but out of respect to his memory, then only recently dead, he would put it off for three months, &c. Taking into account the fact that a node could be detected on the side of the head, and the possibility that either he had contracted a fresh infection, or that the old poison, not properly eradicated, had been lighted into fresh activity by dissipation and excitement, I determined to try the effect of a mild mercurial course. He was accordingly put upon a combination of Plummer's pill, quinine, and opium, at night—with sarsaparilla and aqua calcis, in the morning. This was continued for six weeks without any action on the system, but with a very decided improvement in his appearance and mental condition. He no longer talked in the foolish, extravagant manner he had done; all his delusions disappeared; his general demeanour became quieter, and his tone more natural. The herpetic eruption, though not entirely eradicated, faded away; and the node lost its prominence, and no longer gave him pain when touched. Satisfied with this improvement, I thought it better to lay aside the treatment, and resort to other remedies which would be free from the objections to which a protracted use of mercury was liable; I am not certain that I acted wisely in this course, for he remains to some extent in an unsatisfactory condition still. He is indolent in his habits—fond of reading, particularly novels, but unwilling to go out or take exercise; he is somewhat bloated in look, with a hepatic tinge of complexion, and is not as attentive to his dress and personal appearance as I am sure he would be were he perfectly recovered. His delusions are all gone, and his mental powers are fair enough, but the cutaneous eruptions, which were never entirely removed, have again become troublesome. I have, therefore, thought it advisable to resume the former treatment, and push it to a greater extent."

On the Use of Belladonna in the Treatment of Epilepsy. By Dr. RAMSKILL, Physician to the Hospital for Epilepsy and Paralysis.

(From a Clinical Lecture, 'Medical Times and Gazette,' Nov. 22, 1862.)

WE give the following summary of Dr. Ramskill's views on the

treatment of epilepsy by belladonna:

"Concerning the treatment by, and action of, belladonna, I will give you, in a short compass, the results of my experience in its use. First, you must not always, nor even usually, look for immediate and palpable beneficial results. The number of fits at first may not lessen in equal times; very frequently the reverse obtains; and you may expect, for three or four weeks after commencing it, even in the most

appropriate cases, a complaint that the patient gets worse; but, after six or eight weeks, if any amelioration occur, it will be decided and progressive. At first, the dose should be very small, and gradually augmented until the pupil shows signs of its action, and the patient complains of both alteration in sight and dryness of throat. Having obtained this result, and maintained it for some weeks, the dose may be gradually diminished; but its effects on the eye and throat are not to be so diminished as to become imperceptible to the patient, but only so far lessened as to cease causing absolute discomfort. The other toxic effects of belladonna are wholly uncalled for. Patients vary greatly, both as to susceptibility in the action of the drug and in other respects. The annoyance as to dry throat and disturbed vision, which, at the expiration of a month, may be said to be unendurable, will now and then cease, the dose being the same, or even slightly increased; but I may remark, these cases always improve most rapidly. I prefer to give the drug in an eighth-of-a-grain dose three times, or only twice, daily, for week; then a quarter of a grain for fourteen days; a third for the next fourteen days, at which time its physiological action will in most cases be manifest. I think it wise to halt at this dose for two months or three months, slightly increasing the dose if the patient shows diminished susceptibility to its influence, decreasing it if the reverse happens, and then gradually dropping it to the quantity first administered. I have given as much as four grains for a dose, but very rarely. I think it imperative to say, that I have never been able to give in epilepsy the large doses which Dr. Fuller has succeeded in administering in other diseases of a convulsive character. In this remark I am supported by the authority of my colleague, Dr. Brown-Séquard, who has arrived at the same conclusion. One objection to the use of belladonna, when you cannot see your patient at regular intervals, arises from its uncertainty of strength and corresponding difference of action. To those who wish to use a preparation of uniform strength, having similar and, in some cases, improved properties of belladonna, the salts of atropia are now easily procurable. The best of these is the valerianate of atropia; the commencing dose, a hundred-andtwentieth of a grain. Hitherto, I have preferred belladonna, having had a strong desire to find what it could, and, if possible, what it could not, accomplish in the treatment of epilepsy. It is right to say there are different methods of administering belladonna. Trousseau gives a centigramme of the extract and an equal quantity of the powder of belladonna for the first month, in the evening of each day. He gives it at this time because of the frequent nocturnal character of epilepsy, and partly because of the disagreeable effect on the sight and throat during its early administration. During the second month he gives two such pills at the same time, and during the third month three pills. If, at the end of six or nine months, the VOL. IX.

frequency of the fits is decreased, he increases the dose. He asserts that, of 120 patients, he has cured twenty. A most important question now arises—Do we know anything of the nature of the action of belladonna beyond the empirical results obtained in treatment? If a drop of solution of belladonna or atropine be dropped on the foot of a frog properly prepared, and fixed on the field of a microscope, the blood-vessels will be seen to contract, and they will remain in this condition for a considerable time. For comparing the action of opium, a solution of the latter, similarly prepared, was applied to another part, and the vessels were immediately dilated. Now, belladonna, internally administered in medicinal doses, causes, first, dilatation of pupil, with dimness of vision; secondly, dryness of throat and difficulty of swallowing; thirdly, increased tone of involuntary muscle; fourthly, it relaxes the bowels, and cures incontinence of urine, arising from weak sphincter vesicæ.

"As dilatation of pupil is one of the earliest phenomena, let us see

if we can account for it.

"We can now understand the nature of the action of belladonna in producing dilatation of the pupil; and from its effect on the iris we can deduce a strong probability of the nature of its action in epilepsy. It is a stimulant to the sympathetic, the motor nerve of the blood-vessels, and it is only on this supposition we can account

for the other physiological effects of the drug.

"I would add, although experience shows belladonna is one of the most powerful contractors of the blood-vessels of the spinal cord and its membranes, it has a comparatively feeble action on those of the brain. I speak of its administration in medicine—not in poisonous or fatal doses. Hence arises its extraordinary adaptability in epilepsy, where we have dilatations of vessels or turgescence in the medulla and its neighbourhood; of its still more marked efficacy in inflammation, and congestion of the spinal cord and its membranes; as well as of its comparative inutility (administered alone) in those cases of morbid activity of brain, connected, as we think, with more or less congestion of gray matter, in some forms of incipient insanity, associated with sleeplessness and suicidal tendency, as well as in some other cerebral diseases."

Hydrocyanic Acid in the treatment of Insanity. By KENNETH McLeod, M.D. Edin., Assistant Medical Officer of the Durham Lunatic Asylum, Sedgefield.

('Medical Times and Gazette,' March 14, 21, and 28, 1863.)

Dr. McLeod publishes in the 'Medical Times' a series of papers on the employment of hydrocyanic acid in the treatment of insanity,