

year and a-half from the time when he had taken mercury, the urine passed during ten days was examined, but no trace of the metal was found.

While mercurial preparations are being taken internally, the urine constantly contains the metal. Within two years I have examined fourteen cases of the kind, and have always arrived at a positive result. I have always submitted to analysis the urine passed during several days, as I had observed that the quantity passed in twenty-four hours was insufficient,—in such small quantity is the metal discharged by the kidneys! The elimination of mercury also continue for some time after its use has been suspended. For the first eight days the urine is invariably found to contain it; in one case I detected it four weeks, and in another six weeks, after its internal use had been discontinued, by submitting to analysis the urine collected during four days.

The opinion, pretty prevalent at present that the use of iodide of potassium favours the elimination of mercury from the organism, is not supported by my observations. During the last two years I have undertaken a considerable number of examinations of urine, with a view to arriving at a decided conclusion as to this point. I have examined the urine of individuals who had been put upon iodide of potassium immediately, or a few months, or even years, after the mercurial treatment. As I had already observed, that when the urine is rich in iodide of potassium, the electrolytic deposit of mercury does not follow with certainty, I made it a rule to set free the iodine by the addition of sulphuric acid containing nitrous acid; but in spite of this, I never found in such urine a marked increase in the quantity of mercury. If the treatment by iodide of potassium was commenced immediately after the discontinuance of the mercury, the urine invariably contained the metal, just as in the case where no iodine had been taken; the longer the time which had elapsed from the termination of the mercurial ointment, so much the less considerable was the amount of the mineral found in the urine; if several months had elapsed between the two modes of treatment, the search for mercury was always fruitless.

The two cases of mercurialism were for only a few days under clinical observation. The quantity of urine at my disposal was small; it amounted, in the case which terminated fatally, to 38½ ounces, in the other to 64 ounces. The urine of the first patient was collected two days before his death; it was turbid, rich in albumen and pus-corpuscles, and contained so large a proportion of mercury, that after an hour's exposure to the electric current, the negative pole was thickly coated with it. In the urine of the second patient, albumen, though less abundant, was also present; it speedily became alkaline, yet the mercurial reaction was immeasurably stronger than in any of the cases observed by me where treatment by mercury was in force. I examined the brain and liver of the patient who died, and found mercury in both organs, more abundant in the liver than in the brain.

Under the fourth head, my observations lead to some important results. A short sketch of the case in question may contribute to a proper estimation of the results of analysis. A soldier, 33 years of age, had an attack of typhus in his twenty-first year; this was followed by ascites, scurvy and chronic catarrh, which incapacitated him for his duties for six months. In 1852 and 1853 he had an attack of inflammation of the left lung. In 1853 he, for the first time, contracted a gonorrhœa, which was cured in eleven days, by sulphate of zinc injections, but was followed by a bubo on the left side, which suppurated and healed in seven weeks. In 1856 he contracted a chancre, and again had a bubo on the left side, which was not healed until after eight months of treatment, red precipitate being the principal remedy used. In August, 1860, syphilitic ulcerations are said to have appeared spontaneously on the glans penis. When admitted into hospital he presented all the symptoms of secondary syphilis; there were ulcers the lips and throat, and a maculated eruption on the skin. The patient, in the course of fourteen days, took twelve grains of corrosive sublimate; during the following days he took daily half a pound of decoction of sarsaparilla, and fourteen days after the discontinuance of the mercury he was ordered iodide of potassium, of which he took half