

paralysis is not necessarily gummatus, but may be secondary to gummata as well as to other causes. The lesion is a chronic meningo-encephalitis resulting in atrophy of the cortex, or encephalo-malacia. Perhaps the division of general paralysis into an idiopathic and a secondary variety, as with epilepsy, would clear up the confusion. The characteristics of the dementia secondary to syphilis, as opposed to the idiopathic general paralysis of the insane, are as follows: Precedent syphilis; precedent headache, continuous, intense, worse at night; precedent or coexistent hemiplegia, aphasia, or paralyzes of cranial or other nerves, having the irregular characteristics of development and course already described. Greater variety and more fantastic combination or sequence of symptoms. Absence or inconspicuousness of the delusions of grandeur and of the tremors of face and tongue. And, finally, the beneficial effects of thorough antisiphilitic treatment upon many of the symptoms.

PROGNOSIS AND TREATMENT.

As prognosis in cerebral syphilis depends largely upon treatment these two will be considered together. Gummatus lesions are favorably influenced by iodide and mercury; secondary lesions are not. Treatment of the gummatus lesion is so effective that a case may present the very gravest symptoms of severe brain disease—delirium, convulsions, coma—and yet get well. Whereas treatment of the secondary changes is ineffective, though these are usually associated with syphilitic lesions susceptible to iodide. Prognosis, therefore, depends not so much upon the extent and situation of the syphilitic lesions as upon their age at the beginning of treatment and consequently the nature and extent of the secondary changes which they have set up. Earliness of treatment, then, is a most important consideration in prognosis. And as this depends upon the earliness of diagnosis the importance of making a correct diagnosis at the earliest possible period is supreme. As these patients are at any time liable to become blind, or to die in an epileptiform attack, or of hemorrhage from a gummatus artery, it is important also to get them under the influence of antisiphilitic drugs as soon as possible. For this reason mercury should be given as well as iodide, and both in doses rapidly increased to the limit of toleration. The mercury may be given in the form of mercurial ointment by inunction, in doses of half a drachm to a drachm or more every night, unless toxic symptoms appear; and at the same time iodide, beginning with thirty drops of the saturated solution a day, and increasing at first rather slowly to a drachm, and later, if toxic symptoms are not conspicuous, increasing very rapidly. If the patient is vomiting, the iodide may be given by rectum. Two hundred grains a day by mouth is not at all an extraordinary dose. Ten grains, three times a day, constitutes neither a reliable therapeutic test nor efficient treatment.

The practical points of this paper are the importance of the early diagnosis of cerebral syphilis, the importance of early treatment, treatment by mercury and iodide together, and both increased as rapidly as possible to the limit of toleration.

It is stated that the Emperor of Abyssinia has appointed a young Swiss woman as physician to his household. One can hardly realize that such a triumph of evolution is possible in that ancient land.

AN EXAMINATION OF FORTY-THREE PUBLISHED CASES OF OPIUM OR MORPHINE POISONING.¹

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Occasion.—The greater number were suicidal; a few were accidental; none were reported as homicidal.

Sex and Age.—Thirty-four were adults; nine were children. Of the adults 24 were male, 10 were female. Of the children seven were eighteen months or less (one was fifty hours; one was five weeks); two were over eighteen months.

Death or Recovery.—Thirty-six recovered; seven died. Of the deaths one was a boy; six were adults: one was a female; six were males. All of the cases but two had treatment; of the two, one was found dead in the morning; one died almost immediately.

Of the seven deaths, three seemed to be solely from the effects of the drug; one, complicated by previous medicinal doses of chloral, is described as from the exhausting effect of the remedial measures; delirium tremens, angina pectoris, uremia are complications in one case each.

Form of the Drug.—This is stated in 39 cases: laudanum, 19; morphine, 16; opium, two; soothing syrup, one; opium and morphine, one. Deaths following laudanum, two; morphine, two; opium, one; opium and morphine, one; unknown, one.

Quantity.—The quantity taken is recorded in 38 cases. Laudanum, fluid ounces, 3, 2 (2), 1½ to 2, 1½ (3), 1¼, 1 (5), ½ (2), ¼, ⅓, 3 minims; total 18.

Morphine, three teaspoonfuls, grains 51, 36, 30 (3), 20, 15 to 20, 16, 7, 1½, ⅓, ¼ (2), ⅓, ⅛; total 16.

Opium, grains 150, 6; total 2.

Opium, 2½ gr. and morphine ¼ gr. in three days.

Soothing syrup, two teaspoonfuls divided.

The deaths followed the opium and morphine (no treatment); 3 oz. of laudanum (uremia); 1 to 2 oz. laudanum (delirium tremens); 150 gr. of opium; ¼ gr. of morphine (angina pectoris); ⅓ gr. of morphine (after chloral); and one unreported dose; total, 7. All the other cases recovered.

Three minims (estimated) produced thirty-six hours' stupor in a five-weeks' infant, requiring artificial respiration nearly all the time for sixteen hours. One-sixtieth of a grain of morphine in two doses produced immediate alarming condition in a female adult somewhat reduced at the time, but tolerating one grain of opium at another time. On the other hand, thirty grains of morphine produced no effect whatever on an adult male, the only treatment being a somewhat late emetic.

Onset of Symptoms.—The time to the onset of disturbing symptoms is stated or implied in 19 cases. Five are described as "soon," "very soon," "immediate," "a few minutes"; one in fifteen minutes; six in thirty minutes; one in forty minutes; five in one hour; one in about two hours. Two of the fatal cases are in the "very soon" group, and the other five lack data; four of the early group resulted from the very small doses; the fifth is from six grains of opium. Of the six earliest cases, two were males and four were females. Of the seven latest cases, five were adult males, one was a female infant, one was an infant, sex not reported.

¹ Boston Medical and Surgical Journal, Medical News, New York Medical Record, Medical Journal, American Journal of Medical Science, 1882 to 1896 inclusive—fifteen years.

The conspicuous initial symptom is nearly always drowsiness, stupor, inability to stand; in one case the intoxication began with convulsions, coma later.

The interval before treatment is given in 34 cases, and ranges from nothing to thirteen hours; it does not seem to bear any definite relation to the subsequent gravity of the case. Of the seven fatal cases, however, two received no treatment, and in the others the interval was one hour, two hours, five hours (2), seven hours.

Termination of Case.—In the seven fatal cases death took place “in a few minutes,” “next morning,” 12 hours, 13½ hours, 36 hours, third day, three days. The second, third, fourth were apparently uncomplicated.

In 31 of the cases of successful treatment the time is given to partial recovery or encouraging improvement. It ranges from “a few minutes,” 12 minutes, 15 minutes, 20 minutes to 21 hours; in seven cases it was from 11 to 13 hours. The average time was very nearly six hours from the beginning of treatment.

The time of complete recovery is stated in 25 cases, and ranges from 1, 3, 6, 12 hours to 4, 5, 5, 10 days in cases in which there was complete unconsciousness. The average was two days and two hours.

Pulse.—The condition of the pulse or heart is stated with more or less accuracy in 27 cases, four of which were fatal. “Little affected,” “fair,” two cases. “Just detectible,” “absent,” “pulseless,” “barely perceptible,” “feeble,” five cases. “Full, slow” (3); “slow, strong”; “slow, intermittent”; “slow, 65”; six cases. “Rapid, feeble, intermittent”; “rapid, small, weak”; “rapid, irregular, weak”; “rapid, weak”; 110, 148, 156; 68, 84, 100, 120; 140, 148; 124 to 134; 96, 100; 85, 90, 100, 110; 110, 160; 150; 160, 130, 120; accelerated, 14 cases.

The fatal cases were 110, 148, 156; 124; 96, 100; “absent,” four cases.

Face.—The appearance of the face is mentioned in 20 cases. Cyanotic, purple, dusky, livid, congested, 18 cases. Dull eyes, one case. Pale, one case. The pale case took three ounces of laudanum, was complicated with albuminous urine and uremia, and died on the third day; two other fatal cases are included in this list—one purple and one cyanotic.

Pupils.—The condition of the pupils is mentioned in 36 cases. Pin-point, dot, or some word indicating extreme contraction, is used of 22 cases; contracted is applied to 11 cases; total, 33. Dilated is applied to two fatal cases; one was not observed until after death, and the other died in a few minutes. Widely dilated is the only term applied to a non-fatal case, in which no mention is made of the treatment. In many cases dilatation soon after the use of atropia or belladonna is mentioned.

Mouth.—The condition of the secretions of the mouth is not mentioned in any case. In one case the lips and tongue are spoken of as black.

Temperature.—Mention of the temperature is made in only six cases. The statements are—normal; 102.2° in 12 hours; 96.4°, 104°, 103°, 101.3°; 101.6°, 105.8°; 103.5°, 104.5°. The second, third and fourth were fatal—complicated with delirium tremens, uremia, chloral and exhaustion, respectively.

Skin.—There is some description of the condition of the skin in 17 cases. Cold skin, six; cold and wet, seven; warm, moist, one; profuse sweat, one; dry, one; livid, one. Four of the fatal cases are in this list,

and were respectively—warm, moist; cold; cold, moist; dry.

Bladder.—The condition of the bladder is mentioned in only four cases. Thirty-eight ounces of urine was drawn in 15 hours; the urine was retained 24 hours; the urine was retained nine hours; the urine was retained 19 hours. The last three were infants.

Urine.—Urine is described twice, once as albuminous, once as scant and high-colored.

Respiration.—The condition of the respiration is mentioned in 35 cases. In four cases it is described as “little affected”; “rapid, shallow”; “26 a minute”; “10, 12, 14.” In the other 31 cases the frequency is much diminished; in 12 it is described as stopping entirely; in 15 other cases it is noted as going down to 1, 2, 3, 4, 5, 6 or 8. They are described as “slow, gasping with occasional deep sighs”; “stertorous, intermittent”; “shallow, feeble”; “abdominal.”

Stupor.—Complete unconsciousness is mentioned in 34 cases; three others died; unconscious, 37; partially unconscious, one; conscious, one; no symptoms, one; no data, three; total, 43.

The period of complete unconsciousness is mentioned or implied in about one-third of the cases, ranging from a few minutes up to 11, 12, 12½, 13 to 20, 20, 26, 36 (2) hours, with recovery. In one of these cases artificial respiration was maintained 12½ hours upon a man apparently dead; in another it was maintained 16 hours, with brief intermissions, upon an infant capable of making only slight and irregular efforts to breathe.

In one case the subject, though conscious, went to sleep while talking, after 46 hours.

Other Symptoms.—Of other symptoms little classification can be made on account of the meagreness of the data. Late vomiting is mentioned repeatedly, but cannot be separated from the effects of the remedial measures; one instance of vomiting is mentioned prior to the use of any remedies. Thirst is mentioned once or twice. Injection of the conjunctivæ once or twice. Inability to swallow is frequently mentioned or implied. Partial recovery followed by a relapse appears to be a frequent occurrence. Convulsions prior to stupor are mentioned once. Limpness or complete relaxation is mentioned six times. “Intense itching,” “scratched leg,” “rubbed face and nose,” three cases.

After-Effects.—The scanty statements lead to the conclusion that the after-effects are usually slight and chiefly attributable to the strenuous measures employed to save life. Laryngitis, pneumonia, sore throat or cough are mentioned in four cases. Irritability, prostration lasting ten days, a rash, hallucination or mild delirium (presumably from atropia or belladonna) are mentioned; also sore mouth (from permanganate of potassium). In one case the attending physician ascribes the death to exhaustion from the violence of the treatment.

Treatment.—Aside from the maintenance of respiration, no particular remedial measure can be judged from these cases to have had especial value. The gravity and duration of the cases led to variety of treatment in the same case; nearly all the cases recovered under the most diverse treatment. Atropia and permanganate of potassium figure by far the most numerous; coffee very little; caffeine, amyl nitrite, strychnine, apomorphine, oxygen, whiskey, milk, electricity, etc., appear, and improvement followed them all.