

sure on the abdomen generally relieves the pain, patients know this, and often lie on their belly, with a folded pillow or some such substance beneath them. Constipation is usually pronounced, and when a motion occurs the dejections are hard lumps or scybala. Nausca, hiccough and eructations of gas are common. Urine is scanty, and it is passed with great difficulty. The pain may be paroxysmal, the patient in the interval being free from it. Usually, however, it is always present, but the exacerbations are well marked, at times there is tenesmus. Pulse is abnormally slow, sometimes about 35 per minute, and is often irregular, in frequency, not intermittent. It is fuller and harder, as a rule, than it is in health. There is not any rise in temperature in the majority of cases; in a few an insignificant rise takes place. There are various disorders of sensation, hyperæsthesia, numbness, formication, a feeling of pins and needles, neuralgic pains in both the upper and lower extremities, headache, amaurosis, this often is double, and comes on sometimes suddenly, sometimes gradually.

There are various motor disturbances, tremors, epileptiform convulsions, local paralysis of the extensors of the forearm, generally the right, sometimes both. This gives to the hand a very peculiar appearance, the wrist drop, as it is called. Rarely the muscles of the upper and lower extremities are affected and rapidly become atrophied. If the gums be examined nearly always a blue line will be found at the junction of them with the teeth. This line, gentlemen, is well illustrated in the two patients now before us, as is also another sign—a brown or black incrustation on the teeth with a tendency to rapid decay. This blue line is said to be due to the formation of the sulphuret of lead, sulphuretted Hydrogen being evolved from the decomposing particles of food, remaining between the teeth, and beneath the margin of the gums. The disease, if left to itself, may end in a few days or weeks. If the patient remains exposed to the source from which the lead comes it may continue an indefinite time. In itself it is not a fatal disease, but if the amount of lead in the system be large there at times develops an affection of the brain which is known as Encephalopathia Saturnina. This complication is generally met with among laborers whose work favors a copious absorption of the poison. It is marked by intense headache, amaurosis, delirium, sometimes maniacal, sometimes melancholia, epileptic convulsions,—these being often so frequent as to be the cause of death.

The introduction of lead into the system may be through the lungs, stomach, mucus membrane and the skin. Certain occupations involve the inhalation of lead. Those employed in the manufacture of lead, paints, and painters are the most exposed. Paper stainers, color grinders, card glazers and plumbers are also exposed. The disease has been known to result from sleeping in a newly-painted room. Water distributed in lead pipes is often the vehicle through which it is introduced into the system. One of the worst cases I ever met with was in the person of a fellow student, who for some time every morning drank soda water drawn from a fountain whose pipes were of lead. He was very ill, narrowly escaped death, but eventually made a good recovery. Lead is sometimes a component of the colors used in decorating confectionery, though I think now most confectioners use vegetable coloring. Articles enclosed in lead foil may also be contaminated.

Diagnosis.—The diagnosis of this disease is not at all difficult. The presence of a few of the prominent symptoms in a person exposed to lead will at once excite suspicion.

Treatment.—Is palliative and curative. Relieve pain by morphia, by mouth, bowel or hypodermically—warm fomentations to the bowels followed by hot linseed poultices over abdomen on which tincture of opium has been sprinkled. A mixture of chloroform and laudanum applied night and morning to the bowels is said to be very effectual in giving relief. Have the bowels move freely, and as they are constipated active cathartics are necessary; the most active advised is croton oil in a dose of 2 drops; compound powder of jalup is useful; so also is sulphate of magnesia in doses of 3j. every 2 hours in $\frac{1}{2}$ pint of water till free dejections are obtained. Purgatives are useful in removing from the system the lead contained in the contents of the bowels. A drachm of dilute sulphuric acid in a quart of sweetened water should be taken in the 24 hours. It is advised that this kind of lemonade might be used at meals by lead workers, as at this period much lead is thought to be introduced into the system. It would form an insoluble compound with any lead entering the stomach. Its efforts for good are said to have been tried and not found wanting at the large lead works at Birmingham, England. The great remedy for getting the metal out of the system, which is the object to be aimed at, is the administration of iodide of potassium, a soluble iodide of lead being formed, which passes away