermis. — The stratum germinativum is normal, but the overlying rete cells change abruptly. The protoplasm of the cell shrinks, leaving the nucleus occupying the larger portion of the cell structure; or the protoplasm around the nucleus disappears, leaving conspicuous perinuclear halos; or again, the nuclear protoplasm rarefies, leaving a clear space containing

chromatin granules floating within the nuclear rim. The stratum granulosum is hyperplastic and dense. The cell boundaries are very indistinct and the layer as a whole seems compressed. Above this layer is an indeterminate zone, basic in its affinity and difficult to name. It is very compact and contains many elongated flattened nuclei without granules. This zone occupies the area of the stratum lucidum, but can hardly be designated by this name. Above this debatable ground appears a very hyperplastic stratum corneum which is almost twice as thick as the whole underlying epidermis. It is wholly atypical and consists of swollen horny cells full of vesicular spaces, most of which seem to hold a degenerated nucleus containing granular matter.

Corium. — The subpapillary layer is rather rarefied and holds numerous vessels, many of which are slightly dilated and surrounded by lymphocytes. On the other hand, some of these vessels show endothelial thickening. Below this level the corium becomes highly pathological and contains many lobules contiguous to one another and separated by more or less vertical or slanting bands of fibrous tissue. The lobules themselves are composed of short, dense connective tissue cells containing many lymphocytes. Within these lobules are large veins exhibiting considerable endothelial and perithelial thickening, and here and there total obliteration. Sweat glands, when present, seem compressed, and their lumen is much restricted in diameter. These structures seem to be analogous to the cellular invasions of the fat cells observed in erythema induratum, and in places in these sections this invasion and final obliteration of the panniculus adiposus can be well observed. No giant cells, however, can be noted.

The elastic element in the corium is very much reduced in amount everywhere. It is deficient in amount in the papillary and subpapillary zones, while in the neoplastic lobules elastin is represented solely by a few somewhat large and peculiarly straight rods.

CASE 5. *Syphilis*. Male aged forty-nine, machinist.

Probably initial lesion three to four years ago. To-day has two exceedingly deep ulcers near scapula and near spinal column, accompanied by "rheumatic" pains. In three weeks the ulcers were entirely healed under iodide of potash and mercurialunctions.

CASE 11. *Lupus Erythematosus*? Female aged thirty-seven, housework.

Has had chills once or twice weekly for four months up to two weeks before admittance to the hospital. Has not felt well or strong for four or five years. Several years ago had glands removed from the neck.

In February, 1910, patient thinks she froze her ears and nose. Two weeks later the present disease began in dry and grayish scales on the convalescent areas. In May pigmentation of the face appeared after sitting in the sun, and her family physician told her she had erysipelas.

On entrance one found dark red to brownish, or even purple, elevated areas covering the entire face and forehead and ears, and here and there one noted closely adherent, dirty, gray scales. Edema was present below each eye. The back of the hands and the arms presented red, dry, scaling, slightly elevated patches, pea to coin-sized. The fingers itched. Von Pirquet reaction negative, as was our examination of the nasal discharge for lepra bacilli.

The case was a diagnostic puzzle and to-day (Dec. 16, 1910) the woman lies in the ward again as a re-entrant. We may have here a paralyzed vascular network following the severe exposure of the affected parts to the winter's cold.

CASE 16. *Scrofuloderma*. Female aged fifteen, school.

Three years ago pain and stiffness and loss of strength developed in the child's wrist two weeks after vaccination. Hand and forearm were put up in plaster and when the dressing was removed two to three months later a discharging ulcer made its appearance and lasted for a year. Shortly after, other ulcers developed and have persisted ever since. On entrance, both forearms and wrists were undeveloped and the skin showed many foul, sluggish, deep ulcers with interspersed scars, and the right elbow and wrist were ankylosed at an angle of 45°. A radiograph indicated an accompanying osseous change. Physical examination was negative, Von Pirquet positive. No temperature.

These ulcers yielded slowly to Scharlach R dressing, but thorough curettage was performed later and great masses of necrotic tissue, extending down to the tendon sheaths were scooped out.

CASE 19. *Herpes zoster*. Male aged sixty-two.

Right scapula, thoracic, axillary and brachial regions affected. Severe neuralgic pain, especially at night, which yielded very satisfactorily to freezing with ethyl chloride over the seats of origin in the spinal cord.

CASE 20. *Syphilis*. Female aged twenty-four, jeweller.

Date of infection unknown. Present condition consisted of numerous ulcers of five months' duration on both lower legs. On right leg there were twelve, and on left two, and they ranged in size up to that of a silver half-dollar. A small brown cicatrix was found in left pubic region and a mucous plaque was present on the left side of the tongue. During the woman's visit three teeth were removed because of necrosis of left lower jaw. Patient was discouraged and hysterical. Thirty-three days after entrance all active lesions were healed.

CASE 23. *Pemphigus foliaceus*. Female aged seventy-three.

For the last year has had frequent dizziness and headache and swelling of face. The cutaneous eruption developed about six months ago as yellowish "spots" on tongue, lips and buccal mucous membrane. These "spots" soon became blisters, and these blisters gave way to large exfoliated flakes. The disease then manifested itself on the chin in the form of blisters accompanied by a burning sensation.

On entrance the chin was free from eruption, but the oral cavity was still affected. The tongue was completely denuded and bore deep cracks. Scattered over the arms, axillæ, groins, trunk, buttocks, legs and feet were numbers of ruptured blebs with ragged epithelial coverings, or with completely denuded surface, or with sanguinolent moist crust. The patient was very weak, emaciated and poorly nourished and complained of intermittent itching.

During the remainder of her life a few new bullæ appeared, always flaccid, never tense. The great heat was very depressing to the patient, her appetite was never good; nausea developed and disappeared; delirium was present. Later a great change took place. Old lesions had healed and but few new ones had developed, and the prognosis looked favorable. Five weeks after entrance, however, flaccid bullæ appeared, delirium returned, the appetite failed and the final decline commenced, death occurring fifty-nine days after entrance, nine or ten months after the original outbreak. No autopsy was permitted.

CASE 32. *Prurigo*. Female aged thirteen, school.

This young girl had been in our ward on three or four previous occasions. A few days of hospital life, with its healthy conditions of air, food, sleep and medical care, had always brought about a rapid amelioration of

her skin lesions and she was always discharged practically free from visible signs of disease after a few weeks' sojourn in the ward. Despite her apparent cure, the child would always return to the out-patient clinic a week or more later with the disease as evident as ever. This had been our previous experience, and we were destined to see the cycle repeated once again.

On entrance the eruption was a perfect replica of previous attacks. The cheeks and forehead were very flushed and studded thickly with firm, hard, shotty papules. The arms and legs were similarly affected, but the lower legs and the lower arms were much more abundantly broken out and the extensor surfaces of both arms and legs were more affected than the flexors. Palpable glands were numerous and widely scattered.

This was a typical example of prurigo mitis, and hospital hygiene, soothing washes, carbohydrate diet and intestinal antiseptics brought about their usual rapid favorable results, and nineteen days after entrance the girl was discharged nearly free from outward manifestations of her disease. To-day, Feb. 20, the disease has apparently wholly disappeared.

CASE 34. *Trophic ulcer*. Female aged thirty-six, dressmaker.

This patient had a long surgical and dermatological history and had been in the hospital numerous times. Her adolescence was interrupted by numerous illnesses, including measles, scarlatina, diphtheria, mumps, multiple cervical abscesses, etc. On top of this history was the story of the death of five brothers and sisters in childhood, three of which were due to phthisis. The long, persistent affection of the foot dated back twenty-four years. It began like chilblains (lupus pernio?), followed by atrophy and ulceration and total destruction of toes, until all had fallen off progressively from the big toe outward. The present trouble consisted of an ulcer on the dorsum of the foot, accompanied by great pain, but controllable by hot water. The ulcer responded well to treatment and was nearly healed in sixteen days.

CASE 36. *Dermatitis herpetiformis*. Female aged five.

For the last four summers the patient has had a similar outbreak, but never so extensively as at present. Four months before entrance the child had scarlatina, and one month later the present outbreak began. The general physical examination revealed no abnormalities apart from the skin lesions, which consisted of small and large herpetiform vesicles scattered over the entire body and extremities. Many lesions had coalesced and crusted, and between them appeared numerous pigmented macules, the remains of previous outbreaks. The blood showed 13% of eosinophiles; indican was usually deficient in amount. Two weeks after entrance the production of new vesicles had ceased, and the patient's skin was free from active lesions. This, however, was merely a quiescent period of the disease, perhaps induced by Fowler's solution (M. v. t. i. d.) and by the external application of 50% ichthyol. During the rest of the child's stay in the ward (five weeks) there were always a few grouped vesico-bullæ present, usually on the wrists and dorsum of feet.

CASE 43. *Xeroderma pigmentosum*. Female, Irish, aged eleven, school.

Brothers and sisters living and well. This is the first example of this rare disease observed in this hospital in only one member of the family, and also the first case outside of the Russian Jews. At the age of three months in the month of February this child was taken out of doors for the first time. The following day the mother noticed a considerable erythema of the face followed at once by freckling which had persisted, receding every winter and reappearing more

intensely every summer. At seven years of age the eyes became "sore" and were examined and glasses were prescribed. One year ago a growth developed on the right eye which has persisted and the visiting ophthalmologist records: "Pseudo-ptyerygium of right eye, scars on the left cornea, and chronic conjunctivitis and blepharitis of both eyes." The present dermatosis was limited to the entire face, ears, neck, hands and forearms, most markedly on the face, where there were many pinhead to small pea-sized, reddish-brown to chocolate-brown macules associated with a few punctiform or linear telangiectases. The interlying skin was atrophic, thin and wrinkled, and in places desquamating. On the left ala of the nose there were several keratoses; while on the right cheek a well-developed but small epithelioma was present. The child as a whole was undersized and the face looked pinched and old. The child was kept in a darkened room by day and spent the evenings and nights out of doors. The keratoses and epithelioma were curetted and excised, and after a sojourn of six weeks in the ward the child, much improved in appearance, was transferred to the Eye and Ear Infirmary.

HISTOLOGY.

The epidermis is very abnormal for the most part. In its most typical areas the layer as a whole is thin and the boundary between corium and palisade layer is indefinite and difficult to define—a precancerous state. Above this malformed basal layer there are only a few strata of spinous cells, and these cells, even, are abnormal; some have large perinuclear halos, others are entirely wanting. Above these atypical layers the granular cells are absent and, surmounting all, we find parakeratosis.

Corium.—As a whole this portion of the skin can best be described as fragmentary. Below the most diseased areas there are collections of lymphocytes seeming to connect with the broken epidermic line by a pedicle and spreading out below into a rounded mass of lymphocytes. In places the sebaceous glands seem irregular in their make-up. Vessels are not conspicuous and elastin resembles connective tissue in its disjointed look.

EPITHELIOMA ON XERODERMA PIGMENTOSUM.

The epidermis of the non-ulcerated portion is very hyperplastic. The rete consists of many layers of cells, and as one approaches the epitheliomatous area the boundary between epidermis and corium becomes ill-defined, and epithelial down-shoots appear. In the ulcerating epitheliomatous area, cellular confusion is conspicuous. Here one sees all manner of degeneration—cavitary and ballooning especially. Scattered through this area are whorls and irregular masses of epithelial cells mixed up with great outpouring of inflammatory cells. These epithelial masses show cells of great size with central rarefaction. Widely dilated sweat glands occupy a conspicuous place in the picture, appearing very high up in the sections. In addition, there are many dilated capillaries and hypertrophied veins. The corium as a whole is markedly disrupted by cellular invasions, principally lymphocytic. As one would infer from the foregoing description, elastin is conspicuous by its absence. On the whole, the histological picture is a remarkable one.

CASE 46. Scrofuloderma. Male aged eleven.

Multiple crusting ulcers in a negro boy about eyes, jaw, neck and clavicles. Dullness in left lung; ankylosis of left elbow; evening temperature of 99.

CASE 47. Dysidrosis. Female aged eleven, school.

Bullæ of both feet, especially of plantar surfaces,

and, to a lesser extent, of all fingers on their lateral surfaces. There was in addition a marked hyperhidrosis present. These active lesions dated back only two weeks, but the patient had suffered much for the past six or seven years from itching of the feet.

CASE 50. Purpura. Female aged three.

Family history negative. The extensive hemorrhages into the skin of face, scalp, tongue, chest, arms and shoulders developed suddenly four days previously without discernible cause and without other objective physical symptoms.

CASE 51. Dermatitis exfoliativa. Male aged twenty-four, clerk.

A sore developed on the penis about March 1, became phagedenic but was healed in about six weeks. One week later a faint roseola appeared and the man began to take internally some capsules and to rub in externally "mercurettes." This was done for more than six weeks. In June a week of malaise, sore throat, etc. In late July noticed vesicles on lateral aspects of fingers, and one week later "water blisters" between scapulae and on face. On Aug. 26 the patient entered the hospital in a state of universal desquamation. The scales were large, thick, loose at periphery and attached at the center. There was considerable moisture about the face and there were remains of bullæ about the ankles. Itching was a marked feature and the skin as a whole was of a dusky red hue. The general physical condition was good, insomnia and pruritus being the only marked pathological features. Twelve days later the mental condition became clouded and the man was restless and irritable, but in another week the skin began to be less moist and to desquamate less and the patient became more normal mentally. So it went with ups and downs until the middle of October, when the skin was nearly normal in color and quite dry, and the desquamated scales were much smaller in size than at any previous time. A few days later, however, the sacral skin became moist and erythematous, then the same conditions developed on the legs and finally the whole body surface became moist, dusky red and rather denuded of scales. Improvement again followed but the patient became tired of his surroundings and left the hospital on Nov. 1. A few days later, after no care whatever, because the nurses of a private hospital were afraid to go near this unfortunate man, I found him in a most deplorable condition. The odor from his body was almost insupportable, the whole surface was moist, dusky red, covered with large thick scales attached at their center, and his bed was literally full of desquamated scales. The man was ordered home, where he has been seen every two weeks, and now (February, 1911), the man has gained considerable weight, and with the exception of his face and lower legs the skin is practically normal. The hair has grown again everywhere, except in the anterior portion of the scalp, but the nails are still replaced by elevated conical keratinous masses. This great change for the better can be attributed partly to more favorable surroundings, home cooking and companionship, but principally to the suppression of all external treatment save the application of borated talcum powder. This idea was derived from Dr. Engman and Dr. Mook, of St. Louis, who had found recently in three cases of dermatitis exfoliativa that no treatment at all, or restriction to inert powders, had been followed by cures.

It is a fact worthy of record in this connection that the writer has now under his care three other cases of dermatitis exfoliativa who have all done remarkably well under this desiccating treatment, the explanation of this striking amelioration apparently lying in prevention of bacterial growth, heat and moisture being absent.

CASE 52. *Dermatitis medicamentosa*. Male aged sixty-five, merchant.

About eleven days before the outbreak of the skin the man had been given iodolbin, of which he had taken perhaps a half dozen capsules with the idea of helping his arteriosclerosis. (Iodolbin is said to contain $21\frac{1}{2}\%$ of iodine.) The first symptom noticed was a hemorrhage into the right eye. Two days later a small papule appeared on the left ala of the nose. Other lesions soon developed on cheeks, neck, ear, chin, eyebrows, scalp and back of hands. These lesions were unusual looking. They were whitish, flat-topped, firm, elevated nodules. The top looked macerated as though pus were underneath. On puncture no pus was found, however, but the upper layers of the skin were separated from the highly exuberant underlying papillae. This was the initial lesion, and each one spread slowly, coalesced with its neighbor and broke down into a firm crateriform sloughing ulcer with rolled up, dirty-white edges. Cultures from unbroken nodules revealed only the ordinary pus germs. General physical examination revealed chronic interstitial nephritis in a greatly debilitated man. The urine contained albumen, but no trace of iodine. Despite energetic treatment, the ulcers continued to spread, necrotize and coalesce until finally practically the whole of the face and back of the left hand became a foul, sloughing, bloody ulcer with greatly elevated, rolled-up, dirty-white surrounding walls. The notable feature of the process was its constant extension without multiplication, but with the strictest adherence of the peripheral walls to the striking clinical characteristics of the original papulo-nodular lesions. Every day found the man weaker and more septic and lesions larger until a few days before death, when the necrosis ceased and healthy granulations appeared. This cutaneous change for the better came too late, however, for the septic absorption had been too severe for a man as badly diseased internally, and death ensued thirty-three days after the appearance of the original papule. At autopsy there were found: (1) Stones in the pelvis and calyces of the right kidney. (2) Pyonephrosis of right kidney. (3) Chronic nephritis and hyperplasia of right kidney. (4) Agenesis of the left kidney. (5) Obliterated left kidney. (6) Arteriosclerosis. (7) Fibrous and verrucous endocarditis of the mitral valve. (8) Slight fibrous endocarditis of the aortic valve. (9) Defective closure of the foramen ovale. (10) Chronic adhesive myocarditis. (11) Hypertrophy and dilatation of the heart. (12) Emphysema and edema of the lungs. (13) Chronic pleuritis, left side. (14) Hydrothorax, left. (15) Ulcer of the stomach. (16) Erosions in the mucosa of cecum. (17) Slight chylous ascites. (18) Cholelithiasis. (19) Streptococcus septicemia. Such a report explains why this man should have been susceptible to an irritant like iodine.

CASE 58. *Granuloma fungoides*. Female aged forty-six.

Disease began as a pruritic eczema seven years previously and was treated as an eczema by various physicians until a dermatologist began to be suspicious of a developing granuloma fungoides. Soon after, this doctor's fears were realized, for the chronic red infiltrations of the right popliteal and right mammary regions became more infiltrated and raised above the skin. On entrance to the ward there were numerous, typical, dusky-red, superficially rough and scaly infiltrations scattered over the body. The left foot and left labium were swollen and glands were palpable in the left inguinal and right mammary and axillary regions. Bandaging gave some relief to the edema. A few days later the abdomen began to swell and this condition increased rapidly from day to day. Bullae

now developed on the left leg and thigh, which were now reaching large dimensions and becoming brawny. Flatulency developed and ingestion of food was disagreeable because of the growing abdominal tumor. The left lower extremity and inguinal region were now threatening to break down. Throughout these twenty-three days vigorous x-ray treatment was carried out to the extreme limit and the individual lesions responded well to the influence of the rays. On the twenty-fourth day, after a consultation with Drs. Porter, Harrington, Richardson and Codman, Dr. Porter opened the abdomen and found a large cyst of the left broad ligament containing brownish, turbid fluid. The recovery from ether was good, but lack of appetite and of sleep retarded convalescence. Restlessness and abdominal pain supervened and the following day the patient suddenly died.

The autopsy (Dr. Oscar Richardson) revealed:

A mass in the left inguinal region which shows the operation wound 5 cm. long. This is open and exposes broken down, dirty, grayish, new growth-like tissue. The section of the axillary masses shows tissue similar to that in the groins.

Peritoneal cavity contains a slight excess of reddish cloudy fluid. The serosa of contiguous coils of the small intestine is coated with a slight amount of reddish, granular fibrinous material.

The pelvic cavity contains a large mass of tissue which extends over the brim posteriorly, infiltrating all through the tissues. On section this tissue is grayish-white, encephaloid in character and is continuous with the masses in the inguinal region. This mass infiltrates also the psoas and the muscles of the anterior and abdominal wall.

In the region of the mesenteric and retroperitoneal glands there are smaller and larger masses resembling the tissue already described.

Diagnosis. — Pyonephrosis, left. Thrombus in left exterior iliac vein. Edema lower extremity. Slight fibrinous peritonitis. Obsolete tuberculosis of a bronchial gland. Septicemia, streptococcus.

HISTOPATHOLOGY.

Skin. — The sections examined were ulcerated to a large extent. The epidermis of the unbroken skin was greatly flattened by the tremendous underlying cellular invasion and the intercapillary downgrowths were sparse, slim or absent. The rete was reduced to a few layers of sickly cells, the granular stratum was for the most part absent and the horny layer was unimportant. The corium was almost entirely occupied by dense, though somewhat scattered, homogeneous masses of mononuclear cells, whose nuclei were unusually large and whose extra-nuclear protoplasm was almost invisible. The supporting reticular membrane was difficult to discern, owing to the density of the infiltrating cells. Curiously enough, one could note a few scattered fibers of elastin, delicate and long and straight in the thickest cellular masses, short and thick in the sparser areas. In the ulcerated portions of the sections the lymphocytic masses extended quite to the free border of the skin.

New-growth-like mass from the peritoneal cavity. — The histology of this tissue was similar in all respects to that of the corium of the skin — a dense, almost solid mass of lymphocytes supported by an almost invisible fibrous reticulum.

CASE 60. *Lupus vulgaris*. Female aged ten, school.

An unusual type of perhaps fifteen nummular areas on buttocks, thighs, hands and feet. These areas were dull red, free from nodules, very superficial and had recurred several times after various forms of treatment.

She entered the ward for the purpose of allowing the lesions to be excised.

CASE 62. *Ichthyosis hystrix*. Male aged twelve, school.

This boy was born blind, deaf and dumb and at the age of one and one-half years developed a strange anomaly of the skin. At entrance, the face, neck, ears, nose, lips, genitals, legs and feet showed lines and plaques of papillary prolongations covered with brown-black integument. The whole skin was dry and harsh to the touch. The terminal phalanges of fingers and toes were enlarged, some were inflamed, and many were without nails. The hair was very sparse and dry and short. (This condition of the hair and nails is suggestive of the congenital and family cases reported by Nicolle and Halipré and by the present writer.¹)

CASE 64. *Syphilis*. Male aged twenty-two, student.

Chancre five months previous to entrance followed in four weeks by roseola of two weeks' duration. Later, two months of sore throat and then present rupioid ulcers which dated back one month. These ulcers varied from dime to dollar size, exuded pus and appeared on legs and arms.

CASE 69. *Pellagra*. Female aged fifty-two, housework.

This white woman was born in Marblehead, Mass., and had had ten children, of whom six are still living and well. Ten years ago she had bronchitis and has suffered with recurrent attacks ever since. As a young woman she experienced three years of facial neuralgia. The menopause appeared ten years ago, and for the last eight weeks there has been much flatulence and diarrhea. The cutaneous eruption developed on the extensor surface of the forearms as a "pimply rash," which itched severely but soon dried and became scaly. Four weeks ago the skin of the back of both forearms and hands and around the whole wrist was affected. This eruption consisted of vesicles and bullæ on an erythematous base, with suggestion of hemorrhage on the fingers, and the upper brachial margins were absolutely sharp. The tongue was red and swollen and fissured, and the mucous membrane of the lower lip was edematous and covered with brownish crusts along the vermilion border. The labia, vagina and anus presented similar appearances. A biopsy was refused.

The patient was poorly nourished and cachexia was quite pronounced and there had been a loss of weight of twenty pounds during the last five months. There were only seven teeth remaining and these were badly decayed. *Pyorrhea alveolaris* was present. The knee-jerks were exaggerated. The woman was very weak and listless and her memory was very poor. Anorexia was marked. There were signs of severe bronchitis in the lungs. Before the woman left the ward Dr. Griffin, of Columbia, S. C., examined her and agreed with our diagnosis. Two weeks after leaving the ward the patient died.

In addition to the foregoing patients, there were interesting examples of the following diseases which were severe enough to require hospital care: Dermatitis venenata, 14 cases; eczema, 12 cases; syphilis, 5 cases; varicose ulcers, 4 cases; epithelioma, 3 cases; sycosis vulgaris, psoriasis and scabies, 2 cases each; and lupus erythematosus, herpes zoster, lupus vulgaris, purpura, furunculosis, pityriasis rosea and callositas, 1 case each.

¹Jour. Cutan. Dis., June 1896.

Medical Progress.

PROGRESS IN HYGIENE AND STATE MEDICINE.

BY WM. C. HANSON, M.D., AND H. LINENTHAL, M.D., BOSTON.

DISINFECTION BY FUMIGATION WITH DRY RESORCIN.

THE mode of disinfection which Chalmet¹ describes is practical, inexpensive and claimed to be highly effective as demonstrated by bacteriological tests. The process is as follows: A little resorcin powder is placed on a plate and gently heated by an alcohol lamp; the resorcin vaporizes quickly. For an ordinary room two to three grams of resorcin are sufficient. The room can be aired out after an hour.

Not only does this method disinfect the room, but it is claimed that it acts as a prophylactic, preventing the development of contagious diseases in those who have been exposed to infection. The author advocates the frequent fumigation of the sickroom by this method during the course of the illness. It may also be used for the fumigation of schoolrooms and schoolchildren, since the vapors of resorcin can be inhaled without injury and in many cases with benefit to the respiratory tract.

THE VALUE OF DISINFECTION.

From recent bacteriological study Hogarth² concludes that persons become infected mainly by direct contact, and that infective material must be comparatively fresh to cause disease. The crucial problem, then, is not in the infectivity of objects, but of patients who continue to harbor active disease-producing germs long after convalescence. To be efficient, the ordinary measures of disinfection require careful revision.

THE VALUE OF TERMINAL DISINFECTION.

In a very convincing and stimulating paper Chapin³ questions the value of terminal disinfection, particularly in such diseases as diphtheria and scarlet fever. The theory of infection by fomites has never had any basis in observation or experiment. It is now well known that the ordinary pathogenic bacteria are not saprophytes and that they begin to lose their virulence and die almost as soon as they leave the body of the host. The danger, therefore, that virulent organisms exist in the patient's room is extremely small and insignificant when compared with the danger of conveying organisms by the nose and throat from the healthy members of the family.

The abandoning of terminal disinfection of scarlet fever and diphtheria in Providence did not in any way increase the number of recurrences of these diseases in the families where one member was ill with either disease.

Terminal disinfection is a costly process, its need is supported neither by theoretical considerations nor by practical results. Furthermore, it withdraws attention from the importance of contact infection and the necessity of personal