THE THERAPEUTIC VALUE OF VALERIAN.*

BY

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THE newer claims of the various forms of psychotherapy for the treatment of the neuroses are likely to cause the older methods to fall into disuse, even into contempt. Like Macbeth, the psychotherapist would "throw physic to the dogs," and it is with the view of saying something in favour of valerian therapy—perhaps the oldest of all the methods of treating the neuroses—that I venture to contribute this short paper.

In 1904 when a student in the materia medica class at Edinburgh University I remember that Sir Thomas Fraser stated that the therapeutic value of valerian lay chiefly in its smell, and that any other effect was due to its carminative action. On starting in general practice, in which I did my own dispensing, I used valerian very sparingly at first because its valuable characteristic (smell) might have repelled patients rather than attracted them. When I did use the drug it was only in those cases where there seemed to be some functional disturbance for which no other drug was indicated. In such cases valerian was given to reinforce suggestion treatment through the olfactory sense.

In spite of a few mistakes in administering the drug I was greatly impressed with the success of valerian therapy in a large number of cases of the minor neuroses. The drug was given in the form of the ammoniated tincture of valerian combined with 10-grain doses of potassium bromide. I soon found that the bromide, while adjuvant, was not the essential part of the therapeutic value of the mixture, for if the bromide was given without the valerian the result was less successful or was even a failure. I attributed the action of the valerian to its effect in reinforcing optimistic suggestion through the sense of smell—a psychic rather than a physical or chemical action. Dr. Dan McKenzie, in his book on "aromatics," shows how important is the sense of smell in awakening dormant memories of past experience, and Mr. John H. Kenneth of Edinburgh University had an interesting note in the *British Medical Journal*, June 3rd, 1922 (p. 904), on "osmics and psycho-analysis." Mr. Kenneth thought that osmics—the science of smell—might be of use in psycho-therapeutic practice. He wrote:

"In the course of experiments on olfactory fatigue and on associations and effects evoked by different smells, the remarkable visual and (to a lesser degree) auditory recollections of scenes and events, in some cases of more than twenty years ago, hitherto forming part of unconscious memory, were extremely vivid, as expected. The same olfactory stimulus may, of course, release varied associations or groups of associations in minute detail. An emotional disturbance may be produced, and in the presence of a complex a marked resistance is noticeable, the smell stimulus being quite as potent as a word stimulus. Of the odorous substances experimented with, musk, otto of roses, tonka bean (cumarin), and cedar-wood oil gave the most vivid results, while resistances were encountered in certain cases with musk, clove oil, and asafoetida."

These observations of Mr. Kenneth rather confirmed me in the view that the action of valerian was chiefly psychical. It produced an olfactory stimulus, which in time caused a break up—if I may use the term—of complexes associated with fear and anxiety of external circumstances, or of apprehension of the functional working of the organs of the body—in other words, hypochondriasts.

Further experience in the use of valerian, especially the constant good results obtained when given in the type of case for which it seemed indicated, made me think that valerian had a more definite action due to some chemical factor rather than to an indirect psychical stimulus.

Let me give in general terms the type of case in which I think valerian is indicated. The symptoms usually described are: palpitation, something rising in the throat, flatulent eructations, rumbling of the bowels, sense of pressure on the vertex, desire to be alone, and lack of interest in home and social surroundings, fear of something going to happen, restless sleep accompanied by disturbing dreams, lack of mental concentration, and general depression, so marked at times that thoughts of suicide creep into the mind—in other words, the first stage of melancholia.

Women are more affected than men, but I will give an illustrative case which occurred recently in my own practice.

The patient, a man aged 54, was organically sound; he was a confidential clerk in an important firm of solicitors dealing with the administration of large estates. He had nearly all the symptoms described above, and became totally unfit for his work. His firm, appreciative of the value of his services, sent him to a leading consultant, who, after a thorough overhaul, advised a two months' holiday at the seaside, and prescribed glycerophosphates and other so-called nerve tonics to be taken regularly. On his return from his holiday by the seaside he found himself as bad as ever, and could not concentrate on his work.

When he came to see me he described the misery of the seaside holiday. Each vacant day was succeeded by another one, allowing him time to brood over his troubles. I advised him to continue at work, but only to do such work as to maintain his interest, and to avoid the mental fatigue involved in calculations. I gave him the ammoniated tincture of valerian in half-drachm doses and $\frac{7}{8}$ grains of potassium bromide. In three weeks his confidence had returned, and after six weeks he could undertake full work involving intense mental concentration in complicated problems of finance. During that period he had taken 12 oz. of the ammoniated tincture of valerian. He has had one or two tendencies to relapse since, but he returns for his smelly mixture to keep him up to the mark.

Similar cases could be cited, but they would be wearisome; suffice it to say that I am convinced that there is enough evidence to show that valerian does contain some definite property which has a decided and specific beneficial action on the higher levels—and perhaps also on the lower—of the central nervous system.

Continental pharmacologists have given more attention to valerian than their British colleagues, but even on the Continent research has been very limited, and the literature, such as it is, is not of recent date. The best account I have been able to find is an article in the *Pharmaceutical Journal* of November 19th, 1921 (p. 402), by Dr. N. Smolaka of the Ministry of Health, Belgrade, entitled "The history and therapeutic properties of valerian." In this article Dr. Smolaka described three experiments on frogs carried out by Professor Wicki at the Pharmacological Institute at Geneva. The frogs were immersed in 1 per cent., 2 per cent., and 3 per cent. solutions of the liquid extract of valerian, and observations made of their behaviour. Dr. Smolaka concludes that his experiments prove that the extract prepared and made by him was of high physiological activity and paralysed the brain of the frog in small concentration. He described the drug as an antispasmodic, because it depressed psychical action.

These experiments on the frog do not help us very much to understand the action of valerian on the human subject; all they do is to show that valerian has a definite action on the nervous system of the frog due to some chemical factor in the drug. It is stated by Cushny that valerian contains borneol, or Borneo camphor, and numerous esters of acetic, formic, and valerianic acids. Is it possible that this borneol is the important active principle in valerian?

The action of camphor in depressing the brain and spinal cord is well known, but whether the allied borneol is the valuable active agent is a question to be determined by pharmacologists. All I have tried to show is that valerian is a very valuable drug in general practice, capable of restoring mental efficiency and alleviating mental misery. It has also the advantage of having no deleterious properties such as are associated with the habit-forming narcotic series of drugs. It seems to be a drug well worthy of further research into its properties and action on the nervous system.

* A paper read in the Section of Therapeutics and Pharmacology at the Annual Meeting of the British Medical Association at Cardiff, 1928.