some dryness of the throat and wanted his mouth frequently moistened. He soon became brighter in his mind; he took more interest in what was going on; he moved voluntarily in bed, and tried to help himself to food. His voice also returned, and he left his bed and began walking around the ward. After this his recovery was rapid and uninterrupted. He has had no other treatment than the hyoscyamine, and he has now so much improved, though he is still somewhat pale, that he may be looked upon as having recovered. He can sit quietly; he has power over his hands, both in co-ordination and in grasp, although his grasp is still a little feeble. He walks and stands now without falling. His pupils are dilated, although not much.

The systolic apex-murmur persists: it is a chronic mitral regurgitant murmur. In every other respect the boy is nearly well.

Dr. Da Costa then referred to one or two points of clinical interest in connection with this case: first, some points which have nothing to do with the treatment; and, secondly, some which bear upon the treatment.

In the first place, this attack of chorea was clearly of rheumatic origin. It came on at the end of an attack of acute rheumatism. It is true that the boy was previously feeble and *ill*-nourished, and that he was regarded as a nervous child; but the association of chorea with rheumatism is too close a one for us to regard it here as a mere coincidence, You can generally trace, in a case of chorea, a strong rheumatic element, either inherited or acquired. In this form, before the patient has left his bed or his attack of rheumatism is clearly over, the chorea is manifested, which makes the connection still closer. Now, it has been thought that there is an embolic process at work in the smaller blood-vessels of the motor centres in the brain and spinal cord; small vegetations which are formed upon the valves are washed into the arteries supplying the motor tracts especially the corpora striata, and the subsequent disturbances of nutrition gave rise to the irregular, unco-ordinated muscular movements. This is a plausible and ingenious theory; yet it is hardly sufficient to account for all the features of the disease. There must be some want of stability of the motor centres, independent of the coarse lesions resulting from embolism, the evidence of the existence of which, moreover, is not complete, and which is certainly not constant.

In the case reported there was no voluntary control over the muscles, and at the same time the mind seemed to suffer: he was almost an idiot. When admitted, his temperature was 98¼°: therefore the attack of rheumatism was over, and these symptoms were not due to a fresh outburst of the rheumatic affection. The want of power in these muscles must also be taken into consideration, as showing a close relation between chorea and paralysis.

Now, coming to the question of treatment, the influence of the hyoscyamine, which was suggested by analogy from the treatment of tremor, was here strikingly manifest. The dose was increased from $\frac{1}{200}$ to $\frac{1}{100}$ grain without any bad effects; but when he was taking this quantity he complained of some dryness of the throat, although it never was so severe as to require us to reduce the dose again. It was finally discontinued two days ago. Now he is perfectly steady and can control his movements; his tongue is clean and he has a good color; he is gaining flesh: indeed, he may be considered as well.

Did the hyoscyamine produce the striking effect or did the rest in the hospital do it? That rest is good in all and can cure many cases of chorea, is admitted; but the improvement here was too sudden—coming on in three or four days—and too great to be attributed entirely to the good nursing and the food which he received since he was admitted. It is claimed that hyoscyamine is a valuable antispasmodic and exercises a remarkable control over muscular movements; also that with the control of the movements the condition of the muscles is improved and all the functions increased. Even the blood has improved; for, though he is still anæmic, he is not so much so as he was. Within a week after beginning the treatment he was out of bed and walking around, but not so well as at present.

What shall be given further? Will not the condition remain? Not necessarily; for all the irregular muscular movements have ceased. He can take, however, for his anæmia, the elixir of the pyrophosphate of iron, a drachm three times a day, and stop the hyoscyamine as having accomplished its purpose.

AMENORRHEA.

Dr. Skene, gynecologist to the Post Graduate School of New York, writes as follows on amenorrhea in the *Medical News*. In organic diseases, especially those of the liver, heart, lungs, or kidneys, in the advanced stages, we may look for derangements of menstruation. Amenorrhea is naturally a consequence of hepatic or heart affections, but in renal diseases the pathology is not as easy of explanation, as it is perhaps less mechanical than the former. I presume in amenorrhea occurring from renal disease, that is due more to malnutrition, tissue deterioration, and anemia. The point, however, to which I specially call attention is the necessity for us to look well to the general organization in obscure cases, and seek there the causes of amenorrhea, rather than in the pelvic organs themselves.

I would next call your attention to the management of amenorrhea in chlorotic patients. This condition, known as chlorosis, presents that peculiar form of organization in which we have a partial arrest of the development of the circulatory apparatus and sexual system.