

ascertain the existence of any tenderness in the supra-orbital region, such as is described by Head⁽¹⁾ in true angina pectoris.

The pain was relieved by trinitrine in solution.

The patient has since had one attack of lesser severity, which occurred on April 3rd, and was brought on by excitement. In this attack the pain and cutaneous hyperalgesia were similar in character, course, and distribution to the first attack; and the pain in this instance was relieved by an ammonia and ether draught, which appeared to be as efficacious as trinitrine in its effect.

The heart has been repeatedly examined, and, beyond the hypertrophy, there appears to be no lesion. The second sound at the base is invariably accentuated to some degree.

Her urine is of a normal specific gravity, and contains no albumen, sugar, or excess of phosphates.

The neurotic temperament of the patient, the long duration of the pain, and the restlessness during the pain, together with the absence of signs of arterio-sclerosis and heart disease, make the diagnosis of vasomotor angina from that of angina pectoris gravior.

That angina pectoris occurs in families with a history of insanity or epilepsy was remarked by Eulenburg⁽²⁾, who was one of the first to class disturbances of the vaso-motor nervous system as a variety of cardiac neurosis causing angina.

Occurring in a patient the subject of epilepsy, the condition is interesting inasmuch as it suggests that the attack of angina pectoris might be due to a disturbance of the cells of the vaso-motor centre of the medulla oblongata similar to the disturbance of the cells in the cerebral cortex, giving rise to an epileptic fit.

(¹) *Brain*, vol. xix.—(²) *Allbutt's System of Medicine*, vol. vi.

A Note on Veronal as a Hypnotic and Sedative in Mental Affections. By H. DE M. ALEXANDER, M.D.Edin., Senior Assistant Physician, Royal Asylum, Aberdeen.

IN appearance veronal resembles trional; it is odourless, practically tasteless, and readily soluble in hot fluids. Chemically it is dimethyl-malonyl-urea: but though related to urea, it is not diuretic.⁽¹⁾

We have used this drug for some months in all forms of mental disease with very satisfactory results, and from our experience of veronal we have made the following observations:

1. For the insomnia of acute melancholia we have discarded

all other hypnotics in favour of veronal. It produces a natural sleep, does not disturb the appetite, and has no effect on the bodily weight. The dose requires regulating in much the same way as one would regulate the dose of a laxative in treating a case of constipation. An average dose in melancholia is from 8 to 15 grains, and we have not found it necessary to exceed the latter dose. If after a sleep of, say, eight hours the patient awakes still very sleepy, we cut off a grain or more from the succeeding dose.

It is essential to combat the insomnia of melancholia and more especially so at the beginning of the disease, as it is this symptom which tends to aggravate what Kraepelin has designated the "apprehensive depression" so characteristic of the affection. Paraldehyde, though an effectual hypnotic in melancholia, is a most nauseating drug, and we believe that in addition to its liability to disturb the appetite it tends to increase rather than diminish the apprehensiveness of the melancholic. Patients who have had both drugs administered to them much prefer veronal, and more than one patient has remarked on the "cheery feeling" with which he has awakened after a good night's sleep from veronal. Dr. Weiner (*) has observed that the sleep is indistinguishable from natural sleep, and the patient awakes feeling refreshed, and frequently speaking with enthusiasm.

The languor which may ensue after a large dose of veronal has the appearance of a true sleepiness and is quite different from the lassitude associated with a large dose of sulphonal.

2. To control the excitement of acute mania, we are in the habit of giving veronal in a dose of 15 grains, with an additional 10 to 15 grains after the lapse of an hour if no improvement results from the initial dose. As a rule, in cases where the motor excitement is long continued the dosage has to be gradually increased in order to be effectual, but we have not found it necessary to exceed an initial dose of 25 grains. The sedative effect of the drug is increased by alternating it with sulphonal or trional. The freedom of veronal from deleterious effects on the digestion and bodily weight (†) is of great advantage in cases of mania, especially where the drug has to be given over long periods.

3. In the motor excitement of general paralysis and *delirium tremens* the beneficial effect of veronal is most marked.

4. For the persistent restlessness of senile mania veronal is superior to sulphonal, and in this affection a small dose given three times a day is more potent than an ordinary dose given at one period.

5. Veronal is also efficacious in chronic cases where an exacerbation of excitement is directly due to the subjective vividness of a sensory hallucination.

6. In any case of insanity where a sedative is required, and where the patient refuses all manner of food necessitating the employment of the feeding-tube, veronal has the advantage of being much more easily administered through the tube than either sulphonal or trional.

7. We have observed muscular inco-ordination of the extremities in two cases of very acute mania after 50 grains of the drug had been administered during the course of two days. The inco-ordination was quite as marked as the same symptom sometimes observed after the administration of a large dose of sulphonal. It disappeared rapidly on the drug being discontinued, and was not associated with any alteration of the pulse or in the general appearance of the patient. It also differed from the inco-ordination associated with sulphonal in that there was not so much mental retardation accompanying it.

8. The urine has on all occasions presented no abnormality.

9. A roseola-like eruption was observed on the face and chest of one case after the initial dose. This symptom is apparently an idiosyncrasy, as it reappeared in this case whenever veronal was administered.

10. Veronal is reported to be a safe drug, and we administered it with salutary effect to a man suffering from the extreme restlessness associated with *delirium tremens* complicated with pulmonary congestion, a dilated heart, and marked multiple neuritis.

11. The chief objection to the use of veronal is its expense.

(¹) A. C. Jordan, *Brit. Med. Journ.*, March 5th, 1904.—(²) *Wien. med. Presse*, No. 24, 1903.—(³) *Annual Report*, E. Merck., 1903, p. 185.
