years ago. This I have employed constantly since that time, and in many cases, with satisfactory results. The hypertrophic conditions, as described in the paper, are not very rare in lichen planus. I have had a number of cases exhibiting lesions much like those shown in the colored drawings of Dr. Lieberthal. In some instances they were the main feature of the case, in others there was also an abundant eruption of small, flat papules. In this condition internal treatment is relatively inefficacious, and strong local applications are needed, such as Unna's salve of carbolic acid and bichlorid in diachylon ointment. Beginning with a milder strength, a few grains to the ounce, I have sometimes increased it until a blistering or a suppurative action has resulted.

DR. R. R. CAMPBELL, Chicago—In the several cases of lichen planus which have passed under my observation I have been in the habit of administering arsenic and in each case have had most satisfactory results. In one case, which was typical and was seen by Dr. Anthony in consultation with me, I administered arsenic, pushing it as rapidly as circumstances would permit, and the results obtained in this case were most gratifying. We had the satisfaction of following the case for some time, about the diagnosis of which there could be no question.

DR. H. C. SUMNEY, Omaha—I have used arsenic in Fowler's solution up to 35 drops, four times a day. A case had been treated by chlorid of potash and nitric acid. It was an undoubted case of lichen planus, part of it hypertrophied, on the arm and limbs, and we obtained very gratifying results finally with arsenic, working it up to 35 and 40 drops of Fowler's solution. Dr. Baum saw the case. We used the solution of arsenic hypodermically.

DR. M. L. HEIDINGSFELD, Cincinnati—In looking over the microphotographs, and also the lantern slides of yesterday, I was impressed with one point which Dr. Lieberthal has failed to bring to our particular notice. In many of the more favorable sections there is a dense massive wall of cellular infiltration, which is sharply confined to the papular layer of the epidermis, and extending to, and slightly involving the lowest layers of epidermal cells, to such a degree that a sharp borderline between this infiltrate and the epidermis is lost, and the columnar character of the lowest layer of cells is no longer preserved. These are very constant features of lichen rubber in its earlier stages when infiltration is well marked, and to my knowledge is not encountered to any similar degree in any other process, so that the microscopic appearance is very characteristic, if not actually pathognomonic. I can concur in the statements of those members who have seen favorable results from the administration of arsenic. I can not recall a single case that has not been promptly and materially benefited by this agent. I have used the hypodermic administration almost exclusively, employing one-gram doses of 10 per cent. cacodylic acid, or 2 to 3 per cent. sodium arsenate. I recall several cases where Fowler's solution and Asiatic pills had been administered internally, even to the degree of inducing distressing symptoms, without positive results, whereas the institution of hypodermic administration was followed by prompt material improvement.

DR. D. LIEBERTHAL, Chicago, in reply—Dr. Allen is right in calling attention to the soft border which really can be observed in some cases. The plaques increase by spreading in the periphery, and in their beginning as long as they are quite new they are rather soft and with increasing stage of development the consistence increases. These conditions are substantiated by the pathologic findings. In regard to the presence of typical elementary lesions, it is more difficult to make a diagnosis when they are wanting. In my second case I would not have made a clinical diagnosis as readily if I had not seen such cases during my service under von Hebra in the Vienna Policlinic. The reason why I entered into details and especially so with the differential diagnosis was because in the text-books the account of this manifestation occupies about four lines. Dr. Anthony's remark about the similarity of some lesions to the effect produced by the red of the burning cigar gleaming through the ashes is correct. Concerning the administration of mercury, I can state that I used it in my second case quite actively, but

without results. Dr. Corlett, I think, spoke to the point. The plaques look very much like sarcoma, and I stated in my paper the differential diagnosis between these. The remarks of Dr. Bulkley in regard to the administration of arsenic are very worthy of note. It is true enough that in a large number of cases of lichen planus, arsenic will not produce the effects desired. The effect of arsenic depends frequently on the freshness of arsenical preparations. Sometimes we have to try one after another. Furthermore, the mode of administration is important. In some cases the patient can take arsenic by mouth, in others not and we have to apply it subcutaneously or per rectum. Another important point is to see the patient frequently enough, to ascertain the limit of tolerance. I have found it expedient in every case where arsenic is administered to use an astringent as well and one of the best is iron, as was correctly remarked by Dr. Corlett. Unna's ointment sometimes proves of great value, especially if, after it is rubbed in, a woolen cover is applied and the patient is kept in bed.

NOTES ON RECENT CASES OF EXTRA-GENITAL SYPHILITIC INFECTION.*

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At the meeting of this Section last year¹ I called especial attention to syphilis as a non-venereal disease, as observed in marital syphilis, hereditary syphilis, and that acquired by means of innocent extra-genital infection; the latter in social and industrial life, in the care of children, and in professional care of the sick. The instances where the disease has been in some manner innocently acquired, which have fallen under my personal observation and care, now number many hundreds, and there are constant additions. The subject of marital and hereditary syphilis is a large and interesting one, but must be illustrated on another occasion. At present it is desired to call attention to the rather frequent occurrence of extra-genital infection, as indicated by the relatively considerable number of cases which have come under my care in private and public practice during the past year, or rather since Jan. 1, 1900. On former occasions I have reported many instances of this form of infection, and the total number of cases which have come under my personal observation now amounts to about two hundred.

During the period mentioned, 21 instances of extra-genital syphilitic infection have come under my care, 12 in private practice and 9 in public; to these might be added 2 cases of chancres of undoubted venereal origin in unusual localities, 1 on the lower portion of the anterior abdominal wall, and 1 within the urethra. Many more cases have also been seen casually; for instance, at a recent meeting of the New York Dermatological Society a case was presented with chancres on the bridge of the nose, and another with one on the ball of the thumb; such are not included here. The following shows the location of the extra-genital chancres in these cases: Lip, 9; finger, 5; anus, 2; hand, 1; nostril, 1; hard palate, 1; tonsil, 1; eyelid, 1. Of these cases, 16 were in males and 5 in females; curiously enough all the 12 cases seen in private practice were in males, while in public practice there were 5 females and 4 males.

Chancre of the Lip.—Of these, 3 cases were seen in private practice and 6 in public. This location of in-

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fection is undoubtedly more common among the poorer classes, who are more careless or reckless as to the dangers from the poison than are those in the easier walks of life, who have a healthy horror of the disease. Most of the cases presented no peculiar interest; 5 were on the upper lip and 4 on the lower; 6 were males and 3 females. They all gave about the usual history of a cold sore or abrasion of the lip, which failed to heal and gradually developed a hardened patch. In almost all of the cases the patients came for treatment because of the appearance of a more or less severe general eruption, and my experience has been that rarely are these cases recognized until the advent of constitutional symptoms. It is well known, however, that long before this the local sore is giving off an intensely contagious secretion, and the profession and the public need to be aroused to the danger of neglecting, on the lips or elsewhere, suspicious sores which refuse to heal. In one case in private practice the infection was proved rather conclusively to be due to smoking the pipe of a man suffering from syphilis, who had mucous patches in the mouth. In 2 other cases in private practice it was traced to barbers, the sore beginning just below the vermilion border, at a point injured while being shaved. Several cases were attributed to the kissing of people with mucous patches. In all the cases there was marked adenopathy, either just below the chin or on one or both sides of the jaw.

Chancre of the Finger.—Of the 5 cases of chancre of the finger, 4 were in physicians, with also a fifth physician, who received an infection on the ulnar side of the back of the left hand during an operation.

One of these cases, which has only very recently come under my care, has had such severe and distressing results that it merits particular description. Five years ago, Dr. —, aged 47, injured the skin near the nail of the right index finger, with a nail cleaner, and very soon after the part was exposed while treating a chancre of the vulva. A few weeks later there was a slight sore on the end of the finger, under the nail, which in a week or two became a rather painful, small ulcer. The nature of the trouble was not suspected until a general macular eruption appeared, and under anti-syphilitic treatment the eruption disappeared very promptly and the finger healed; at the same time the severe general malaise, with fever, ceased. Five or six months later subjective symptoms appeared again, but as there were no external manifestations of syphilis, the cause was not suspected, and specific treatment was not used. For the two years following the patient was miserable, long periods of rest and much treatment for stomach and other troubles being necessary. There was a severe and steadily increasing pain in the lumbar region and about eighteen months after the finger was infected he found it difficult to go up and down stairs and to get into a carriage; the patient's legs dragged and he felt weak and tired, and yet there was no suspicion of the cause, it being all attributed to overwork.

After retiring one night in March, 1898, two years after the infection, he became delirious and for the following five days was insane. It was then suspected that the cause was syphilis, and iodid of potassium administered freely. During the next three months there was increasing motor disturbance in the lower limbs, until in June when on attempting to leave the bed the lower limbs were found to be totally paralyzed; this paralysis lasted for about five months. Power in the limbs then returned very slowly and he can now

walk with difficulty with the aid of two canes, but he can not stand for more than a minute. The bladder and rectum are both partially paralyzed, requiring the use of the catheter and high rectal injections. He is at present improving rapidly under very active mixed treatment.

In the case of another physician, aged 38, who was infected beneath the left thumb-nail in May, 1884, the most severe and disfiguring tubercular lesions have appeared upon the face and within the mouth, quite incapacitating him for work; this condition has resisted treatment and recurred in an agonizing manner. There were never any severe early symptoms and he was married in June, 1888. The following year a healthy boy was born; the child is now in perfect health and well developed. His wife has had no more children, nor any miscarriages. Under very careful treatment the lesions, for which he has recently come under my care, are healing nicely, but a large amount of scar tissue will be left.

In another case of a physician, aged 33, infection took place, on the site of a wart which had been injured, on the back of the right forefinger, during the delivery of a dead child from a supposedly syphilitic woman. The earlier symptoms of constitutional syphilis have been moderately severe, but have yielded well to treatment. The other cases are still more recent and little can be said in regard to the severity of the disease.

Chancre of the Anus.—Two interesting cases of chancre on the side of the anus have been seen recently, both discovered only after the appearance of the general eruption. In 1 of them, a young man aged 28, seen in consultation, there was good reason to believe that it was due to improper practices; but in the other there was no possibility of such a cause, and mode of infection has never yet been ascertained. In a similar case, which I have already reported, the infection was traced directly to soiled bathing drawers, but in this instance no such cause existed. It must have been contracted in a watercloset, from secretions left on a paper, or possibly on hotel bed linen, for he traveled extensively. The case is worthy of special mention because of the severity of the symptoms and the length of time which elapsed before the true nature of the trouble was recognized.

Mr. J., aged 46, has long had what was called "itching piles," and has been obliged to scratch the anal region. On Dec. 27, 1900, he noticed a raw or ulcerated spot to the right of the anus, which persisted until he presented himself, April 6, 1901. Within two weeks after the ulceration was noticed there was a general eruption, quite papular in character, which was still present when seen. This had been diagnosed as chicken-pox and other conditions, but its true character had never been recognized, partly, perhaps, because of the character of the man and the absence of exposure through intercourse.

When first seen there was an abundant large, flat, papular syphilide over the body, limbs and face, which was unmistakable. The lips and mouth were also the seat of the most profuse mucous patches, producing great distress. Recognizing the nature of the eruption, I sought for a long time before finding the seat of infection. The penis was free from disease, there was no evidence of a present or past primary sore on the fingers, in the mouth, or on any part of the body, until the anal region was examined. There was then found on the right side, extending somewhat into the opening,

a partly healed, superficial ulceration, with quite a hardened base; this had existed for over three months and only palliative ointments had been used, but these served to prevent much annoyance. During all this time he had been totally without specific treatment, and had mingled freely with others, in his home and elsewhere, without the slightest suspicion of the immense danger from the profuse discharge given off by the raw mucous patches covering the lips and much of the buccal cavity. The only wonder is that there are not more cases of extra-genital infection from some of these neglected cases.

The progress of the case under very active specific treatment was remarkable. The eruption faded very promptly, the mucous lesions in the mouth healed shortly, as also did the sore in the anal region, and in a month there were only some stains to indicate the nature of the former trouble.

Chancre of the Hand.—Five months before Dr. T., aged 55, consulted me, he had noticed a sore on the back of the right hand, on the ulnar side. This had occurred after an operation on a patient where there had been much pus, and, as there was much inflammation in the sore on the hand, with the formation of abscesses on the arm, which were opened, the real nature of the infection was not recognized. Some five months later he noticed the general macular papular eruption, which had faded materially before I saw him, and when he presented himself he had also a very considerable amount of mucous patches on the tongue and lips. There had been no other infection, and he certainly had not been exposed venereally. The delay in the appearance of the eruption was probably accounted for by the severity of the ordinary pus infection already alluded to; this has been known to retard the development of the constitutional signs of syphilis.

Chancre of the Nostril.—Mr. D., aged 34, was sent to me for the diagnosis of a general eruption which had appeared first about ten days previously and had rapidly developed, covering the entire body and limbs, including the palms. He was surprised and indignant when the eruption was pronounced syphilitic, for he was a married man and had led an extremely virtuous and careful life. There was certainly no primary lesion on the penis, although the general large, papular syphiloderm existed there; neither could any site of infection be found anywhere on the body, limbs or elsewhere until attention was directed to a soreness in the right nostril, which almost occluded it. It was then learned that for fully six weeks preceding he had suffered from what he supposed to be a cold, having much trouble with the throat, and a soreness deep in the right nostril, which he considered a "cold sore." He had taken no specific treatment, as the nature of the trouble was not suspected until the advent of the eruption.

On making careful and deep examination, with the throat specialist, who had suggested the consultation, we found the right side of the septum nasi the seat of a superficial ulceration, running back nearly an inch, and half an inch or so wide. It was rather hard, with quite sharply-defined edges and a gray pultaceous floor. There was considerable swelling of the turbinated bones and some mucous patches around them. The submaxillary glands on the right side were much enlarged. The source of infection could not be traced. In another case of chancre in exactly the same location, previously reported, the poison was probably from the patient's

grandchild, whom she had cared for, and who soon after died with hereditary syphilis.

Chancre of the Hard Palate.—Mr. W., aged 50, a lawyer, was brought to me by his family physician on account of a general macular eruption which had appeared a week or two previously. There was no question in regard to the diagnosis, but the same difficulty as in the other cases presented itself. How had the infection been acquired? He was a man of high moral character, who certainly had not been exposed through sexual congress. The same search was made for the site of entry of the poison, the patient being stripped, and for a long time no local sore was found on any part of the body or in the throat. Attention was then directed to a certain soreness which he had long experienced on the roof of the mouth. A well-defined ulceration was there found, in the median line about one inch from the front teeth, oval in form, and partly healed, but with a superficially ulcerated base; the submaxillary glands on each side were found enlarged. The source of infection was never ascertained, but supposed to be through eating in public places.

This patient has faithfully carried out the treatment for over a year, and has experienced as yet no serious symptoms from his disease. The eruptions faded rapidly and the ulcer on the roof of the mouth healed quickly, under active specific treatment, and his health, which had suffered greatly, improved in a remarkable manner, he regaining many of the pounds he had lost.

Chancre of the Tonsil.—Miss McG., aged 30, was brought to me by her physician, with a very profuse, large papular syphiloderm, developed principally about the mouth and face, but with also some scattered lesions on the neck, chest, and elsewhere. The throat had been sore for some weeks and on examination the left tonsil was found to be greatly enlarged, distinctly hard to the touch and with tolerably well-defined ulceration over most of its surface; the submaxillary glands on that side were large and hard. No source of infection was discovered.

Chancre of the Eyelid.—Mrs. —, aged 32, had a sore on the edge of the lower right eyelid, extending well over its inner surface, for the treatment of which she applied to one of the eye clinics. After the appearance of a general eruption the nature of the trouble was recognized, if not before, and under proper constitutional treatment the eruption disappeared and the sore on the eyelid healed. When she came to me there was really only the scar of the chancre on the inner surface of the right lower eyelid, with some adenopathy on that side, and some remains of the already faded eruption. No history as to the source of infection could be obtained, and no suggestion as to the source of the virus could be made.

While these cases present nothing that is striking or peculiar, it was thought desirable to place them on record as instances of the accidental and innocent acquirement of syphilis aside from coitus, which are really more common than the general profession appreciates. While some of them were in physicians, who are known to be frequently exposed, over three-fourths of the whole number of cases were in lay people, who never appreciated the possibility of such an accident and who, perhaps, could not have protected themselves from it, even though aware of the danger to which they were exposed. By the repeated recording of such cases the profession and public will in time learn that syphilis is not always acquired through the act of coition, and

the stigma attached to a person infected will be in a measure removed.

DISCUSSION.

DR. L. B. BALDWIN, Chicago—The articles I have written on the subject have been chiefly addressed to dentists. In looking carefully over the text-books of dentists in not one can I find any reference made to the contagiousness of the mucous patch. That struck me immediately. I had five cases of young practitioners attending the dental colleges in Chicago who were suffering from mucous patches. I have also had four cases where I could trace the infection of the patient directly to the dentist's chair. The greater number of chancres, as I have seen them, occur in the better classes, not in the poorer classes. I do not think the question of filth or habits have much to do with the possibility of acquiring a chancre on the lips or mouth or tongue, as I do not think the chances are as great in proportion as among the better classes. Dr. Rhodes asked if I had any cases of chancre of the tonsil. I had two, and gave them to Dr. Rhodes, who collected 32 others. The chancres occurred in physicians. I have seen three, one, a physician in the West, who was suffering from chancre Dr. Baum saw with me. He had infected himself by turning a doorknob and lacerating the skin of the finger which caught in the door. He was treating several syphilitics at the time. I think medical teaching should be such that the dentist could recognize a chancre or mucous patch. There is absolutely nothing on that subject demonstrated in the Chicago colleges, and the number of mucous patches and chancres that come to the dentist, thinking that the lesion is due to some trouble with the tooth or gum, is surprising. In the last year I have had sent to me by dentists 20 or 30 cases of syphilis. One dentist said to me that he had not seen a case of syphilis of the mouth in thirty-three years of practice in Chicago. I agreed with him that he had not seen it. The subject of extra-genital chancre is very interesting as a subject, but I do not consider it nearly as important as the subject of mucous patches of the mouth, which are so directly related to the initial lesion, and they are so much more common and last so much longer that I think the subject of mucous patches of the mouth should be taken into consideration with more thoroughness than is generally shown by the profession.

DR. L. E. SCHMIDT, Chicago—Out of a series of eleven last year one was a so-called hypertrophic chancre of the lip. It assumed the size and proportion of a small pear. It was situated in the median line of the lower lip and hung over like a large protruding part of the lip. Only in the center and lower portion was there a small, rounded, glazed, eroded surface having the typical appearance of a chancre on any other part of the body. I wish to state in this connection that the rash was present when the case came under my observation. A mercurial inunction treatment was started, but the tumor remained unaffected as far as the size and appearance went. Only when iodid of potash was administered in large doses in connection with the mercurial inunction treatment did the mass commence to disappear. Now, after four months' treatment, there remains no sign of any former lesion.

DR. D. W. MONTGOMERY, San Francisco—I would speak of an instance that occurred some time ago in my own practice where a grave error might have been committed by me in the diagnosis of a chancre of the tonsil. The man was coming from Bakersfield to Los Angeles. He looked in the glass at his throat on account of uneasiness there and found a lesion on the left tonsil that he took to be a chancre. He was not a physician but was a very intelligent man and knew something of medicine. He continued his journey to Los Angeles, saw two men there that are used to seeing chancres and they took it to be a chancre. He returned immediately to San Francisco because he wished to be under the charge of some one who would take permanent care of him and he wished them to see the sore as it then existed. He first saw it on Saturday; on Sunday two physicians in Los Angeles saw it; on Monday I saw it. I took it to be a chancre, and I thought of every possibility. The only thing about it was that it was not very hard, but some chancres are not very hard, and the lymphatic nodule under the jaw was not very marked nor very hard.

However, I took it to be a chancre, for it looked absolutely like one. I remarked what a beautiful photograph it would make as the man held his mouth open and depressed his tongue and one could look right down on the base. That forenoon he saw two other men, both of whom were used to seeing chancres, and they both thought it a chancre. We met in consultation that afternoon, and all three agreed that it was a chancre, but as we thought it would do him no harm we had better wait, and commenced to give large doses of tincture of iron. In three days it was vastly improved, and in seven days there was nothing left but an unevenness of the surface. I do not know what it was; there was cultivated from it a bacillus that was certainly not the diphtheria bacillus; it was larger and thicker than the diphtheria bacillus, and it was thinner and shorter than the leptothrix. I do not know what the disease was, but it was not chancre.

DR. C. W. ALLEN, New York City—I do not think the Doctor has proven at all that it was not chancre. Sometimes chancre is a very minute thing; sometimes in a few days it disappears.

DR. D. W. MONTGOMERY—He has never had any symptoms since.

DR. ALLEN—That is different. But a case like that should be observed very carefully for the next six to twelve weeks, or even longer to make sure, because not only may the chancre be almost nothing but the early eruptions be nothing. In my early days I took to Dr. Bulkley to have the diagnosis confirmed a young man who had on his body twelve spots, by actual count. It looked like measles. That was the most eruption the man ever had. He had mucous patches, which confirmed the diagnosis afterwards, but it goes to show how very slight secondary cases of syphilis may be.

The primary lesion of syphilis is not always recognized; to illustrate that point, a young man came to me who had been to a celebrated hospital in New York and had the glands of his neck cut out. I do not know what they took the lesion for, but they made a long incision and excised all the glands of his neck and then they let him go. What they were operating on was a chancre, and these glands would have gone down beautifully under iodid of potassium if the gentlemen had recognized the trouble. But they do not as a rule have chancre in their minds. It is not surprising that the average practitioner who sees a little patch of syphilis here and there should let it escape him when he sees the sores in an unusual position. I would pass for a moment an illustration of what I believe to be a very unusual chancre of the lower lid. I have had chancres about the upper lid where there was a great amount of swelling, the eye being closed for some days and where there was going to be apparently a great loss of tissue, and it was surprising to see what little scar remained after the lesion healed. I have had a chancre of the lid in a position where it could not be accounted for unless in his work he had scratched the lid.

If Dr. Bulkley had not mentioned the fact that this physician had produced a lesion near the nail, and that was where the chancre was located, I might have thought he was describing the case of a physician I treated. My man had a little chancre on the knuckle, acquired in the practice of obstetrics. It is a statement sometimes seen in the books that lesions upon the hands are followed by more severe symptoms than the ordinary form of chancre upon the tongue. I have never been able to absolutely confirm that, although such cases as related by Dr. Bulkley with paraplegia, loss of consciousness, etc., would have that appearance. My man had every once in a while slight attacks of aphasia; he would be unable to talk for some time, then he would get all right and go off on a little trip, pushing the iodids and being all right again. But it is an interesting point as to whether these lesions upon the hands are followed by more severe symptoms than the ordinary syphilis we see.

I do not think the location has much to do with it. I do not think the data we are accumulating as to where the extra-genital chancre occurs, whether in women more than in men, has any bearing on the question. Where there is a solution of continuity and the virus enters there you get the chancres, and can get them on every susceptible part of the body. Large numbers appear to come from the barber shop; some come from

midwives. In the most recent case there had been a scratch from a diaper pin at the time of infection. Dr. Bulkley's case of family syphilis transferred from the baby to the grandmother is very interesting. I read of a case in the *Medical Record* where the baby first acquired a chancre from the wet nurse and gave it to the mother, a chancre of the nipple; the mother gave it to a second child and that child probably to the father, who had a chancre on the surface between the nares. There was the wet nurse, the child, the mother, another child and the father; so the whole family got it in succession in the same innocent way.

DR. D. W. MONTGOMERY, San Francisco—I forgot to mention that, in the patient I was speaking of, the lymphatic nodule quickly went down, which would never have occurred had it been syphilitic. There was no involvement of more than two lymphatic nodules and a sufficient time has elapsed between then and now to exclude specific disease. I do not believe it was a chancre.

DR. R. R. CAMPBELL, Chicago—I do not believe the occurrence of extra-genital chancre is quite as uncommon as we are led to believe; I think they occur more frequently than we have any idea of, but I do not think the diagnosis is made, particularly by the general practitioner, and the error is made from the fact that the general practitioner expects to find the secondary symptoms of the disease adjacent to the part in which the chancre is situated, which is not the case. It has been my experience that secondary manifestations usually occur about the chest and umbilicus. In cases of chancre of the lip that have passed through the hands of a general practitioner and come under my care, in talking the case over with the physician who has treated it previous to its coming under my observation he has invariably stated that he has had the case under observation from three weeks to four months and has not seen any secondary manifestations. To the question, Have you stripped the patient and looked him over for secondary manifestations? the answer is, "No." In almost every case of that character the secondary manifestation has been demonstrated, much to the surprise of the general practitioner who has treated it. The interest in cases of extra-genital chancre lies more in the mode of infection than from the fact of its being extra-genital. Four cases of chancre of the tonsil have fallen under my observation in the past year in which no visible means of infection could be traced or demonstrated, and in patients whom I had a right to believe had nothing to gain by holding back anything of interest to the attending physician. In another case, a chancre of the lower lip, the only history obtainable was from a drinking cup. The girl had been to a public dance and had drank from a glass which had been publicly used. I think if in the teaching and text-books more stress was laid upon the fact of the appearance of the secondary eruption about the chest and umbilicus, pointing out that the glandular enlargement is adjacent to the lesion and the secondary manifestations come first on the chest and abdomen, we would have more correct diagnoses of extra-genital chancres, and without the appearance of secondary manifestations I claim no man is justified in making a positive diagnosis of chancre and beginning anti-syphilitic treatment.

DR. D. LIEBERTHAL, Chicago—I believe it was wise and appropriate for Dr. Bulkley to bring out in his paper, from a scientific point of view, and more especially from a sociological standpoint, that millions of dollars are spent for sanitary progress and thousands of dollars for the prevention of disease, for instance, measles, and there is no reason why we should not call attention to the dangers which are menacing the public. I do not see why we should not try to make the subject more popular and not let it be said that the thing is not so bad because it can be conveyed only by sexual means.

DR. W. T. CORLETT, Cleveland—I have in mind now a young man I left at home who was probably infected from the barber. This point is of interest because the public should know, their attention should be called to the matter. This young man has a facial sore. He had a little pimple; he thought it was a hair, attempted to straighten or pull it out and the result is a

chancre on the cheek, at least I think it is. Sufficient time had not elapsed to make the diagnosis certain. I think it is well, as pointed out by Drs. Montgomery and Campbell, to wait until you are positive of the diagnosis. For eighteen years I have taught this to medical students, because I have seen the importance of it in coming in contact with cases treated by the general physician. So frequently a snapshot diagnosis of chancre is made; the patient is subjected to mercurial treatment; the result is the lesions disappear and years afterwards the question may arise as to whether or not the patient ever had syphilis. Those questions are so important that I think it is extremely necessary to impress upon students and others the advantage of waiting until a positive diagnosis can be made. I think it is no disadvantage in the way of treatment. Dr. Bulkley mentions a chancre resembling a "cold sore," which brought to my mind the fact that I have known a number of chancres following a cold sore. I have in mind a physician who a number of years ago had a sore on the lip. He had been treating a syphilitic patient and had a habit of stroking his mustache, with chancre as a result. With most physicians I find the chancre is on the hand, usually the right hand, not always at the border of the nail but somewhere on the index finger.

DR. L. B. BALDWIN mentioned the prevalence of syphilis in dentists. I think that is extreme. Some years ago we had a dental class with our medical class; the dental students were in the habit of coming to my office with venereal disease. Dental students in my experience are the most frequent victims of venereal disease and I suppose it is because they have absolutely no teaching. With our own students it is exceptional to have them come with venereal disease, but not so with the dental students because they are not instructed in regard to this dangerous eruption of the mouth. In regard to the severity of syphilis following extra-genital chancres, I agree with Dr. Allen that it has nothing to do with it *per se*; that the disease as such is usually neglected and goes on week after week and month after month without treatment and in those cases one expects to find and does find very severe constitutional symptoms following. In regard to the treatment of these neglected cases of course we all have special forms of treatment and we all probably have more than one method of treatment. I think in the treatment of syphilis we should not follow one routine; some by the mouth, some by inunctions, some by nitrate of silver injections. I think in severe cases nitrate of silver injections are by far the best because the most rapid and because there is an opportunity to push the drug without interfering with digestion. For many years I have used the salicylate of mercury, pushing it until the physiologic effects are produced and I only remember one instance where it was followed by an abscess.

DR. L. DUNCAN BULKLEY, in reply—I regard the points brought out in the paper of practical interest, because these cases come so unexpectedly, and if unrecognized, in families, they may produce much havoc. In regard to the relations of dentists to syphilis I think the physicians should give them every opportunity of knowing and recognizing the lesions of syphilis about the mouth. On two occasions I have lectured on the subject before the dentists of New York, exhibiting pictures and casts; it is very important that they should be able to recognize mucous patches. At the New York Skin and Cancer Hospital we had recently a course of lectures on syphilis by members of the attending and consulting staff, and the one on syphilis of the mouth, nose and throat, by Dr. Delavan, was repeated to a room full of dentists, cases being shown.

On the occasion of one of my papers on the dangers of syphilis in dentistry, before the New York Odontological Society, a physician present said, in discussion, that at the beginning of treatment of a patient with syphilis he sent him to the dentist, to have the teeth put in order, that there might be less danger of injury from the mercurials. I deprecated this practice, believing it to be better for the patient to suffer than to expose the dentist and others to the dangers of contagion; and I forbid the patient going to a dentist until I gave permission. When it is necessary for him to go I believe the dentist should

be informed of the condition of the patient, as should any other physician, and he can take the risk if he chooses, and take extra precautions against acquiring the disease or transmitting it to others.

Many of these cases of extra-genital chancre are curious and difficult of recognition. Few would suspect that this picture of chancre of the eyelid, exhibited by Dr. Allen, was of this nature; probably not two men in the medical section nor ten in the surgical section would so diagnose it. I was interested in Dr. Montgomery's case of suspected chancre of the lip. As I remarked before, these cases are sometimes very difficult of diagnosis, and opinion must sometimes be suspended for awhile. Some years ago I had a sore on the knuckle of my left hand that lasted for some weeks, which several of my confrères in New York regarded as a chancre, as I was much occupied with syphilis and had abundant opportunities for inoculation. After studying it pretty thoroughly I was satisfied that it was not such, and it healed under simple dressing, when the finger was splintered and irritation avoided. Some months afterward I had a node on the left tibia, which my friends agreed was of syphilitic origin, the result of the supposed chancre of the knuckle. But on investigation this was found to be the result of pressure on the sharp edge of my desk, as I sat writing, and this, too, disappeared under simple and proper measures without anti-syphilitic treatment. It is needless to say I never had any true signs of syphilitic infection. There is much need, therefore, of very great care in analyzing supposed cases of extra-genital chancre.

In regard to the location of the sore I may say that in my own practice, private and public, and in clinics and societies here and abroad, I have seen the primary lesion of syphilis situated on almost every portion of the body—about a hundred on the lips, dozens on the fingers and hands, many in the throat, etc. I would like to inquire of Dr. Baldwin if the 32 cases of chancre of the tonsil which he mentioned included the 15 which I reported some time ago?

DR. BALDWIN—No, they were cases collected in Chicago.

DR. BULKLEY—Since reporting these 15 cases I must have seen half a dozen or more other cases of chancre of the tonsil. They are not so very uncommon, and should not be overlooked; indeed, extra-genital chancre in various locations is far more common than is generally supposed, and accounts for the infection in many cases of old syphilis, where the sufferer is quite unconscious of the nature of the disease. I mentioned casually a case of chancre of the urethra to call attention to the possibility of having the sore in a location which may be overlooked; these cases are commonly regarded as gonorrhea. I also referred to an instance of chancre on the abdomen, just above the pubes; both of these were undoubtedly of venereal origin, but in locations not readily recognized.

In the case detailed of chancre in the region of the anus, it is very instructive to think what might have happened if the eruption had disappeared and the sore healed without the true nature of the disease being recognized. If the patient had later developed a syphilitic brain lesion, or one deep in the eye, or any serious later manifestation of syphilis, his physician would be thrown off guard by the fact that the man had not been exposed venereally and would have denied having had syphilis. The profession should be more on the lookout for these unusual cases, of which I have now seen about two hundred.

The Campaign Against Malaria in Italy.—The new law making the sale of quinin a government monopoly in Italy enables it to be sold at cost price, and brings it within the reach of the poor even in the remotest hamlets. The law also provides for the compulsory quinin treatment of malarial government and railroad officials and also of the employees of contractors, etc. Celli has recently discovered a large region in Tuscany where although swamps and anopheles abound and malaria is constantly being imported, yet it never spreads, and there has been no autochthonous malaria for twenty-five years throughout the region which was formerly a hotbed for the disease.

TRAUMATIC ARTERIO-VENOUS ANEURYSMS OF THE SUBCLAVIAN VESSELS,

WITH AN ANALYTICAL STUDY OF FIFTEEN¹ REPORTED
CASES, INCLUDING ONE OPERATED UPON.*

RUDOLPH MATAS, M.D.

NEW ORLEANS.

PERSONAL OBSERVATION.

Synopsis: A case of traumatic (gunshot) arterio-venous aneurysm of the right subclavian vessels, involving the artery within the scaleni; division of the artery between ligatures placed on the first and third divisions; detachment of the anastomotic connection; lateral suture of the venous orifice; osteoplastic resection of the clavicle under eucaïn B. anesthesia; recovery, with partial loss of hand and forearm from arterial ischemia.

On September 8, Moise M., a young Acadian farmer, native of Rayne, Acadia Parish, La., was brought to me for treatment at the New Orleans Sanitarium. His attending physician, Dr. C. H. Power, Rayne, who kindly referred him to me and accompanied him to the sanitarium, gave the following particulars of his history and of the circumstances under which the injury was inflicted. We may premise the history of the injury by stating that he is a robust and exceptionally healthy man, aged 24, married. He is broad-chested, muscular, frugal, and temperate; very calm, collected, and courageous. In health he weighs 165 to 170 pounds, and is six feet in height. He is very industrious and active, and has always been engaged in outdoor pursuits. His past history and that of his parents, who are living, reveals no antecedents which bear upon his present troubles.

On Sept. 3, 1900, six days before his arrival at the sanitarium, and while attending a country festival near his home in Rayne, he became engaged in a personal difficulty at about 8 p. m. In the struggle that followed, he succeeded in throwing his antagonist to the ground, and, while holding him down with both hands, the latter drew a revolver from his pocket, and pressing the muzzle close to M.'s chest, fired.

Immediately after the shot M. felt the grip of his right hand relax and realized that his arm had been paralyzed. The spectators in the meantime parted the combatants, and M. was at once driven in a buggy to Dr. Power's residence, a distance of one mile. Though very weak, the patient stepped out of the buggy without assistance and walked a few steps into Dr. Power's office, when the latter saw him, about forty minutes after the shooting. After a hasty examination, sufficient to convince the doctor that the injury was of a very serious character, he applied a compress of iodoform gauze over the wound, and secured this in place with adhesive plaster. The blood had soaked through the patient's clothing and was still flowing out of the orifice of penetration when Dr. Power applied the compress. The bullet wound was small, however, and this moderate pressure succeeded in arresting the bleeding, though it was evi-

1. While this article is in press two additional observations of arterio-venous aneurysms involving the subclavian vessels have been reported by MM. Gallois and Piolet, Lyons, in a contribution on vascular injuries caused by simple fractures of the clavicle. ("Les déchirures vasculaires par fractures fermées de la clavicule," etc., in *Revue de Chirurgie*, Paris, No. 7, 21^e année, July 10, 1901.) These observations, together with the case of Vasilyeff, in which there was ulceration of both vessels in abscess cavity, have reached me too late to be incorporated in the text, but will be found in the final table of the reported cases, which epitomizes the history of seventeen cases of arterio-venous aneurysms of the subclavian vessels, instead of the original fifteen tabulated up to the date of the meeting.

* Read at the meeting of the American Surgical Association, held in Baltimore, May 7, 8 and 9, 1901.