

time of the "reign of terror" in France, records that persons guillotined were noticed in the post-mortem rooms to have firmer contracted hearts with small cavities, showing that the apparent thickening of the wall was due to strong rigor mortis. Dr. Lafleur wished to know if he had understood Dr. Adami rightly when he stated that in general arterial sclerosis the connective tissue change in the intima was the initial point? He, himself, had been accustomed to consider that the essential primary condition was a degeneration of the media, and that the connective tissue change was really a reparative process, such as was seen in all cases of sclerosis. This latter, at all events, was the view of Councilman and Thoma. The vicious circle, alluded to, was especially marked in those cases of arterial sclerosis accompanied with hypertrophy; why it should be particularly so in general arterial sclerosis was easily understood when we considered the enormous number of vessels involved. Not only the systemic, but the pulmonary circulation was affected in these cases, and the disease of the latter reacted on the right heart just as that of the former did on the left. The prognosis was especially bad in cardiac hypertrophy with dilatation when it occurred in cases of general arterial sclerosis. Dr. Lafleur remarked in connection with the treatment, that he thought Dr. Campbell should have been justified in protesting when asked to discuss the treatment of cardiac hypertrophy, because, after all, hypertrophy was a conservative process, and therefore beneficial. Allusion was made to Oertel's treatment of hypertrophy. That treatment had not found the favor here that it had in the Old Country. Some very stringent remarks have been passed upon it. One writer declared that a large number of people who have not cardiac disease will be cured by it, and the few who followed it, and really have the disease, will be killed. The speaker wished to add his testimony in favor of local and general bleeding in cases of hypertrophy from arterial disease. That and hydragogue purgatives were the only means we had. He had seen one case where bleeding certainly saved the man's life. The man was completely comatose, and was rapidly approaching his end, when he had him bled to the extent of 18 ounces; he was at work upon his farm two months later.

Dr. BLACKADER, in considering the treatment of the various forms of cardiac hypertrophy, held that much importance must always be given to the etiology; without clear ideas on this point we would certainly fail to obtain all the relief for our patient which was practicable. In some cases temporary rest of the body in the recumbent position formed an important therapeutic measure. We secured for the heart a comparative rest, also, by limiting the amount of fluids taken into the stomach, and in this

way lessening the amount absorbed, and the total volume of blood to be moved. In the diseases of no other organ would a due consideration of ordinary physical laws give so much assistance in treatment. In another series of cases, disturbed innervation seemed to play an important role, either affecting the cardiac nerves and producing over-action, or acting on the minute arterioles, producing an increase in arterial tension, and thus adding to the work of the heart. Such cases might receive much benefit from the careful use of nerve sedatives, such as the bromides, or chloral hydrate. Both these drugs, but especially the latter, had a direct action on the cardiac and vasomotor nerves, while at the same time they overcame the insomnia and general restlessness which in many cases were prominent features.

While recognizing fully the value of the various therapeutic measures mentioned by Dr. Campbell for the relief of the later stages of the disease, when we had to deal with a failing heart, Dr. Blackader thought that attention had not been sufficiently called to the necessity of recognizing and treating the earliest condition in which there was a pure hypertrophy of the heart muscle. For treatment such cases might be grouped into two classes: (1) those in which the chief trouble, for the time being, lay in over-action of the heart muscle; (2) those in which the principal difficulty was undue contraction of the arterioles. And to meet these conditions we had two drugs which would, properly employed, give efficient assistance. The first was aconite, which acted directly on the heart, lessening its force and frequency, and had comparatively little action on the vascular system. The second was a solution of either sodium nitrite or nitro-glycerine. Both of these acted directly upon the small arterial vessels, and had almost no action upon the heart, and by them arterial tension could be lessened. If good results were, however, to be obtained, it was necessary to secure a steady action of the drug, paying due regard to the time required in its elimination. Aconite was eliminated comparatively slowly, and in order to maintain an even action it should be administered about every six hours; with the nitrites it was different, they were eliminated rapidly, and to maintain their action in the vessels the doses should be repeated at least every three hours. The ordinary routine method of administering them two or three times a day was very defective, and in most cases proved useless.

Dr. WILKINS mentioned a case which occurred recently in his practice, which tended to establish high arterial tension as the cause of cardiac hypertrophy. The woman had been under his care for the last three years. She first complained of difficulty of breathing on the slightest exertion. Examination showed the lungs normal, slight enlargement of the heart,