## Clinical Notes and Cases.

## THE ABSENCE OF THE PERONEUS TERTIUS IN A MONGOLOID IDIOT.

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With a comment by F. G. CROOKSHANK, M.D., F.R.C.P.

M. B— was admitted to Storthes Hall Mental Hospital in December, 1927. Her age was then 41. She showed marked stigmata of mongolism, the facies was typical, the tongue was fissured, and she readily took up the "Buddha" position when sitting.

Her mental state was one of idiocy. She was ineducable, inarticulate, and unable to fend for herself in any way. She suffered a good deal from chest complaints, and during her sojourn here had two attacks of lobar pneumonia. The last one proved fatal, and she died on January 19, 1933.

The most interesting feature of the *post-mortem* examination was the absence on both sides of the peroneus tertius muscle. The ligamentum teres on each side was very poorly developed.

We are indebted to Dr. C. W. Ewing, Medical Superintendent, Storthes Hall Mental Hospital, for permission to publish the particulars of this case.

## NOTE BY F. G. CROOKSHANK, M.D., F.R.C.P.

In The Mongol in Our Midst (third edition, 1931) I have shown that certain homologies obtain between our indigenous mongoloids (whether imbecile or not) and the orangs, on the one hand, and racial mongolians on the other. None of the observations made and recorded by me has been invalidated, although many have refused to accept the proven homologies as other than "superficial", and have offered suggestions by way of "explanation" incompatible with those which I have put forward.

The difficulties in the way of verifying my thesis—that completer investigations than have hitherto been made would extend the known range of these homologies—are many. Ex hypothesi, since imbecile mongoloids are "confusion products" rather than "pure reversions", not every imbecile mongoloid subjected to anatomical dissection should be expected to reveal definite orangoid homologies. But the clear results of the post-mortem examination made by Drs. Montgomery and David Bruce are important, for the reason that, some years ago, I ventured to predict that such results would be obtained if due investigation were made.

On pp. 263, 264 of the book in question the chief points now relevant are carefully set out. But some amplification may here be made. It has long been stated by comparative anatomists that the peroneus tertius (which tends to maintain the foot in the normal human position) is an exclusively human muscle, not found in the great apes. But, while human anatomists admit that this muscle is sometimes weak, or even absent in human beings, I cannot find that, until recently, any notice has been taken of the *racial* incidence of such abnormality. However, Kurz, of Münster.-i.-W. (for many years Teacher of Anatomy in Shanghai), has shown conclusively, what Stevenson of Peking has told me, that the peroneus tertius is not infrequently absent from the Chinese cadaver, which sometimes, very remarkably, displays a *peroneus parvus*—a muscle hitherto considered peculiar to the orang.

The importance, from my point of view, of these observations, and of Drs. Montgomery and Bruce's confirmation of my inference—that the peroneus tertius should be found absent in many imbecile mongoloids—is reinforced by the lately reported discovery of the peroneus tertius as present, after all, in the gorilla. (I say "reported", for I have not the full reference available.)

In a word, the "peroneus tertius test" of my observed and postulated series of homologies between the mongoloid, the mongolian and the orang is (so far) found to give "positive" results, and the affirmation that these homologies are "superficial only" is (so far) weakened. But the weakness of the ligamentum teres reported by Drs. Montgomery and Bruce is also important. Many years ago I found the ligamentum teres completely absent from the cadaver of a mongoloid baby that I examined at the Belgrave Hospital for Children, as I suspected would be the case.

This structure is normally absent from the orang, but I cannot say that it has often been reported as absent from racial mongolians. But every now and then the head of a femur is found, amongst mongolian peoples, to present a feebly-marked pit, and sometimes this pit is absent.

Whilst grateful for the independent vindication of at least one of my inferences by Drs. Montgomery and Bruce, I would venture to express a double wish, or aspiration: First, that all those who have the opportunity of dissecting "true" imbecile mongoloids would make a point of investigating those structures which, in mongolian races and in orangs, are found to differ in type from that obtaining in negroes and/or in gorillas; and secondly, that systematic anatomists, when they meet, in dissections of the "European"

cadaver, with "abnormalities" which are "normal" to orangs and frequent in mongolians, should pay some attention to the general anthropological "type" and/or the racial origins of the subject.

If the existence of orangoid "abnormalities" amongst European or "white" subjects is found generally to coincide (as I believe it does) with a mongoloid facies, or other characteristic, an important addition to our knowledge will have been made.

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