

Mongolian Imbecility. By C. H. FENNELL, M.D., Assistant Medical Officer, Darenth Schools.

THE type of imbecility with which my paper deals is chiefly met with in the special institutions and in the out-patient clinics of children's hospitals, and is fairly common in this country. The somewhat scanty literature of the subject, however, includes descriptions of the leading features of the class which differ a good deal in detail. This divergence of opinion is due, I think, mainly to the fact that observers are by no means agreed as to the degree of deviation from other types which qualifies an imbecile for inclusion in the Mongol group—a disagreement easy to understand when we realise that there is hardly one single feature which can be regarded as peculiar to Mongolism. Further, many recorded cases have been noted only at an early age, when certain later-developed aids to diagnosis are wanting. I have thought it of interest to record my observations of twenty-one well-marked cases met with among the 2000 inmates of Darenth Asylums, where the minimum age of admission is five, trusting that they may afford some guide to the mental and physical forecast advisable in dealing with the infant.

I would venture to define Mongolian imbecility as a condition of antenatally arrested development, bodily and mental, marked especially by brachycephaly, by a proneness of the tissues to low and chronic forms of inflammation, and by certain characteristic mental features. In only one of my cases, and that the least pronounced in type, was brachycephaly absent; it was associated in every instance with a greater or less tendency to straightness of face, and in more than half with a steep occiput. Indeed, the profile in these patients is fully as distinctive as the full face view. Dr. Sutherland has suggested that the familiar upward slant of the palpebral fissures may owe its origin to the arrested growth of the skull base. In three of my cases, otherwise unmistakable, this stigma was absent, and in one of these the direction was reversed. Some degree of obliquity is by no means uncommon in idiots who have no other claim to inclusion in the genus under consideration, and in examining a hundred such I found it present in

fifteen. The nose in the adolescent Mongol is almost always an aid to diagnosis, being short, and broad in its whole length, with nostrils looking more forward than usual ; these characters were present in fifteen of my cases, and in all the rest the shape was suggestive. Epicanthus was present in eight only. Evidence of blepharitis, past or existing, was found in more than half the total number, and I have found it a troublesome and recurrent complication. Double convergent squint was a feature in nine, while in two others one eye was similarly affected. The cheeks are usually flabby and redundant, lending themselves peculiarly to the facial contortions so frequently noted. A feature to which I would call attention as completing the facial picture is a uniform flush extending from the mala to the lower jaw ; this was almost constant in my cases, and contrasted markedly with the normal coloration of the cheeks.

Transverse or irregular fissuring of the tongue, with hypertrophy of the circumvallate papillæ, I found in every instance. I am tempted to regard this condition as pathognomonic of Mongolism in later years ; in the examination of the tongue in over two hundred idiots of all other types I met with none which at all recalled it. As regards the palate, Dr. Robert Jones has called attention to the frequency with which marked deformity occurs in this class ; I have found it invariably present, and characterised by a contracted vault with the sides sloping more steeply in front, so that an anterior plateau is formed—usually, but not always, ridged in the median line. Such a condition is of course not peculiar to the race, being fairly common in imbeciles of all descriptions.

The Mongol appears to be particularly prone to rickets ; fourteen of my series, or two thirds, bore evidence of the disease in the thorax. The abnormal laxity of ligaments described as permitting of hyperextension at the joints in the infant seems to disappear within the first few years of life, as I did not meet with it in any case, but its effects may possibly be traced in minor deformities usually ascribed to “defective growth or habit.” More than half my patients were distinctly knock-kneed, while several were flat-footed or scoliotic.

In thirteen cases, or nearly two thirds, the circulation was notably defective, as evidenced by coldness of extremities and proneness to chilblains. Of greater interest was the occurrence

of three cases of congenital heart deformity. Attention was called in 1899 by A. E. Garrod to the frequent association of this defect with Mongolism, and the combination was suggested to be usually fatal in infancy. Dr. John Thomson was unable at the time to recall any instances of it among his older Mongols. Such malformations are difficult of demonstration *intra vitam* in many cases, and it is quite possible that the autopsy might show the incidence among my patients to be actually a higher one.

The hands in this type are far less characteristic than those of the cretin, at least in adolescence. In fourteen out of twenty-one cases I found them short, and in sixteen patients the fingers as a whole were short also, but the latter showed no constant shape, and were stumpy and tapering in about equal proportions. Relative shortness of the thumb and little finger was usually absent, and in no case striking. Incurvation of the little finger I have commonly met with among idiots of all classes, and I find my observation confirmed by the exhaustive analysis of Park West. The feet were occasionally short and clumsy, but more often normal in shape.

The deep reflexes have been described as always diminished or absent in the Mongolian. In mine, on the contrary, they were distinctly brisk in nine, normal in six others, and absent in five only.

The skin was almost without exception rough, dry, and papillated; in about two thirds of the number it showed the slight hirsuties often seen in strumous children.

As regards mental development, I have not encountered a definite instance in which the imbecility rose above a low grade. It may be objected that in a special institution only the most marked examples of any type are likely to be met with; but none of the Darenth Mongols are to be found in any but the lowest classes of the school, and I am tempted to think that the examples of scarcely deficient mental ability which have been described were somewhat near the borderland of the group. Generally speaking, the more marked the physical stigmata, the deeper has been the amentia. The child is cheerful, affectionate, easily amused, and often a born mimic, and these traits are apt to raise false hopes of educational possibility. But the usual result of some years' training has been that, although his amiable disposition has prompted the

teachers to exceptional efforts at training, only slight progress has been shown in manual work, and little or no capacity for reading or counting. It has been stated that the Mongol is readily taught habits of cleanliness, but only one third of my cases were reliable in this respect, while three of the remainder were habitually wet and dirty after years of careful attention. In one instance only—that of a man of twenty-seven—has the trained faculty of imitation produced much practical result; the patient in question can do a good deal of ward work, such as scrubbing, making beds, etc. In this instance mimicry is strongly developed; the patient can imitate for weeks afterwards features in a theatrical entertainment which have caught his fancy. But he can only make a few barely intelligible sounds, and is quite childish in manner and habits. Only one other of my cases has learnt to make a bed.

In fine, the Mongol is a child of much promise but small performance, and I would suggest that in all cases seen in early infancy a much guarded prognosis should be given as to the mental outlook.

DISCUSSION

At the Annual Meeting in London, July 17th, 1903.

The PRESIDENT.—I am sure we thank Dr. Fennell for his short and to-the-point paper on Mongolian imbecility. He has enlightened me upon one subject. I always thought a Mongolian imbecile was one of the educable classes, but he tells us, from his experience, that it is a class of much promise but small performance.

Dr. FLETCHER BEACH.—I, with you, sir, thank Dr. Fennell very much for bringing this class of case before us. As he says, they are a fairly numerous class, and I have had as many since I have been in practice on my own account as during the time I was at Darenth. The curious thing about Mongolian imbecility is that it seems to be more common now. It may be that we recognise the condition more readily than we used to, and there is no doubt that the stigmata which Dr. Jones states were usually present are not present in all the cases. I used to show cases to Dr. White's students and students from many of the hospitals in London many years ago; I would have five or six cases, and show the points in one and then in another, so that the students might get an idea of what the stigmata were. Very often you will get the typical condition of the tongue, with the rough skin on the hand, but you do not get the epicanthic mark, and often you may not see the squat nose and undeveloped ear. I do not know whether Dr. Fennell noticed the turning in of the little finger, but that is a point which has been noticed considerably of late. A curious thing is that in general practice Mongolian imbecility is so often mistaken for cretinism. I remember some years ago, after having been on my holiday, I found in my ward a case of Mongolian imbecility which had been labelled cretinism, and the physician had been treating it with thyroid, and wondered why he had not been able to get any good result out of it. I pointed out to him the difference between the two, but as a matter of curiosity I kept on with the thyroid to see if any change occurred; however, I found absolutely none. The prognosis, as Dr. Fennell says, is bad. There is the instability of the brain, which, I think, is proved by *post-mortem* and micro-

scopical observation, in which the cells are seen to be badly formed. Therefore it is clear that we could not expect much improvement.

Dr. ANDRIEZEN.—I agree with Dr. Fennell's description of the type, which I frequently encountered when I was at Darenth. But since then I have come across, in private practice, during the last two years, two cases that struck me as being of a much milder and weaker type, and capable of education. One was a boy thirteen years of age, who was seen by me about March or April last year. I should classify him as a high-grade imbecile, capable of a good deal of education. He presented the characteristic features and physiognomy of the Mongol type. But at Darenth I never saw a case capable of improvement; they were generally of dirty and degraded habits, which nothing seemed to alter. As Dr. Fennell has paid special attention to these cases, I should like to ask him what he considers to be the cause of this special type of idiocy. Of course very many cases of idiocy are due to tuberculosis or syphilis or alcoholism in the parents, but there must be some special reason for the production of this peculiar type of degeneration. Many years ago Morel, in his great work on the subject of types of degeneration of human species, dealing largely with cretinism, also mentioned types, of which he gave photographs, approximating to the Mongolian type. So it would seem that there is yet some unsolved question as to the exact cause of this particular type approximating to a particular race. I wish to express my admiration of the excellent paper which has been read.

Dr. MORRISON.—It is said that the Mongol is a genus by himself in the human family, and if there is one thing that distinguishes a Mongol it is his dietetic habits. I would like to ask Dr. Fennell in what particular does the common habits of diet of the Mongolian differ from those of the ordinary European or Asiatic? Are his common staple articles of food and drink different in kind or degree? If rickets is recognised to be the pathogenic substratum in cases of Mongolian imbecility, we know that rickets is largely prevalent north of the Tweed, and this is largely attributed to the dietetic habits of the people. I wonder if the pathogenesis of Mongolian imbecility can be safely ascribed to the dietetic habits of the people, or more directly to marital consanguinity; I only rose to ask this question.

Dr. ROBERT JONES.—I listened with a great deal of pleasure to Dr. Fennell's paper, and I must say that this class of imbeciles interested me very much in my early days. I went into office at the Earlswood Asylum almost immediately after taking my degree, and saw a good deal of the habits of this class. They almost invariably sat cross-legged, tailor fashion. Whether this is an atavistic return to their racial character I am unable to say. Another interesting thing is that Dr. Fletcher Beach says they are more common now than many years ago. I have on more than one occasion seen these Mongols driving in smart carriages through the Park in the care of their nurses. One never comes across them in ordinary lunacy practice, but I have occasionally seen them in this way. One more point. The family history of these cases is, as far as my own researches have gone, that in many instances these children are the youngest of a very large family. Even where that is not so there has been a very marked disparity in the ages of the parents. The fact stated by Dr. Beach that this type is now more common may have something to do with what we heard yesterday in our President's address in regard to the greater prevalence in these days of late marriages; our social system is now more complex, and one of the features of our social life is that marriages are much later than they used to be. Has this anything to do with the more frequent occurrence of the Mongolian type? Finally, I have never seen a grown-up Mongol, *i. e.*, out of an asylum, and I only once saw an adult over twenty-five years of age in an asylum; that was at Colney Hatch during the time I was on the medical staff. They seem to die off before maturity. I have never seen in them any tendency to suicide; they seem very fond of music and very imitative, but in spite of this they do not improve.

Dr. MORR.—I would like first of all to congratulate Dr. Fennell upon this very interesting paper. It is the sort of work we want, to collate facts and bring them before us in a short paper like this. The question is, Is there a convoluted physiognomy which one can correlate with the external physiognomy of the individual? Does it resemble a Mongol brain? I have a Chinaman's brain, and I shall be glad to give Dr. Fennell a photograph of that brain. As you perhaps know, it is very difficult to get a photograph of a Chinaman's brain, and especially

the brain itself. It presents some very important features which are not found in ordinary brains.

Dr. FENNELL.—I have to thank you for the kind way in which you have received my paper. Dr. Beach suggests that the cases are commoner than they were in his time at Darenth. I think that is so, because I have only selected twenty of the most marked in the institution of which he was formerly superintendent. With regard to the in-turned little finger, I do not think that is characteristic of the Mongolian, because I have found it in imbeciles of other types. Dr. Park West recorded an analysis of the shape of the little finger in 600 normal children, and he found incurvation to exist, to a greater or less degree, in a very large proportion of them; it was quite as large a proportionate number as is seen in Mongols. Dr. Andriezen asks if any suggestion can be made as to the causation of this form of imbecility. With regard to the facial peculiarities, I think Dr. Sutherland's theory that deficient growth of the skull base is responsible for the features is quite plausible. But the fissuring and hypertrophy of the papillæ in the tongue do not come under this category, and it can only be regarded as a happy suggestion in accounting for many of the features commonly met with. I cannot satisfy Dr. Morrison as to the dietetic peculiarity of Mongols; I have not noticed that there are any special points about them in that respect. I do not think the Mongol shows much interest in his diet, and he is found to conform very readily to the rules of the institution in which he is placed, and to the diet he is supplied with. Dr. Robert Jones mentioned the family history in this type. I cannot say that my statistics in this respect are worth anything, because I have not been able to secure that personal contact with the friends of the patients upon which all statistics of value are based. But I have sent out forms and interviewed some friends. I found that phthisis was traceable in the immediate forbears, or brothers or sisters, in nine out of twenty-one cases. I found the mother's health was unsatisfactory in an early period of the pregnancy in twelve out of twenty-one cases. A neuropathic history I have found in only nine. Of my cases five were the last-born of a large family, and two were the last but one. In the remaining cases the position in the births of the particular child was not suggestive. Dr. Muir also arrived at that conclusion in a recently published paper. Dr. Mott speaks of the peculiarities of the Mongol brain. I have had no *post-mortems* on Mongols at Darenth during the last six months, but I had two when I was medical registrar at Great Ormond Street. In one case there was a simplicity of convolutions, but I am sorry I did not take a photograph of the brain. I was not then so much interested in this type as I am now. But, as Dr. Jones says, these imbeciles seldom survive to maturity, and I have no doubt I shall have several *post-mortems* to record in a subsequent paper.

A Short History of St. Luke's Hospital. By WILLIAM RAWES, M.D., F.R.C.S., Medical Superintendent.

ON June 13th, 1750, Dr. Thomas Crow, Mr. William Prouting, and four other gentlemen met in a tavern in Exchange Alley, their object being to promote the establishment by subscription of a hospital as a further provision for poor lunatics. They drew up certain "considerations," which were printed and distributed to the public. Others were subsequently added. Epitomised, they were as follows:

1. That although the metropolis abounds in hospitals and