

seat of the more important changes which go on during the so-called latent period, and that the definite symptoms which follow are results of these changes conveyed by the medium of the blood-vessels to the several organs and other parts of the body. Taking now into consideration other varieties of disease, such as tubercle and tumors, we still find the lymphatic system connected with their development or spread, for there seems to be but little doubt that pulmonary tubercle has its origin in the inter-alveolar septa and parietes of the bronchioles, in which situations are found embryonic cells and leucocytes in large numbers; and, further, the spread of tubercle follows a lymphatic tract, as in those cases in which a caseous lymphatic gland is the source of generalized tuberculosis; also we know that the mucous membrane of the intestinal tract, a part most closely connected with the lymphatics, is a common seat of tubercle.

As I have stated, it is from the product of a cell's activity, in its turn affecting or spermatizing other cells in its immediate contact by their assimilation of this abnormal product (ordinary lymph being the normal medium of a healthy leucocyte), that all the subsequent changes are probably due; it need not of necessity, in every instance, be the product itself that gains admittance into the body to act as the germ of a disease, but the particular cell manufacturer itself may, in some instances, enter and exert its direct influence, therein, or even the normal leucocytes, or cell elements of the body may, by abnormal irritation or nerve influence, have their physiological characters changed, and the lymph, therefore, in which they grow will, by their assimilative and productive process, be likewise ultimately changed in a corresponding manner. It is by this latter method that I would explain the enlargements of lymphatics from distal irritation, and also the possibility of developing tubercle artificially by other material than the products of tuberculosis, as Sanderson and others have long ago shown. Also this will, I think, in some manner, explain the connection between a sudden shock and subsequent development of disease dependent thereon, such as we now see from railway accidents, and such as I believe to have been the case in a young patient of mine who died of localized meningitis, which gradually developed itself in a previously perfectly healthy person, with no trace whatever of tubercular history, soon after receiving a severe shock by witnessing the accidental death of a young friend whom he was chasing in the dark, and who, forcibly running against a water hydrant on the roadside, received such internal injuries as to cause rapid death. Again, there may be in some cases an hereditary tendency for leucocytes, or cell elements to take on an abnormal growth at a fitting opportunity afforded by ill-health, or the decadence of life, implanted upon them by the parent, just in

the same way as features and peculiarities are implanted on the offspring of man and animals. Also the foregoing ideas do not exclude bacteria as a source of disease, they being equally living cells and bringing forth their own peculiar products. Finally, we know that tumours have a cellular origin, and in one class, at least—viz., the carcinomata—the lymphatics are most intimately connected with their growth and spread, for the alveoli of cancers may be regarded as the dilated origins of the lymphatic system. Whether these can be derived from contagion seems as yet difficult to positively determine, but from cases which have come under my own observation, I am personally inclined to believe it possible. Taking, then, into consideration the above ideas, I desire to maintain that it is to the lymphatic system and cell agency that most, if not all, forms of disease are due.—W. Groom, B.A., M.D. Cantab., etc., *Lancet*.

LACTIC ACID AND DIET IN INFANTILE DIARRHŒA.

Less than two years ago, Hayem, of Paris, presented to the Academy of Medicine in that city a report on the use of lactic acid in the green diarrhœa of children. In the preparation of this work he had been assisted by his interne, Lesage, whose particular share in it had been the development of some pure gelatine cultivations of a germ which Hayem had discovered as being present in the vomited and rectal discharges of this variety of diarrhœa. He said he had established beyond the possibility of a doubt, by clinical experiment, the direct relation of this germ to the green color, and as such he claimed for it the right of discovery. However, soon after his report was published this claim was contested by Damaschino, who said that, three years before, he had discovered this same microbe, had shown its relation so green diarrhœa, and had presented to the Biological Society some micro-photographs of it. Hayem admitted his priority to the microscopical discovery, but still claimed as his own the credit for showing the proper relation of the bacillus to the particular form of diarrhœa. He stated that Damaschino had gone no further than merely to recognize the germ and then cited the experiments which Lesage had made of introducing into the intestinal tract of healthy animals some pure cultivations, and producing by them a characteristic green diarrhœa. He also showed that the discharges were contagious.

The microbes, which are rod-shaped and can exist only in an alkaline medium, show a disposition to bunch themselves into groups, and their number is in direct relation to the severity of the attack. These are, therefore, the first successful attempts to establish the parasitic origin of at