

pal and intermetatarsal muscles in the sprawling feet of the Cryptobranch; and occasionally the fibres are connected with the other muscles upon the dorsal or plantar aspect of the foot, or upon the palmar aspect of the hand. The most frequent form of variety is apparently presented by the interosseus primus volaris of Henle, which arises from the palmar surface of the first metacarpal bone, and occasionally also from the second, and passes into the dorsal aponeurosis of the thumb.

In the mention which has been frequently made, during the course of these lectures, of the relation between non-variability and utility, and of the circumstance that those muscles are most liable to variety which have the least clearly defined and the least important resultant of their action, I have by no means wished to express any view as to the connexion between the stability or non-variability of a muscle and its utility, or to prejudge any of the questions that may arise out of this subject. I have merely pointed out the fact that the muscles which are most easily spared are the most variable and the most frequently absent; and, further, that the varieties which do occur in muscles are, for the most part, of such a kind as are calculated very little to impair their utility. How this comes to be so is, of course, a part of the great question how that structure which is fittest for its purpose in each region of the animal body comes to be there present—a question to which future researches into the laws of development may furnish some key, but to which, at present, one scarcely sees the direction where an answer is to be sought.

Other questions arise. Seeing that instability and variety are most to be observed in those muscles, on the one hand, which, like the palmaris longus, are of the least importance, and in those, on the other hand, which, like the peroneus tertius and the extensor primi internodii pollicis, are peculiar, or nearly so, to man, may we regard them as evidences of a transitional or unsettled condition of the structures in which they occur? Does, that is to say, variability in a muscle indicate that the muscle is in the process of being stamped in, or of being expunged from, the economy of the particular animal? or does it simply mean that the muscle in question is of sufficient value to have attained a place and to maintain its ground, but is not sufficiently essential to the well working of the body to render itself a fully fixed feature in the developmental processes?

Associated with this question is the further one, whether varieties are more or less frequent in these later times of the now existing human and animal forms, and in the more advanced or more civilised, and, on the whole, better developed members of the human family. The little information at present furnished by the dissections of different races of men and different animals of the same species is insufficient for the formation of a clear opinion upon this point. As far as the information goes, it would perhaps, on the whole, incline us to think that these points do not exert any decided influence upon varieties. I do not think, therefore, that we can base upon varieties any strong argument in favour of progressive change, though they may give evidence of a capability for change and of adaptability to new conditions. Indeed, I do not see my way beyond the limited view that those structures in a given animal condition which are most useful to the body, are most stable; and that, on the whole, those which are least useful, are most unstable, and most liable to variation. I do not think we can infer that any muscles are loosening their hold and disappearing, or that any are becoming more fixed; though we might suppose that, under altered conditions of usefulness, these changes would take place, and that they would most easily take place in the muscles in which a want of developmental persistency is most indicated by their frequent variety.

With regard to the hereditary transmission of muscular varieties, we have not at present any information. It is probable that, like other individual peculiarities, they are transmitted, but that, by reason of intermixture in breeding and of the developmental tendencies to reassert themselves and maintain the better standard of form, they become lost, or rather that any accumulation or excess of them is thus prevented.

An interesting question also suggests itself as to the relation which exists between irregularities in nerves and those of muscles. Upon this point, I have been able to obtain very little information, and what I have obtained does not lead to much result. Commonly, the nerve-supply to the abnormally disposed or supernumerary muscle is not named in the account given of it. That the nerve to a supernumerary muscle is not always derived from the same source as that of the immediately contiguous muscle, from which it may be supposed to be segmented, is shown by the instance of the anconeus internus mentioned in the last lecture as deriving its supply from the ulnar nerve, and that of the additional anterior belly of the digastric muscle mentioned in my first lecture as deriving its supply from the mylo-hyoid nerve. Indeed, our knowledge of nerve-supply to muscles leads to the inference that

convenience of distribution is the influence which would chiefly determine the source in any particular form of irregularity. Neither does it appear from Mr. Quain's very valuable and beautifully illustrated *Commentaries on the Arteries*, in which muscular varieties are occasionally described, that any particular relation is to be traced between them and varieties in the arterial trunks.

There are many other points in connexion with this subject upon which I ought to dilate, but time forbids; and it only remains for me to thank you, Mr. President and gentlemen, for the patience with which you have listened to these too dreary details.

THERAPEUTIC MEMORANDA.

TEETHING CHILDREN.

THE treatment of diarrhoea in teething children is apt to be looked at from a one sided point of view—the quickest way to arrest it. We have diarrhoea—1, from dental irritation; 2, from indigestion caused by over and under feeding; 3, from atmospheric changes. Then, too, the diarrhoea may be of a simple, inflammatory, choleraic, or dysenteric character; each variety demanding a different plan of treatment.

Astringents, as a rule, are to be condemned. The diarrhoea will continue in spite of them, unless other precautions are taken. If the motions contain mucus and are slimy, and there is a trace of blood and redness about the anus, chalk mixture and kino will be of no service, nor will bismuth, acids, or oxide of zinc. The diet is primarily at fault in these cases, and undigested food has passed into the bowels. Warmth and complete rest, with a dose of castor-oil in such cases, is the most appropriate treatment, though the gums may require puncturing, and a grain each of hydrargyrum cum creta and Dover's powder may be necessary. Occasionally a quarter grain of calomel, with a grain of Dover's powder, will be found of great value. Among hospital patients a large number of cases of diarrhoea are attributable to over-suckling, and suckling by mothers in delicate health. The return of the catamenia is no hindrance to their nursing, or even menorrhagia in a mild or severe form. Remove all children suffering from diarrhoea from the breast, and let them have cow's milk diluted with lime water, previously warmed and given in a well rinsed bottle, and you will cure the diarrhoea.

Many children are reared entirely on Swiss milk, and this will now and then agree far better than cow's milk. Sometimes milk, in any form and however pure, will keep up the diarrhoea, and then cold barley water, or cold water thickened with isinglass will be necessary, or thin water arrowroot, to which a few drops of brandy may be added should the child be exhausted. Sometimes a powder containing two or three grains of rhubarb and carbonate of soda will neutralise the acidity which has resulted from the fermentative products of digestion, and set the little patients right with magical quickness. If the evacuations are free from mucus and blood, and there is no pain, a mild mixture of sulphate of magnesia and tincture of rhubarb may be prescribed in some cases with advantage. A drop of ipecacuanha wine in plain water, or mucilage and water, has been recommended, and it will often succeed.

Children are liable to diarrhoea at this season of the year from heat, and the excitement of travelling, and change from healthy country places or the sea-side to the contaminated air of London.

W. H. DAY, M.D.

SMALL PAINFUL TUMOUR CONNECTED WITH THE INTERNAL SAPHENOUS NERVE.

A. N., aged 35, came as an out-patient to Guy's Hospital, July 12th, 1873. She complained of a small, painful swelling, situated about four inches above the inner ankle, and half an inch behind the inner margin of the tibia. This, she stated, had been first noticed at least nine years previously, and had at intervals caused her a good deal of pain. During the last two years she had often suffered intensely from throbbing, burning, and darting pains, at the site of the swelling; and it was on this account that she sought advice. The tumour was sensitive to gentle pressure, but might be firmly squeezed laterally between the finger and thumb without causing pain. When, however, it was directly pressed upon, a sensation was excited along the inner margin of the foot. It was removed by the dresser, without the aid of chloroform. The tumour was about the size of a large pea, white, firm, and opaque, with a depression on one side like a hilum, to which a small filament remained attached. Under the microscope this filament was found to consist of nerve tissue. The tumour itself was composed of fibrous tissue arranged in variously distorted coils and loops, and the vessels pervading it were seen to be surrounded by concentrically arranged fibres.

R. CLEMENT LUCAS, M.B.Lond., F.R.C.S.