

Oxalate of lime is so insoluble in the distilled water that it might be well considered to be insoluble in the urine. Its occurrence in the form of crystals shows, however, that it cannot be insoluble; for crystalline form implies deposit from solution. Careful observation of the urine also shows that the oxalate of lime is soluble therein.

A medical man, in very tolerable health, aged 59, passed about a drachm of water at half-past ten in the morning, saying that he had a good deal of irritation. I examined it immediately. It was acid and had a slight cloudiness. Under the microscope I saw many globules, like mucus, some of them slightly serrated. I saw some dead perfectly formed spermatozoa, and a great many particles looking like the bodies of spermatozoa, tail-less—that is, slightly triangular and highly refracting. I looked most carefully for oxalate of lime, expecting to find it; but I could not find a single crystal any where, and no urate of ammonia was to be seen. At nine the following morning I again looked at the drachm of urine. There was a very transparent cloudy sediment, like mucus, only more transparent, occupying nearly one-fourth of the liquid in height. On examining a drop, myriads of small crystals of oxalate of lime were seen, and not a particle of urate of ammonia or uric acid. I had passed over similar observations before, by supposing that my first observation had not been made with sufficient care, but from the above, and other cases that have since occurred to me, I am certain that it sometimes requires many hours for the oxalate of lime to crystallize out. You cannot say that no oxalate of lime exists in any urine until at least twenty-four hours have elapsed from the time of the passing of the water.

It requires no skill and no preparation of the urine to find the oxalate of lime. The urine should be left to stand for twenty hours in a bottle, or tall glass; the upper part of the fluid should be poured off, and the last few drops remaining in the glass or bottle should be examined. A magnifying power of 320 times is generally sufficient, but the crystals are some times so small, that twice this power is necessary to determine the form. Generally oxalate of lime octahedra are thus found without the least

difficulty, sometimes in large single crystals, very frequently in aggregations of small octahedra, forming microscopic calculi. Dr. Golding Bird was the first observer who stated that these crystals, which had for some time previously been observed in urine, were oxalate of lime. The chemical proof is difficult, if not impossible, to obtain, for the octahedral crystals are rarely present in sufficient quantity to admit of perfect examination. —*Lancet*.

*Death from Convulsions, Caused by the Irritation of a Calculus in the Bladder.*—Francis McFadden, æt. 12, was admitted into the hospital with symptoms of stone in the bladder. Twelve months before a stone was removed by lithotripsy; and in the early part of last summer a new formation was removed by the same process. After each operation his health improved very much, but in the last few months the symptoms re-appeared with greater severity. About three weeks before admission he was carefully sounded, but no stone detected. Dr. Peace passed a sound into his bladder, and immediately thought he felt a stone; but fearful of increasing the vesical irritation, withdrew the instrument, and ordered him to be put to bed, and anodynes administered. During the afternoon he suffered intensely with vesical tenesmus and dysuria and about ten at night was seized with convulsions, which resisted all the remedies employed. In the morning he partly recovered his senses, but was in so exhausted a state that he died in a few hours after, a little over twenty-four hours after he was admitted into the house. It was afterwards stated by his mother, that he had been in such constant pain for the few days preceding his death, that he had been unable to sleep, or even to take his food. The urinary organs were examined sixteen hours after death. The kidneys were very pale, lobulated, and very much enlarged. The right kidney measured five inches in length by two and a half in width. The left rather less. The pelvis and infundibula were much dilated, and the ureters so much enlarged as to resemble the small intestines. In one of the dilated infundibula of the left kidney was found a calculus of the size of a large pea, the other infundibula con-