

his clothes, and woke up on the following morning feeling very chilly, felt severe pain in his back, and noticed that his face was puffy. Nevertheless, his troop being on the march, he was forced to proceed, and not for some days could he obtain rest in bed with warm bed-clothes. He has never been well since, became anæmic and weak, suffered greatly from lumbar pain, and after struggling two years to earn a living, was obliged to enter this hospital. During his stay here, headache was an urgent symptom. It was not continuous; some days he complained more than others, but the pain was always present, and at times very severe. We found that it was relieved best by purgatives. After a dose of two drachms of jalap powder temporary relief ensued, but up to the time of his death headache continued.

A uræmic headache has, in some cases, a distinctive character—it is accompanied by a sense of heavy weight or compression over the forehead, and there is often obstinate pain at the back of the orbits.

Some of you may have seen a lad who, a few days ago, came into No. 11 ward, and died there within 24 hours. He had been ill some months with a disease of his kidneys, and though he looked flushed and wasted like a phthisis case, or one of typhoid fever, yet he had no elevated temperature, and his urine, a few drachms of which were withdrawn with a catheter, was almost solid on boiling. He said he had been, you will remember, in a Birmingham hospital at the age of 14, and that when there the doctor had cupped his back, and he had been told he had kidney disease.

Now, I asked this boy, in your presence, what his headache was like, when he answered, that it felt like a heavy weight behind his eyes, forcing them out.

Remember, too, that headache may be the first symptom of uræmia.

Another point of diagnosis in uræmia is well illustrated in this case. The distinctly urinous smell of the breath led to the examination of the urine at once, and to the subsequent direction of the enquiry towards a history of Bright's disease.

*Vertigo.*—With the headache is commonly

associated vertigo, or dizziness, a consciousness of disordered equilibration which, like the headache, is very probably the result of the circulation of poisoned blood in the brain centres.

*Epileptiform convulsions.*—The most striking cerebral symptoms connected with uræmia are what are commonly called uræmic convulsions and uræmic coma.

These seizures are precisely like epilepsy. They have occurred in two of our cases, and are met with where the patient is already in bed with dropsy or other manifestation of Bright's disease, but often in persons who, up to the time of the attack, have been apparently in very good health. In such cases there is usually a premonitory stage of pain in the head, drowsiness, vomiting, or severe dyspnœa.

A few years ago I was called into a druggist's shop, as I was passing, to attend to a man who had been seized with violent convulsions. Tonic and clonic spasms, biting of the tongue, and frothing of the mouth were present. On the subsidence of the more violent symptoms I had him conveyed to his home, and handed him over to the care of his own physician. He never previously had any fit of any kind. About a year afterwards he died of Bright's disease—this attack, of which I had been witness, having been the first evidence of the disease.

As a matter of clinical experience there is no way by which a distinction can be made at the time between a uræmic and an epileptic attack of convulsions. In a severe case of uræmia the most alarming manifestations of epilepsy are also present, even the biting of the tongue, the frothing of the mouth, the involuntary discharges of urine and fœces.

You saw the girl, Shepherd, in No. 30 ward, dying of uræmia. At the close of her illness convulsions set in, not hurriedly, but with ample warning, in the shape of continuous severe headache, and attacks of vomiting. For three days, off and on, convulsions occurred, and in these the main characteristics were the severity and suddenness of the clonic spasms. While speaking, for example, a sudden closure of the jaw would take place, as sudden a snap as could well be imagined, with the result that