

In health, no doubt, much larger quantities of lactic acid than any given in my cases would be excreted without producing any perceptible disturbance in the bodily functions. The acid would escape by the skin, the kidneys, or, after oxidation, as carbonic acid and water. It cannot be justly argued that the quantities of acid taken by my patients were too small not to have escaped in this way. The conditions under which the drug was given must be borne in mind. In diabetes we have a state of suboxidation very unfavourable to the conversion by oxidation of new compounds; and in Wright's case this was aggravated by the serious pulmonary complications. Associated with these, there was a dry and branny state of the skin highly unfavourable to the elimination of the lactic acid by one of the common channels. Lastly, the well known persistent acidity of the urine in diabetes points to a pre-existing hyperacidity of the fluids. These considerations are, I think, important, as defining the conditions under which the experiments were made—conditions most favourable to the development of the specific effects of the lactic acid. It was the combination of all these which rendered Wright so susceptible to the action of the drug. By the absence of one of them (the lung-complication), and the minor degree of glycosuria, we may probably explain the slighter susceptibility in the second case. The larger doses of acid which Wright was able to take occasionally, towards the close of his stay in the hospital, find an explanation partly in his more careful management of the remedy, partly in an acquired toleration of it, and partly in the great improvement which occurred under treatment in the state of the respiratory organs and in the sugar-excretion.

I refrain for the present from discussing the bearings of my observations on the therapeutics of rheumatism. The effects of the lactic acid on the excretion of sugar will be considered, with other modes of treatment, in a future paper. In this communication, my object has been to lay before the profession facts which have an important bearing on the origin of a common and serious malady. If, by pointing out the nature of the poison of acute rheumatism, they help in the smallest degree to improve therapeutics, they will not have been observed in vain.—*British Medical Journal*.

ON NERVOUS OR SICK-HEADACHES.

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[The pathology of nervous or sick-headache is a defective supply of blood to some portion of brain, owing to contraction of one of the cerebral arteries, probably the middle cerebral. There is generally loss of tone of the cerebro-spinal system, from overwork, anxiety, or some similar cause. The headache is frequently preceded by a glimmering of some portion of the field of vision of one eye. If the patient will lie down this glimmering not unfrequently passes off or becomes much less intense, and the headache

which would have followed is averted or correspondingly modified.]

Let us consider separately the remedial measures to be adopted (1) during the stage of disturbed sensation, (2) during the stage of headache, and (3) during the intervals between the attacks.

1. *During the Stage of Disturbed Sensation.*—In the forms attended with disturbance of vision, you will find that in the same individual the longer this stage lasts, the greater will be the headache; and therefore we must endeavour to shorten it as much as possible. If the condition, then, depend upon deficient supply of blood to a part, such means must be adopted as shall assist and increase the flow of blood to the part; and this can be done in some measure by posture and stimulants. Directly the glimmering appears, the patient should lie down with the head as low as possible, and if the glimmering be on the right or left of the vision, he should lie on the *opposite* side. Let him take at once a full-sized glass of sherry; if at hand, half a bottle of soda water is a useful addition. Champagne would be preferable, being more diffusible; but its administration would often involve a little delay, and at the commencement of an attack it is a great point to save time. A large tablespoonful of brandy diluted may, if the patient prefer it, be substituted for the sherry. If alcoholic stimulants be objected to, or if it be not advisable to recommend them, then a teaspoonful of sal volatile in water may be prescribed instead. If the patient be chilly or his feet cold, the couch should be drawn before the fire and a hot bottle applied to the feet. By these means the heart is enabled to drive the blood with greater force to the brain, and the duration of the vibratory movement is thereby materially lessened. After it has passed off, the patient should lie still for a time, so that the glimmering may not return. This injunction will only be necessary when the headache is slight; if it be severe, attended with much nausea or vomiting, the patient will be little disposed or able to leave the recumbent position. If instead of the disturbance of vision preceding the headache, there be a feeling of depression or irritability, fidgets, &c., the administration of such cerebro-spinal stimulants as henbane, valerian, asafoetida, spirit of chloroform, or ether, will often cut short the attack; ten or fifteen drops of the tincture of henbane with the same quantity of spirit of chloroform, will soothe the nervous irritability in the slighter forms, and may be repeated in three or four hours, if necessary. If there be great mental depression, then valerian or asafoetida should be tried. Stille says: "Nothing is more astonishing in the operation of remedies than the promptness and certainty with which a dose of valerian or asafoetida dispels the gloomy visions of the hypochondriac, calms the hurry and agitation of nervous excitement, allays commencing spasms, and diffuses a soothing calm over the whole being of one who but an hour before was a prey to a thousand morbid sensations and thick-coming fancies of danger, wrong, or loss." I give the preference to valerian, and prescribe from half a drachm to a drachm of the ammoniated tincture. The asafoetida