panying the melancholic state. I think there can be no doubt that the change is due more to senility than anything else, and would express myself thus:

The condition is probably due to a process of lacunar absorption accompanying senility or other chronic states of depressed nutrition.

Not every senile change is present in every aged person, and some senile changes develop relatively early in life in individuals predisposed to them by hereditary factors, or by wasting diseases or chronic causes of depressed nutrition, including mental causes—for example, premature whitening of the hair.

These considerations may serve to account for the early onset of symmetrical atrophy of the parietal bones in a patient with melancholia, as also in my case of chronic jaundice and cirrhosis of the liver. In the same way "brown atrophy" of the heart, exactly similar to that found in very aged persons, may notoriously sometimes be met with in younger persons dying of cancer and other chronic wasting disorders.

The lacunar absorption which causes the atrophy of the outer table in the parietal bones is probably not solely due to senility, but, as other "senile" atrophies, intimately connected with it. Senile atrophies of organs and parts of the body are nearly always either general or symmetrical in distribution. The localization of symmetrical senile atrophies is probably to be accounted for by portions being selected which are no longer being much used, and are of least vital importance for the organism. Thus the bones and muscles of extremities which are not much used tend to atrophy early, and in the skull the symmetrical atrophy of the parietal bones occupies a site which is not pulled on by muscles, and is mechanically of relatively little importance for maintaining the strength of the brain case and its safety from concussion.

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ON THE SIGNIFICANCE OF SCARS OF THE GENITAL REGION IN THE RETROSPECTIVE DIAGNOSIS OF SYPHILIS.

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In seeking evidence of syphilis in cases of nervous or other internal disease when the cause is obscure, it is usual to examine the skin and mucous membrane, and, if scars are found in the genital region, their presence seems often to be looked on as evidence in favour of syphilis. If, on the other hand, no scars are found, their absence is sometimes looked on as implying absence of syphilis. In either case such a conclusion without further inquiry may lead to error.

In order to understand the matter aright, it is well in the first place to bear in mind what seems often to be forgotten, namely, that the primary lesion of syphilis is not in itself a destructive lesion, and therefore does not necessarily leave any scar at all. It may or may not do so according to circumstances which will be considered by and by.

Although venereal disease in some form is the chief source of genital scars it is by no means the only one, for scars in this region may be due to many other causes—such as balanitis, irregular herpes, abscesses, and injuries of various kinds, including the use of caustics and surgical operations.

Supposing, then, that a scar or scars are present on the penis or groins, or both, what is their significance, and especially what is their value as evidence of syphilis? To find an answer to this question the first thing to be done is, of course, to inquire into the history, and this in many cases will settle the point. But in many other, and notably in some venereal cases, the history helps little or not at all, so that an attempt has to be made to gain information by other means.

It has already been mentioned that the primary lesion of syphilis does not necessarily leave a scar, and when the site of inoculation is mucous membrane, as it is in the great majority of cases, and especially if the sore be under cover of

the prepuce, and not cauterized or otherwise irritated, no permanent mark may be left behind. That this really happens any one who doubts may satisfy himself by examining his syphilitic patients from time to time after the primary sore has healed, when it will be found that in some of them no trace of it remains. The same remark applies also in many cases of late internal syphilitic disease. This absence of scar occurs mostly among those who are of careful and cleanly habits, and thus is oftenest met with in private practice. In many other cases, however, and in hospital practice as a general rule, pyogenic matter of some kind gains access to the primary sore, and thus a degree of ulceration, which varies in different cases, is set up, and consequently a scar may be left. But although the primary lesion of syphilis on mucous membrane may not leave a scar, it is, nevertheless, a fact that when the skin is its seat there is nearly always sufficient loss of tissue to lead to scarring, so it becomes important to remember that a scar on the body of the penis, if from a venereal sore at all, nearly always means syphilis.

The local or soft chancre is probably the principal cause of genital scars, and owing to the irritating quality and the ready autoinoculability of chancreous pus the ulcers usually multiply, and thus multiple scars remain. Exceptions to this are met with when the virus is destroyed while the sore remains single or when a careful patient manages to prevent autoinoculation. The local chancre—in the uncircumcised, at any rate—nearly always attacks primarily the mucous membrane. When the skin is affected it is usually by consecutive inoculation. When the virus of syphilis and that of the local chancre are both present the resulting "mixed chancres" may, of course, be multiple; and, of course, also, if more than one place happen to be inoculated at the time syphilis is contracted, there may be more than one primary sore. In practice, however, it is found that the primary lesion of syphilis is single in the great majority of cases. For instance, of 103 syphilitic patients in whom the primary lesion was still present at the time they were admitted into the Male Lock Hospital when I was house-surgeon there I noted that 91 had only one sore. Of the remaining 12, 7 had two sores, and only 5 had more than two. As a general rule, therefore, it may be said that a single scar of the penis points towards syphilis, while multiple scars point to the local chancre.

A syphilitic scar, after the induration has disappeared, is generally round or oval, thin, non-adherent, and quite supple. On the skin it is also often deeply pigmented at first and the pigmentation is slow to disappear.

Gummata may, of course, leave scars either on the penis or groins, but, excepting what is sometimes called "relapsing chancre," their rarity and the time of their appearance, being themselves late signs, would make them little likely to cause difficulty in such cases as those now under consideration.

In connexion with this subject it may be as well to mention that, apart from gumma, enlarged inguinal glands go for nothing or little in the diagnosis of late syphilis. It may also be remarked that neither in primary nor in secondary syphilis is the adenopathy of very long duration, and even at the time it is present requires to be considered in relation to other evidence, for, as has been pointed out elsewhere,¹ a large number of non-syphilitic men have a degree of glandular enlargement equal to that found in some cases of primary syphilis.

If phagedaena attacks either syphilitic or local sores the resulting scar will be irregular in form and much larger than that due to almost any other cause except extensive injury, and there may be so much loss of substance that considerable deformity is left. So that very extensive scarring of penis or groins, if not traumatic, points to phagedaena.

Gonorrhoea may be accountable for scars of the penis or groins as the result of abscesses in connexion with that disease.

The scarring left by ulcerating balanitis may be considerable, and is usually accompanied by adhesions between the prepuce and glans penis. In adult life balanoposthitis is mostly arrested before it ulcerates sufficiently to leave scars, but during infancy and childhood it is often unnoticed and therefore untreated, and its effects often lead to trouble later in life, for the irregular cicatricial surface left by partial adhesions is easily abraded or torn during coitus, and is thus very liable to become inoculated if the patient is exposed to infection. Unless they become infected, however, such scars are hardly likely to lead to difficulty in diagnosis, as their appearance and history would usually prevent mistakes.

When *herpes* ulcerates from constitutional causes or from accidental irritation or the application of caustics it may leave a scar. Such a scar is usually irregular in form, and may have a crenulated border which is characteristic. But if a single-spot herpes ulcerates, or in any case if the ulceration has been extensive, the resulting scar will have no characteristic features, and the diagnosis will depend chiefly on the history, especially a history of repeated attacks of herpes.

Suppuration of a *sebaceous follicle* on the skin of the penis, like similar lesions elsewhere, may also leave a scar. Such scars from their position might give rise to a suspicion of syphilis. But they are pitted, and very much smaller than a syphilitic scar in the same situation, and the history ought to help in leading to a right conclusion.

Abcesses may be venereal or non-venereal. A suppurating bubo may accompany a suppurating syphilitic sore, and occasionally a lymphatic abscess occurs on the dorsum penis, with or without a bubo. The local chancre is the most frequent cause of suppurating bubo, and also, though less frequently, of suppurating lymphangitis of the penis. Gonorrhoea is sometimes accompanied by suppurating bubo, and rarely by lymphatic abscess of the penis. Much more common are periurethral abscesses, the scars of which are often adherent, and generally situated on the under surface of the penis.

Tuberculous lesions are so rare on the penis that they need only be mentioned. In the groins they are not so rare, and it should be remembered that tuberculous scars are irregular, adherent, thickened, and often puckered or seamed, which will usually serve to distinguish them from other scars. Enlarged glands also will often be found at the same time, as well as signs of tubercle elsewhere.

Of *traumatic* scars those due to surgical operations or to accidental injury have a history which, as a rule, is quite easily obtained. But when the injury has been wilfully inflicted by the patient himself a true history may not always be forthcoming. People sometimes do strange things—for example, a gentleman, after a long period of continence, yielded to temptation, and immediately afterwards, stricken with fear and remorse, applied a red-hot iron to the penis. To the severe burn thus produced he next day applied strong carbolic acid and subsequently nitrate of silver. The result was a most troublesome ulcer which was accompanied by a suppurating bubo, and took six weeks to heal. Such cases are no doubt rare, but they are worth remembering when difficulty arises as to the origin of a scar.

CONCLUSIONS.

From the foregoing remarks it may be gathered that the diagnostic value of genital scars is not always easy to determine. But although no hard-and-fast rules can be laid down, still the retrospective diagnosis of syphilis is a matter of such importance that an attempt ought always to be made to get information from every available source, and attention to the points that have been mentioned will sometimes help materially in the clearing up of an otherwise doubtful case.

Excluding for the moment non-venereal cases, the following rough summary may perhaps be found useful:

1. Genital scars are more common and more marked in hospital than in private practice.
2. In many cases of nervous or other late form of internal syphilis the genital region is free from scars.
3. A single scar on the skin of the penis suggests syphilis.
4. A single scar on the mucous membrane also suggests syphilis as a rule—occasionally the local chancre.
5. Multiple scars on the mucous surface of the penis only suggest the local chancre.
6. Multiple scars on both mucous membrane and skin also suggest the local chancre.
7. Inguinal scars, together with scars on the penis, suggest the local chancre.
8. An inguinal scar without any penile scar (if venereal at all) suggests gonorrhoea.
9. Extensive scarring of penis or groin, or both, suggests phagedaena.
10. Genital scars, with scars on other parts of the body, suggest an ulcerating syphilide.

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MEDICAL STUDENTS IN GERMANY.—The number of students of medicine in all the German universities in the last summer semester was 6,049, as against 6,072 in the previous year. In the corresponding period of 1894 the number was 7,796.

MEMORANDA:

MEDICAL, SURGICAL, OBSTETRICAL, THERAPEUTICAL, PATHOLOGICAL, ETC.

ERYTHEMA SCARLATINIFORME (INFLUENZAL).

IN March last you published a paper of mine on erythema scarlatiniforme (influenzal). Since then I have made notes of 10 cases and have seen about eight other cases. As the subject is of great importance to general practitioners I here report the history of half a dozen cases condensed from my case-book.

1. April 2nd, 1904. Arthur N., aged 10 years. Mother stated that two days previously he came home from school cold, shivering and aching all over; she put him to bed. On evening of April 1st he complained of sore throat, and on the 2nd, when I first saw him, he had a diffused red rash all over the body, face and extremities; temperature 99°; throat sore, no patches, neck sore, glands swollen; no taste or smell; tongue creamy; aching all over. April 3rd, rash disappearing; temperature normal; no taste or smell. Kept him under observation for ten days, but no development.

2. May 10th, 1904. F. W., male, aged 15 years; siphon filler. Saw him at 10 p.m.; temperature 102°; respirations hurried; complaints of aching all over and sore throat, pulse rapid, fauces congested, no patches; a diffuse scarlet rash on face, body and extremities. Mother stated he had not had scarlet fever. History given: Two days previously had shivering and felt ill, but remained all day at work; went to work on 10th, but had to leave off at dinner time. 11th, temperature normal, rash fading. 12th, quite well except that he cannot smell. 14th, came to see me—quite well.

3. May 22nd, 1904. W. D., aged 8 years. History given: On 20th came over shivering with headache and general aching. On 21st, hot, thirsty, and no appetite. On morning of 22nd complained of sore throat and nausea; had been delirious all night; rash visible. I saw him in evening, he then had a diffuse red rash all over; throat congested, temperature 102°, pulse quick, delirious. Had scarlet fever four years previously. 23rd, rash almost gone; tongue creamy; temperature subnormal; no taste or smell. He rapidly convalesced; no desquamation.

4. May 27th, 1904. Mrs. C., aged 28 years, consulted me for diffused rash on face, body, and extremities, of characteristic scarlet appearance; throat congested; said she felt cold, shivering, and aching all over two days previously; taste and smell abolished, tongue creamy; temperature 101°. On 28th, temperature 99°. On 29th seems well but weak; no taste, but can smell a little. Kept under observation for a fortnight, but no sign of fever.

5. May 16th, 1904. T. V., aged 7. History given: On 14th shivering, thirsty, and feverish; on morning of 16th complained of throat and rash appeared. When I saw her the temperature was 99.4°; tonsils swollen, submaxillary glands in both sides swollen, and diffuse red rash general. On 17th, temperature 99°, rash fading, tongue still creamy. On 18th, temperature normal, rash almost gone. On 19th, temperature 101°; gland under right angle of jaw much swollen and very painful. On 20th and 21st, condition unchanged; temperature 100°. On 22nd, temperature normal; swelling of gland disappearing. I kept her under observation till June 6th, but there was no desquamation or other sign of scarlet fever.

6. June 11th, 1904. W. L., aged 9 years. Mother stated he was languid and sleepy on 6th, but seemed better on 10th. When seen on 11th had a red suffusion all over surface; temperature 99.6°; tongue yellow, fauces injected, but did not complain of sore throat; headache and general malaise; can taste. His mother remarked that he seemed exactly as he was when he had scarlet fever three years ago, except that he did not vomit. On the 12th, general appearance same as yesterday; complains of itching; was quite well in two days more.

The notes of the other four cases are very similar to these, and the cases, the notes of which I did not take, also ran a similar course.

I would like to draw particular attention to the resemblance with scarlet fever in the history of invasion of these cases—namely, the scarlet efflorescence after two days of fever upon the skin, fauces, and tonsils, accompanied in all by some tenderness of submaxillary glands and in some by marked swelling of these glands.

London, S.W.

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LACTATION IN A MALE INFANT.

The secretion of a little milky fluid by the breasts of newborn infants is not rare in either sex, but the continuance for any length of time is unusual. A case where the process has been carried on for four months in a male infant is therefore worthy of record.

The child was born on August 23th, 1904, and two or three days after birth the nurse noticed and drew my attention to a swelling of the breasts, which were about the size of walnuts, hard to the touch, and from which I could, on gently squeezing, obtain several drops of milk. Treatment was not suggested; the tumefaction of the breasts subsided in a fort-