COCAINE: WHAT WAS ITS INFLUENCE IN THE FOLLOWING CASE?

TO THE EDITOR OF THE JOURNAL:

Dear Sir.—With the view of increasing the amount of clinical evidence as to the value and effects of cocaine, I submit the following history of a case treated in the Missouri State Lunatic Asylum No. 2:

Esther C., admitted October 21, 1884; aged 39 years, married 20 years, mother of four children, youngest 2½ years old. She was a strong, healthy woman until four years after marriage, about which time she became affected with some uterine trouble, and was never strong and well afterwards. She had never any acute serious illness. Eighteen months previous to admission the first symptoms of mental derangement were observed, manifested by neglect of maternal and household duties, and by frequent attempts to leave home alone, by day and night. She became despondent and melancholy, feared injury and death, destroyed her clothing and the furniture, did not eat or sleep much, had periodical attacks of excitement and violence, and threatened to kill herself and baby. She had delusions in regard to religion. There was no insane heredity, but her mother was an exceedingly nervous woman. Her expression was anxious and distressed, and she was restless and discontented.

The thoracic and abdominal organs were sound, and performed their functions very well. Cervical and corporeal endometritis existed, associated with profuse vaginal leucorrhœa. She was greatly depressed and profoundly melancholic, constantly lamenting and complaining that she was the most miserable of beings, and expressing a desire to change her surroundings where sympathy could not reach so unworthy and wretched an object. She was removed from the Asylum by her husband in June, 1885, having remained under treatment for six months. She was greatly improved, both in physical and mental condition, when removed.

In September, three months after her removal, she was re-admitted in a much more deplorable melancholic state than when first she came under observation. She had attempted suicide, and was completely inconsolable. Her physical condition was low, the uterine disorder and leucorrhœa had re-appeared, and her second state was altogether worse than the first. On November 2 the use of hypodermic injections of hydrochlorate of cocaine was commenced, Dr. A. P. Busey administering one grain at 9 A.M., and the same quantity at 4 P.M. This was continued for thirteen successive days. At this period her physical condition had improved, she was stronger and better nourished, her appetite was better, and she slept better; but her melancholy was as profound and her lamentations as distressing as usual. At this time there appeared several irritable boils upon the face, scalp and neck, which was the only indication of systemic disorder.

The cocaine had a pleasant effect upon her, always acting as a cerebral and nervous stimulant, and it exhilarated and enlivened her for from one-half to one hour after the administration. She was so pleased

with its effects as to request its administration with great earnestness. It always increased the pulsations of the heart from twenty to twenty-five beats, and the sphygmograph uniformly indicated very considerable increase of arterial tension. It did not produce nausea or loss of appetite, nor did it produce uniformly marked paleness of the surface, which is one of its chief primary characteristic effects. Nothing indicating illness was noted at the time when the last evening portion was injected, but during the night she complained of pain in her head, especially on the left side, and she became restless and sleepless. On the following morning the temperature rapidly increased, and the pulse also increased in frequency and force, indicating serious constitutional disturbance. The surface of the extremities was pale and cool. The face was discolored, bluish, turgid and puffed. The eyeballs were perceptibly swollen, the eyes dull, pupils motionless, and the vessels of the ball filled with blood. The left side of face was more discolored than the right. There was a continuation of the severe pain in the head, and articulation and vision were perceptibly impaired. She could not be aroused to give an intelligent reply to questions. Delirium soon supervened. The discoloration and swelling of the face continued. The circulation of the extremities diminished. The balls of the eyes rapidly protruded, and within a few hours they had protruded so far that the lids could not cover them. The balls felt hard, dense and resisting. Violent delirium passed into profound coma, which terminated fatally within thirty hours from the time the last injection was given. Unfortunately, no autopsy could be obtained.

The importance of this subject requires no apology for giving minute details of the case. The following conclusions have been arrived at from the observed effects of cocaine, which has been administered very extensively to the insane within the past five or six months:

1. It is an agent possessed of great potency. It acts primarily with great power and celerity upon the cerebral and spinal nervous system, and secondarily upon the heart and vascular system.

2. From its potency and rapidity of action it is liable to initiate organic lesions and functional disturbances which are uncontrollable. It is not uniform in its action, and therefore is an uncertain agent.

3. Its effects are too transient and unstable to become a reliable and efficient remedy in constitutional or organic diseases. The aphrodisiac effects attributed to it have not been observed, neither have the intense nausea and inability to vomit been observed. Its permanent beneficial effects in melancholia and allied affections are not established facts, in the writer's opinion.

4. As it is an agent of great potency, and as it is under trial to determine its limits of usefulness and danger, it should be prescribed with increasing precaution and discretion.

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