

apply a lotion constantly, consisting of 3 grains of alum, 3 grains of sulphate of zinc, 3 grains of sulphate of iron, to the ounce of water, and give internally the following mixture: 3 grains of the bromide of potassium, 60 minims of Parrish's chemical food, 10 minims of tincture of digitalis, water to the ounce—three times daily. Pancreatic emulsion is also of use in giving nourishment to the nervous system. Underdone meat and plenty of farinaceous food should be also recommended."

HOSPITAL NOTES AND GLEANINGS.

Remarks on cases of Vertigo, Reeling, and Vomiting, from Ear Disease. Under the care of Dr. HUGHLINGS JACKSON, at the London Hospital.

A man, thirty-one years of age, came to the outpatient room on August 1st, 1872; for attacks of auditory vertigo. The following account of his first attack may serve as a specimen. One day, about three months before his admission, he was, when walking home from work, attacked very suddenly by *swimming in the head*; he would have fallen, had he not sat down; he felt sick, and also very warm. A friend helped him, or he could not have walked home; when he looked at the ground it seemed to be going round. When home he took some carbonate of soda, and after this he vomited. He slept well all that night, and next morning felt well, except for a nasty taste in his mouth. He had several attacks of essentially the same kind afterwards. Such a set of symptoms coming on paroxysmally suggested disease of the ear. It is worth while mentioning that the patient said there was nothing the matter with his hearing; but, oddly enough, it was found that he could not hear at all on the right side; and, before the examination of it, it was plain that the right ear was very defective, as was shown by his promptly turning his head to place his left ear towards those who spoke to him. Twelve months before he had put a piece of tobacco soaked in rum into the right ear, for the relief of toothache. The syringe brought away a large plug of wax, with bits of tobacco. After this he heard very much better, but there was still some deafness. A plug of wax in the external meatus would be a sufficient cause for the attacks the patient had; but he had another attack, although a slight one, after the meatus had been thoroughly cleared out.

Such cases have long been described; they have been described very recently and most ably by Knapp (*Archives of Ophthalmology and Otology*, vol. ii. No. 1). But it is not widely known that ear disease gives a sufficient explanation of the group of grave nervous symptoms mentioned. The tendency is to put down the giddiness, reeling, and vomiting, to disorder of the digestive organs, and especially to some affection of the liver. But in the above reported case and in many others, there is no dyspepsia, and no evidence at all of liver affection. It is not denied that there is a *vertigo a stomacho læso*; but it is asserted that, of the

numerous causes of vertigo, aural disease is a very important one. The "bilious vomiting" is what misleads so very often in diagnosis. Bilious vomiting is, however, of no particular value as evidence of disease of the liver. Bile will always be found in the ejecta after long-continued and urgent vomiting, however caused. And as to vomiting itself, it is a symptom which is found under the most different circumstances; it is found with cerebral tumour, renal calculus, Bright's disease, and, as we see, with aural disease. Those who would not accept the explanation of the dependence of vomiting, reeling, and vertigo on ear disease, are at any rate bound to examine the ears of the patients who suffer those symptoms; if they do, they will be struck by the frequent coincidence of noises in the ear, deafness, etc., with the paroxysmal occurrence of the symptoms mentioned.

The affection of the ear varies in its nature. Meniere, who first described this group of symptoms, supposed the semi-circular canals to be in fault. It is well known that the auditory nerve supplies two parts, the cochlea and the semicircular canals. The cochlea is for hearing, the canals (according to Goltz) for regulating movements of the head and trunk. It is certainly a fact that injury of these canals in lower animals produces disorderly movements, and, as stated, Meniere believed that injury of them by disease in man produces the disorderly movement of reeling (vertigo is rudimentary or incipient disorder of movement). But it is enough if the contents of the semicircular canals be interfered with indirectly; for example, if they be subjected to increased pressure from disease in the tympanic cavity. But, as Knapp says, the deafness shows that the cochlea must be affected as well; at any rate, the accepted theory is that the cochlea only is for hearing (Helmholtz supposes the cochlea to be the part for musical sounds, the semicircular canals for noises). Knapp has observed in some cases of Meniere's disease what he calls a contraction of the field of audition (analogous to contraction of the field of vision); there is, in other words, deafness for certain groups of musical sounds, and this, Knapp considers, is positive proof that the cochlea is implicated in addition to the semicircular canals.

Dr. Hughlings Jackson thinks that the function of the "canal" division of the auditory nerve is for the regulation of intervals of movements (for more automatic movements occurring in the intervals of a succession of voluntary movements). Hence the association with the other division for musical sounds; both divisions are in action in dancing to music. He believes that the symptoms of seasickness may be explained on the supposition that the contents of the semicircular canals are rudely dealt with in the unaccustomed movements of sailing on a rough sea.—*Lancet*, Sept. 6, 1873.

ERGOT IN THE TREATMENT OF NERVOUS DISEASES.

Dr. Daniel Kitchen, Assistant Physician to the New York State Lunatic Asylum, makes, in the