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HOSPITAL REPORTS.

Westminster Hospital.

ON THE TREATMENT OF AFFECTIONS OF THE NERVOUS SYSTEM WITH OXIDE OF ZINC.

By W. MARCET, M.D., Assistant Physician.

THE following account of some cases admitted lately at the Westminster Hospital shew the powerful effects of oxide of zinc as a tonic and antispasmodic in diseases where the nervous system appears chiefly affected. I am now engaged with an investigation into the physiological properties of this medical agent, especially with the view of determining its action on the constituents of the urine, and hope to obtain some interesting and practical results.

CASE I. Henry Jones, aged 35 years, a pork butcher, admitted as an out-patient on the 26th of May. Usually enjoys a good health, but has a nervous temperament. About eight years ago he was suddenly seized with epileptic fits and occasional hallucinations, each fit lasting an hour, and returning every month. He cannot ascribe them to anything but working in low damp cellars, where he minces meat, occasionally in a putrid state. The fits gradually increased in number, and after two or three months occurred as often as five or six times daily, each attack lasting about three minutes. In this state he was admitted as an out-patient at the Westminster Hospital. As to the nature of these fits, the patient feels when they occur as if falling asleep, and becomes quite unconscious. His brother describes the fits as being attended with congestion of the face, slight foaming at the mouth, and spasmodic contractions of the arms and legs, which symptoms suffice to shew the nature of the disease. It is remarkable that the patient was much troubled with headache before being subject to these fits; but since he has fallen ill, the headache has quite disappeared. He always sleeps well, but has occasionally fits while in bed. There is no pain in the spinal cord, no numbness in the extremities; noises sometimes heard in the ears, and a weak sight; is very subject to vertigo. Appetite always very good; bowels regular; digestion healthy; seldom or never feels sick. Passes water quite freely; it is in general of a pale colour. The diet he takes is good; he was in the habit of drinking from three pints to two quarts of beer daily, but now he never takes more than one pint.

July 6th. Since admission on the 26th of May, he has been treated with oxide of zinc, beginning with one grain twice a day. On May 30th, a blister was applied behind the neck. On the 27th and 28th of June, the treatment was interrupted, when he was ordered to take twice a day two pills, each containing one grain and a half of assafoetida and as much aloes; and on the 29th, seven grains of oxide of zinc were prescribed. The fits have now (6th July) gradually diminished in number and duration; none have occurred for the last five days. He feels much less giddy, enjoys a greater flow of spirits, and has returned to work as a fishmonger.

July 21st. No fits having occurred since the last date, the pills were omitted, with the view of ascertaining whether the morbid symptoms would reappear.

July 25th. Had five fits on the 24th; feels very sleepy and giddy; appetite still good; slept soundly last night.

Ordered to resume the seven grains of oxide of zinc twice a day, which had been discontinued on the 21st.

August 29th. No return of fits. The zinc treatment was interrupted.

Sept. 1st. The fits returned twice on the 29th, and once on the 31st August. To take nine grains of oxide of zinc twice a day.

Sept. 3rd. No fits since the 31st August. Is ordered to continue the pills as prescribed on the 1st.

Sept. 7th. No return of fits. The dose is increased to ten grains.

Sept. 13th. Had one fit to-day. Is directed to take eleven grains of oxide of zinc twice a day.

Sept. 18th. No return of fits. The dose is increased to twelve grains.

Sept. 21st. Is the same as on the 18th. Is ordered to take thirteen grains of oxide of zinc twice a day.

October 10th. Had one slight fit to day, the first since the 13th of September, or nearly one month. To continue the same dose. Thirteen grains of oxide of zinc had been taken twice a day since the 21st of September.

October 11th. Had another slight fit. Is directed to take a cold shower bath every morning, and to continue the oxide of zinc as previously.

October 17th. Had three very weak fits to-day, when he hardly lost consciousness.

October 19th. Is ordered to stop the shower bath.

October 24th. No fits since the 17th. Is doing better.

November 3rd. No return of the fits. Is taking sixteen grains of oxide of zinc twice a day. There is no physiological symptom exhibited by the medicament.

This case is still under treatment.

CASE II. James King, aged 70 years, admitted as an out-patient on the 20th July. Has a nervous temperament; was married three times, and had twenty-seven children; the last, a female child, was born three years ago. Complains for the last month of very great giddiness; and is subject to numbness in the fingers. Is much troubled by extraordinary ideas, as fear from sudden death, desire of self-destruction, etc. There is no headache; he sleeps well at night; has a pretty good appetite; bowels regular; tongue covered with a white fur.

This patient was treated with oxide of zinc, prescribed in the form of pills, as in the previous case.

From the 23rd of June to the 4th of July, he took one grain twice a day; from the 4th of July to 13th, the dose was two grains twice a day; and from the 13th to the 21st, he took three grains morning and evening.

July 21st. Bowels rather constipated, and were relieved the last week by some castor oil. Has greatly improved, enjoys his food much better, and feels much stronger; the giddiness has entirely disappeared; there is no headache; and the patient only suffers from slight rheumatic pains.

From the 21st of July to the 8th of August, the patient continued taking three grains of oxide of zinc twice a day; the dose was then increased to four grains; and on the 22nd, being perfectly free from nervous feelings, from his desire of self-destruction and other symptoms, he was discharged cured.

CASE III. Julia Harris, aged 11, admitted as an out-patient at the Westminster Hospital on the 24th of July. Three weeks before admission, she lost the use of the right arm and leg; the arm became seized with involuntary motions; and when, on admission, I kept her hand forcibly at rest, she could hardly grasp my fingers. I employed this method at every visit, to test the degree of the paralysis,

The right leg has now become nearly quite powerless, and she can hardly walk. Complaints of great headache; speech very difficult and indistinct. No affection of the sight, no noises perceived in the ears. Appetite very bad from the beginning. The only cause for the appearance of the above symptoms was rheumatic fever, which she suffered from for three weeks just before the chorea appeared. Never noticed any worms in excrements.

On the 25th, she began taking one grain of oxide of zinc morning and evening; but, on the 28th, no improvement being perceptible, the pills were omitted, and she was ordered one grain of blue pill, and one-fifth of a grain of opium, twice a day. On the 1st of August, the morbid symptoms had rather increased; the oxide of zinc was then resumed instead of the mercury pills, which she continued to take regularly. From August 4th till September 5th, one grain of oxide of zinc was taken twice daily. On the 4th of August and 2nd of September, a small blister was also applied behind the neck, for the purpose of diminishing the headache. She took half an ounce of castor oil on the 5th of September, on which day the dose of oxide of zinc was increased to two grains. On the 12th, castor oil was again prescribed, to relieve the bowels. The 15th, she was directed to take three grains of oxide of zinc twice daily, and two drachms of cod-liver oil three times a day, besides the pills. (The patient only took two drachms of cod-liver oil once a day, by mistake, until the 21st.) I may observe, that the patient had at this period nearly quite recovered. The chorea was hardly if at all perceptible; she could walk quite straight, and without difficulty; and the power of the hand was gradually increasing; so that it is impossible to attribute the recovery in this case to the cod-liver oil: still it appeared to hasten the cure, and may be useful in cases similar to this one, as an addition to the oxide of zinc. On the 18th, the dose of oxide of zinc was increased to four grains, which she took twice a day, besides the cod-liver oil, until the 21st. She was now quite well; the pills were omitted, and the cod-liver oil continued until the 13th of October, as she had considerably fallen in flesh. On this day she was dismissed, cured.

CASE IV. Hannah Watts, aged 14, admitted on the 3rd of August. Has a healthy constitution, but suffers since the 27th of July from epileptic fits. During the attack, she is convulsed, and screams; becomes red in the face; grinds her teeth a great deal, and foams a little at the mouth. There is no cause to account for these fits, except perhaps an accident the girl met with when only eight years old, on which occasion she fell from a barge on the gravel, and received a severe wound on the left side of the scalp. Her sleep is very restless; she talks a great deal in her dreams, and attempts to get up whilst asleep. She complains much of headache, and, just before a fit, feels distinctly the aura epileptica. The fit was brought on first by a reprimand from her mistress, and continued occurring once daily until the 3rd of August. She had not been subject to epilepsy previous to the 27th of July, but had now and then what she calls a fainting fit, especially in summer. On the 3rd of August, the 5th, the 7th, the 10th, the 14th, and the 16th, she had one fit; from which date she continued to mend in all her symptoms, the fits not recurring; and on the 13th of October she was dismissed, apparently cured.

OBSERVATIONS. Oxide of zinc is one of the numerous tonics recommended for the treatment of nervous disorders; it has proved very useful in the hands of Dr. Herpin, of Geneva, and is considered as an important medical agent. Still, I am not aware that zinc, in form of oxide, has been found so efficacious in this country as abroad for the treatment of nervous affections; and my hospital practice offering a good opportunity of testing the value of this remedy, I have given the medicament in many cases of nervous affections. About nine out of every ten patients submitted to this treatment were either cured or remarkably relieved.

I have not yet employed this substance in a number of cases sufficiently extensive to allow me to state precisely

where oxide of zinc ought to be administered or avoided, but from my observations it appears:—

1st. That the medicament is useful where giddiness, nervous weakness of sight and hearing, headache, and other symptoms of this kind are prominent; also in epilepsy, in which case it appears to possess peculiar medical properties; in chorea, and for the treatment of general nervous debility.

2nd. That oxide of zinc can be administered without the slightest fear of danger, and that the only inconvenient symptoms it may produce are sickness and constipation.

3rd. That the dose of this preparation may be increased gradually to from fifteen to thirty grains and upwards daily.

I continue to avail myself of every opportunity to test the medical properties of oxide of zinc, and trust it will be found useful by other members of the medical profession.

St. Mary's Hospital.

CASES OF LICHEN AND PRURIGO: WITH REMARKS.

By C. HANDFIELD JONES, M.B. Cantab., F.R.S., Assistant-Physician to St. Mary's Hospital.

CASE I. Eliza B., aged 37, female, married, admitted Sept. 18th; of healthy aspect, rather tall. Has an eruption on trunk, and left arm, and neck, which approaches near to the character of lichen agrius. There is not at present much itching, but it is dreadful when she gets warm in bed at night. It comes on in the hot months, and goes away in the cold completely. She has had it seven years; it has lasted for about five weeks on the present occasion. Is otherwise in pretty good health, except that food lies heavy. The eruption is aggravated if she eats food that is not easily digestible. No cause known for disorder. Skin cool; pulse weak; bowels costive; catamenia quite regular.

R Hydr. cum cretâ, pulv. Doveri, aa gr. ij. Bis die.

R Acidi hydrocy. dil. ℥v; tinct. nucis vomicæ ℥x; sod. carb. gr. v; inf. gent. co. ʒi. Ter die.

R Ung. hydr. nitratis ʒiiss; adipis 3vss. M. Fiat unguentum.

Diet of boiled fish, puddings, milk.

Oct. 12th. Has been improving pretty steadily, although the eruption reappears, and then recedes again. Feels a great deal better inwardly; has more appetite and strength. She finds the ointment allays the itching. Pt. in mist. c. liq. pot. arsenit. miv in sing. dos. Pt. in ung. and in pulv. o. n.

Oct. 19th. Is very much better; very hungry; gums are slightly sore.

Nov. 13th. Is now well, the powder having been taken every other night only since last date. Mouth not sore. Some stains left by the lichen. Eats food well; it does not lie heavy. The eruption usually ceases about this time of the year, but she feels much better in herself for the treatment.

Near the end of the following May, she returned to me again, suffering with the same disorder, which prevented her from having any rest at night. It was aggravated also by the heat of the fire, and the laundry work in which she was occupied. Under hydr. bichl. gr. 1-10, dec. sarzæ ʒi, ter die, and the following ointment—

R Ung. hydr. ʒij; cerati plumbi acet. ʒi; adipis 3vij. M.—she obtained great relief.

June 23rd. She reports that she can sleep comfortably now; but without the medicine she used to itch all over in bed, and could not rest at all. She says she is sure to have the eruption during the hot weather.

Markworthy features in this case are the intimate dependence of the disorder upon heat; its control by mercury cautiously administered, and the improvement of the general health by the same means. On the first occasion, arsenic appeared serviceable, after the force of the diseased action had been subdued.