† E. B., aged 7. Father had syphilis before marriage and communicated it to mother; mother very nervous; eldest sister of mother has suffered from epileptic fits; paternal grandfather of patient imbecile; maternal grandfather very nervous; maternal grand-aunt insane. This case is a good illustration of several causes acting together to produce the imbecility, for we have insanity, imbecility, epilepsy, and great nervousness in the parents' relations. The child is stated to have been quite right at birth, and to have gone to school, where she made good progress, until two years before admission. The immediate cause of the imbecility is said to have been a fright, but it was noticed that she was becoming nervous a year before. On admission she was bright-looking, with good features, but was very vicious and bad tempered. She would scream at the top of her voice and then stop suddenly and pull out her hair. Lately she has become quiet, very helpless, and more imbecile.

E. P., aged 6. Mother consumptive, excitable, nervous, and has fits occasionally; cousin of mother insane; uncle and brother of father epileptic. One brother of the patient was born with convulsions. The history of the case was that the child had always been bright, but for the last twelve months she had become "dangerous." She had paroxysms of rage without apparent cause, during which she would tear out her hair, and bite her own and her mother's fingers. On admission she was bright and intelligent looking, and good tempered in disposition. Her mental capacity was fair, her powers of observation, imitation, and attention being good. She improved very much during her residence in the asylum, was quiet, well-behaved, and answered questions intelligently. She was taken out by her friends, after being in the asylum five months. The immediate cause of the overthrow of the child's mental equilibrium is not apparent; the excitability from which she is said to have suffered had disappeared when she was admitted, and practically her mental condition was fairly sound when she was discharged, although she had been in the asylum a very short time.

D. A. P., aged 8. Father "touched in his mind;" paternal grandfather and grandmother died in an asylum; paternal great-grandmother committed suicide; maternal aunt subject to fits. The hereditary predisposition is here seen extending through three generations on the father's side, while epilepsy is present on the mother's side. The mother had a good deal of worry during pregnancy. The child did not speak till a short time before admission. There was evidently a good deal of excitability and destructiveness present, for she never could be left with babies; she would dress and undress them, and smack them, and if she had a doll, the mother says, she would "limb" it. The hereditary neurosis was evidently well-marked in this family, for the eldest child was excitable, and the second dull; this was the third child. On admission, she was a well-nourished, dark complexioned, good-tempered child, with a pleasing expression, subject to fits occasionally. She has made a little progress since her residence in the asylum.

T. J., aged 7. Father suffered from numbness in the left arm, and had a few fits before his death from heart-disease; paternal aunt died of fits; uncle and aunt of father died of paralysis, as also did mother's grandmother and aunt. Both sides of the family, but especially the father's side, were affected. The child was bright and cheerful until 2 years of age, when he was taken with a fit while teething. After this fit he used to have them every four months, and they continued up to the time of admission. He was then a bright-looking boy, of a restless disposition, and always in mischief; mental capacity fair. Under treatment he has considerably improved, and has made good progress in school and in the tailor's shop. In 1881, it was noted that he had had no fit for two years. In 1883 he had another fit, and he has had one since.

J. W. A., aged 13. Father intemperate and sulky; aunt epileptic, and has an imbecile child; grandfather and grandmother died of apoplexy. The mother had a fright when six months pregnant. The case is a congenital one, and is interesting, showing as it does the strong influence of neurosis in the family: first, from the fact that there are two other imbecile children besides this one; and, secondly, in that the aunt, who is epileptic, has also an imbecile child. The boy was of a cheerful disposition, with small mental capacity. He was nearly five years under training, and made next to no progress.

E. K., aged 11. Maternal great-grandmother insane; maternal grandmother and aunt epileptic; maternal great-uncle was epileptic, and died paralysed; paternal grandmother epileptic; paternal aunt has a daughter who is insane. The mother fell downstairs when four or five months pregnant, and became insensible. This is an exceedingly interesting case, not only as showing the action of several predisposing causes in producing the imbecility, but also because the predisposition is seen to extend in the direct line through three genera-

tions on the mother's side and two on the father's side, while the father and mother are mentally sound. This is as well-marked a case of atavism, or reversional heredity, as could be wished for. The side lines are also affected, for the maternal grand-uncle and maternal aunt are epileptic, and the paternal aunt has an insane daughter. With such a history, it is not surprising to find that the child was not only a born imbecile, but one of the very lowest type. On admission she was found to be paralysed on the right side, and to suffer from frequent fits. She could not utter a word. She gradually became helpless, and had to be fed.

C. L. M., aged 9. Father insane; mother imbecile; maternal uncle insane; phthisis on father's side of family; mother frightened when pregnant. The child was a well-marked microcephalic imbecile, her head measuring only 15½ inches in circumference. Naturally her mental capacity was very small. Her special senses were very defective; she was paralysed on the right side, and quite helpless. She died fifteen months after admission, and on examination the posterior half of the left lobe of the brain and the posterior third of the right contained serous fluid. The brain, after the fluid had drained away, weighed only 16 ounces.

M. E. W., aged 7. The grandmother, sister of grandmother, and aunt of child, all died in asylums; father and mother mentally sound. This is another case of atavism, the hereditary predisposition extending through two generations in the direct line, in the latter, however, affecting the mother's sister. The case was a congenital one of low type, with small mental capacity. She was the eldest child; one younger had died of brain-disease. She only lived two months after admission, and on examining the brain after death, the convolutions were found to be very simple in character.

M. D., aged 14. Father very irritable; some paternal uncles have died of "head" disease, and one paternal uncle is imbecile; paternal grandfather died "raving mad." There is not much doubt that the father's irritability, which was said to be increasing, was a sign of the insane temperament, more especially as one of his brothers was an imbecile, and some others had died probably insane, or at least of disease of the brain. Besides this child, there have been nine others, of whom seven had died of convulsions, and two, who were alive, had had fits. The case was a congenital one, of fairly high type. She made good progress in school, and was apt with her needle. She was discharged after seventeen months' residence, as the mother thought she could manage her, but was readmitted nine months afterwards, being very obstinate and not amenable to treatment. She again became well-behaved, and made considerable progress.

S. J. J., aged 6½. Father has "drinking bouts" every six weeks; paternal grandfather died in an epileptic fit; mother a martyr to neuralgia; maternal aunt imbecile; maternal grandfather paralysed. Here the intemperate habits of the father were no doubt an outcome of his father's neurotic temperament; while the severe neuralgia of the mother was probably due to her father's diseased brain, more especially as her sister was an imbecile. The mother fretted a good deal while pregnant, in consequence of her husband's intemperate habits, and the child was a born imbecile of what is known as the Mongol type. His mental capacity was small, and he made very little progress while in the asylum.

Many other cases might be quoted in illustration of the influence which hereditary predisposition has in the production of imbecility; but the above are fairly typical; some being congenital cases, and others being born with unstable brains easily upset by a comparatively slight cause. Other points than those noted might have been touched upon, but it would have been difficult to do so in the time allotted to this paper.

ILLUSTRATIONS OF EXCEPTIONAL SYMPTOMS AND EXAMPLES OF RARE FORMS OF DISEASE.

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[Continued from page 985.]

XXII.—NOTE AS TO THE INHERITANCE OF TISSUE PROCLIVITIES.

THERE are some clinical facts which make it seem probable that diseases of special tissues and parts may be inherited as such, and quite independently of the inheritance of diathesis. The best illustrations that I could quote of this would be from diseases of the eye and diseases of the skin.

A young lady, who was apparently in good health, was the subject of relapsing ophthalmia, attended by phlyctenulae and ulcers. It had begun at the age of 4, and it still persisted when, at the age of

15, she came under my observation. There was a history that her maternal grandmother had suffered in a similar way through exactly the same period of life, after which her eyes had got quite strong. I attended a rather delicate young lady, the daughter of a surgeon, for central ulcerations of the cornea, which left nebulae when they healed. On comparing these some time afterwards with some that were present in her mother's eyes, I found that they were exactly alike. Her mother had suffered at the same age as her daughter afterwards did. The inheritance of various forms of local skin disease, more especially on the hands and fingers, is very constantly observed.

A gentleman, whose health was excellent, came under my care at the age of 57, for psoriasis of the finger-nails. He had been under treatment for psoriasis of his hands and feet ever since the age of 15. He told me that his mother had had dry hands, and that one of his children presented the same condition. In all three the hands were always worse in cold weather, the skin chapping and peeling. It was clearly an example of local peculiarity of tissue rather than of any disorder of the general health.

It would seem not improbable, in connection with this inheritance of tissue-proclivity, that conditions which are in the first individual who suffers matters of personal acquisition, may become subsequently family inheritances. The case which I have recorded in the *Medico-Chirurgical Transactions*, in which a lad whose mother was bald from alopecia areata, acquired at the age of 6, was born almost hairless, and without mammary glands, is the most remarkable instance which I can adduce of this kind. Probably, however, it is only an extreme instance of what in minor forms is very common.

XXIII.—ON CONDITIONS ALLIED TO RAYNAUD'S DISEASE.

Under the name of Raynaud's disease we recognise a condition of enfeebled circulation in the extremities which gives a tendency to symmetrical gangrene of the tips of the digits. There are other conditions of altered nutrition in the same parts, and in association with a similar class of causes, but in which gangrene is not threatened. I have described what I ventured temporarily to name "last joint arthritis"—a very peculiar affection in which the terminal joints of all the digits suffer from disorganising inflammation of a more or less rheumatic type. It is definitely influenced by weather and by exposure to cold, so much so that it might be considered a sort of articular chilblain. It is usually associated with inherited gout, in combination with feeble circulation and liability to chilblains.

In the following case we have neither gangrene nor arthritis, but a peculiar erythematous inflammation beginning at the digit-tips, causing destruction of the nails, and gradually spreading upwards. Miss P. was sent to me by my colleague, Mr. Couper. Her age was 41; she inherited gout, was a total abstainer, and of decidedly feeble circulation. Her fingers had for long been "liable to die and become white." For fifteen years she had suffered much from redness of the fingers and toes, which was worse in cold weather, and which she had considered chilblains. In childhood, however, she had not suffered from chilblains more than others. Five years ago her nails had begun to suffer. Most of them when I saw her were destroyed, being represented only by thin horny lines which crossed the nail lengthwise. It did not appear that the nails had ever been thickened. They became thin and fibrous. The whole finger-tip was withered. The fingers from the tip almost to the knuckle were of dusky red colour, smooth, glazed surface, with some slight tendency to desquamation. There was no moist eczema, the condition resembling rather lupus erythematosus. The redness was, however, not well margined, as in the latter malady, and neither the face nor the ears were in any way affected. I saw the patient on a warm day, and was told that in cold weather the swelling was much greater. The toes were in exactly the same condition as the fingers, and although some suffered more than others, not a single digit had escaped.

By some the condition which I have described would be diagnosed as dry eczema, by others I think it would be considered erythematous lupus, and others might be content to name it chronic onychitis. Undoubtedly it is much like all these diseases, and partakes of the features of all. Especially, perhaps, does its external resemblance come near to eczema. We know, however, of no type of eczema which attacks all the digits at once, and restricts itself to them whilst persisting without cure for many years. Clearly the most important feature in the case, that which leads us nearest to the cause, is the fact of the disease attacking the tips of the digits and having been preceded by the liability to "die." Had the patient in the earliest stage been sent to live in a warm climate, not improbably the disease would never have progressed. If this be true, the condition is essentially a chilblain, that is, a chronic erythematous inflammation of a peripheral

part induced by cold; still it differs from chilblains, for the latter do not usually destroy the nails, do not persist continuously all the year, and seldom attack all the digits at once and in the same degree.

If I were to attempt a pathogenetic analysis, it would be this: Inheritance of gout, attended, as it so often is, by peculiarities of circulation; inheritance of tissues prone to chilblain-inflammation; exposure to a cold climate; and, finally, enfeeblement of general vigour by too abstemious regimen.

XXIV.—NOTES ON THE EARLIEST SYMPTOMS OF LOCOMOTOR ATAXY.

The following case is of interest in reference to the very earliest symptoms of ataxy. A very intelligent medical student was himself the subject. He told me that, three years ago, he had had syphilis, with eruption and all the usual phenomena. Although he had treated himself with specifics, he had had relapses of eruption almost ever since, and only got rid of a troublesome psoriasis palmaris a few months before I saw him. In the Easter of 1886, after a long exposure in cold air during the day, he woke up next morning with deafness in the left ear and loud ringing in both. For this he at once took iodide freely, and got well. The symptom which had excited his alarm and brought him to me was tingling in the feet. This tingling had for some weeks been almost constant, and had been preceded by a sensation of "pins and needles." It affected his left foot much worse than the right, but the right also to some extent. He had no real pain. His patellar reflex was good, and the pupils acted well. He could walk well, but if he got tired the tingling in the feet got worse. Before the occurrence of this tingling, he had been for eighteen months liable to what he called rectal pain, which was, I have no doubt, a spasm of the sphincter. It used to wake him in the night, and keep him awake for from a few minutes to half an hour.

Another case at present under my observation is noteworthy on account of the absence of pupil-symptoms or lightning pains, although the gait is very marked. Mr. N. had a hard chancre, which lasted two or three months, six years ago. He had treatment, and does not recollect any secondary symptoms. He married two years later, and has now three healthy children. He has always lived a regular life, and was never excessive in sexual indulgence. About three years after his marriage, he began to experience numbness of the lower part of the abdomen and stiffness of the legs. "I do not feel to have the free action in my legs that once I had;" "If I close my eyes I feel as if I should fall;" "A year ago I used to play football; now I could not run two yards for any motive whatever." These were the expressions used when he came first to me on February 23rd, 1886. I found that his gait was most characteristic, and that he could not stand steadily with his eyes shut. The patellar reflex was wholly absent, but his pupils were of normal size and acted well on exposure to light. He said that he had never had severe pain in his legs, but only a disagreeable heavy numb feeling, attended by a sensation of cold over the abdomen. His bladder was at times rather sluggish, and his sexual function was weaker than formerly.

My advice to Mr. N. was that he should be most careful as to sexual intercourse and other causes of spinal fatigue, and that he should take for a long time small doses of mercury. A year later he came to me again. He was on the whole better, but the essential symptoms were still present. He could walk better, and did not feel inclined to fall when his eyes were closed, but the knee-jump was wholly absent. The pupils still acted well. He had taken mercury the whole year, but as he had also reduced his sexual intercourse to once a month it was impossible to say whether the arrest of symptoms, which were before rather rapidly developing, was due to what was given or what was forbidden.

XXV.—AN EXAMPLE OF ENORMOUS OVERGROWTH OF THE PAPILLÆ OF THE TONGUE ON ITS WHOLE SURFACE.

An interesting condition of tongue—being, however, simply an extreme development of what in minor degrees is common—was presented in the case of Mr. B. This gentleman, a surgeon, came up for what he called "cracks in the tongue." The so-called cracks were, however, simply deep fissures between masses of overgrown papillæ. The surface of the tongue was tolerably level, but marked with lines in a sort of pattern more or less like a fern-leaf. On touching the tongue, the papillæ could be laid on each side, and made to exhibit deep depressions between their rows. There were no ulcerations whatever, and no sclerosis. It was not possible to make any distinction between filiform and fungiform papillæ, all being coarse and large. There was very little fur, and, on the right side of the median cleft, a well-marked pink streak passed, due to some alteration in the apices of the overgrown papillæ.

Mr. B. had never suffered from any special disease; his attention

had been particularly directed to his tongue of late by curious shooting sensations in it, which, he said, came on if he talked much; it was not in the least sore in eating. I believe that what he complained of were purely nervous phenomena, but they had made him anxious as to the possible development of cancer. They had followed what he called "a nervous breakdown" six or eight months ago. This "breakdown" had been an attack of giddiness, attended with a feeling of nausea, and followed by great muscular weakness; he had been sent away from home, and had regained his health. I have seen this condition of general papillary hypertrophy in very many cases, and with some differences as regards the condition of papillæ involved. In most cases it is obviously the filiform ones which are chiefly implicated; these may be seen to be very much branched at their apices, looking almost like the tops of a field of oats. In the present instance there was no branching, and the surface was minutely nodular all over. When the filiform only are involved the fur usually accumulates on them, which, in this instance, it did not.

XXVI.—ON NOTCHES IN THE UPPER CENTRAL INCISOR TEETH WHICH RESEMBLE THOSE OF SYPHILIS.

There is a state of notching of the upper incisor teeth, which affects the two central ones of the permanent set, and produces a condition very deceptively like that of syphilis. The notches are central, and very conspicuous. A chief point of difference from the syphilitic tooth is that the tooth is usually wide instead of narrow at its free edge. Syphilitic teeth almost always show narrowing, like a screw-driver, as well as notching. Another point of difference is that the teeth, when looked at carefully, are seen to be craggy and very hard, not worn as the syphilitic tooth. In a very marked example of the pseudo-syphilitic notching, the father of the patient told me that the condition was hereditary, and the youth's mother had teeth of the same kind. In this instance, there was no history of fits in infancy or of the use of mercury or teething powders. Nor, indeed, were the conditions those of stomatitis, or mercurial, teeth. The defects occurred in pairs of teeth, and did not damage the whole row. Nor were the first permanent molars—the test teeth of the mercurial set—involved. I have in several other examples of craggy teeth been assured that the peculiarity was in the family. I feel certain, therefore, that we must admit inheritance as an occasional explanation of peculiarities in the form of the teeth. I was once shown, in one of the Paris hospitals, a pair of teeth such as those which I have above described, and great surprise was expressed that I could not admit that they were characteristically syphilitic.

XXVII.—THE TONGUE IN LEPROSY.

The patient whose case supplies the preceding note, Mr. D., is at present suffering from a most severe development of tubercles over the whole of his face and ears, and he has at the same time lumps in his tongue. These lumps are chiefly in the middle region, posteriorly. They project as ridges and bossy masses, which, in parts, look almost warty. There is a certain amount of induration in the substance of the organ, almost as far forwards as the tip. It is exactly the sort of ill-defined lumpy and ridgy induration which we often see in syphilis. There are fissures between the lumps, but no ulcerations. I have but very rarely had the opportunity of observing disease of the tongue in leprosy. I believe it is rare, for both at home and abroad I have seen many lepers.

XXVIII.—ON "GOING TO SLEEP" OF THE LIMBS.

The symptom which patients call "going to sleep" of the limbs, and especially when it occurs in the lower extremities, is one of considerable interest. It is a sort of numbness attended by defective perception of size, so that the limb feels unwieldy and large. There may be no actual anaesthesia, and no "pins and needles." An intelligent patient, whom I pressed to describe his sensations, said it was exactly like what one feels after the foot has been asleep from pressure on the chair, and the tingling of "pins and needles" has just passed off. The following case may illustrate this symptom.

A healthy-looking farmer, aged 40, came to me complaining chiefly of "sleepiness in his lower limbs." It had been present almost continuously for two years, being, however, at some times much worse than others. It gave him great annoyance, for although he could walk well and was accustomed to ride much on horseback, yet his legs never felt comfortable; they were always, as he said, numb, "just short of the pins and needles stage." The condition was pretty much the same in both the lower extremities, and did not affect any other part. The concomitant symptoms left no doubt that it was part of locomotor ataxy. The pupils were small and sluggish, the patellar reflex was absent, and severe pains had been experienced in the legs

on many occasions; the pains had been of the ordinary gnawing or burning kind, but it was interesting to note that they were as a rule worse in the daytime, and were better in bed. They were invariably worse when fatigued, and occasionally, when extra-tired, they had kept him awake all night. The legs were occasionally restless, and he could not keep them still for more than a few seconds at a time. The connection between the pains and want of rest was curiously illustrated by the patient's statement that if he missed an hour's sleep which he was accustomed to take in the afternoon, he invariably had a bad night from pains in the leg. It was his belief that iodide of potassium had frequently relieved his pains, but as they were of irregular occurrence, it was difficult to feel certain on the point. This patient's antecedents were of much interest, and I must suggest three causes possibly acting in combination as those to which his disease was due. He had suffered from syphilis fifteen years ago, he had been married three years, and he had on one occasion exposed himself to unusual fatigue, accompanied by wet and cold. From the occasion last alluded to he definitely dated the commencement of his ailment. He had been out at a sham fight with his corps of volunteers on a very cold and rainy day. He had been on his feet from eight o'clock in the morning till eight in the evening, wet through, and often standing still for an hour or two at a time. When he got home in the evening he found, for the first time, that the backs of the thighs were numb, and after this it soon extended to his legs. As regards the syphilis, it appeared that he had been well treated, and had no secondaries. He had one healthy child.

XXIX.—PERFORATING ULCER OF THE SEPTUM NASI IN A CASE OF COMMON LUPUS.

An interesting example of the perforating ulcer of the septum in definite connection with lupus came under my observation in March, 1886. Miss A. K., aged 30, was sent to me by Dr. Ransome, of Nottingham. She was a slim and delicate-looking woman, and although neither of her parents had died of consumption, several aunts, uncles, and cousins had done so. In early life she had suffered from chilblains, and for ten years or more she had been the subject of lupus. The disease had come to an end on her nose, having destroyed the tip and alæ, but leaving a sound cicatrix. On the right arm also there was a large area of sound scar, which had been left after lupus-ulceration. On her right cheek there was another large sound scar, but with a thick patch of non-ulcerated lupus growth, the size of a shilling, on one edge. This patch was of the ordinary, semi-transparent apple-jelly-like growth, and was conclusive as stamping the case one of common lupus.

I now come to the condition of the septum, which was the feature of most interest. There was a perforation large enough to have admitted a shilling, the front edge of which came to within an eighth of an inch of the columna, but without causing any deformity. Posteriorly its edge could be seen with tolerable ease, and although there was no thickening it was clearly not quite sound, for it bled on the slightest touch. At other parts the edge of the ulcer seemed quite healed. No bone had ever come away, and no disease could be discovered in other parts of the nares or in the mouth.

The case was a good one in proof of the association of common lupus with hereditary tendency to tuberculosis, and of the association of the perforating ulcer of the septum with common lupus. There was not the slightest reason for suspecting syphilis. Indeed the manner in which the ulceration of the tip and alæ of the nose had healed was quite conclusive as to its nature.

ON THE TREATMENT OF CONGENITAL DISLOCATION OF THE HIP, WITH TWO CASES.

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It is unfortunate that such a term as "congenital dislocation of the hip"¹ should be applied to a condition which is not a divulsion of parts previously in normal contact and relationship. Perhaps it may be that, in a few very rare instances of breech presentation, or of some cross-birth, a hip-joint previously normal may become luxated; but such cases—if, indeed, they occur—form but a minute portion of those that we see and know in practice by the name above given. Dislocation from intra-uterine arthritis is merely speculative pathology. The very vast majority of cases are instances of deficient acetabulum; in a certain number the head of the femur is also undeveloped and small; it is usually somewhat flat and misshapen.

¹ See Pathological Society's meeting, JOURNAL, April 23rd, 1887.