

never completely empty, so that finally it loses its elasticity, and owing to its almost constant working it soon degenerates. Now here, if we bring about a complete emptying, we give the ventricle rest and in consequence strength. Franz claims that this can be completely and efficiently effected by exercise—more completely and efficiently than by any other known means. We have, he says, in exercise a means more powerful and safer than digitalis. He further claims that the improvement is more lasting than that effected by other means—that the work of the heart is lessened by the disappearance of the stasis in the venous system, and the nutrition of the heart is vastly improved through the deeper inspirations making the blood richer in oxygen. He advises that in cases where there is good compensation already, that in order to maintain it ordinary gymnastics are sufficient. He lays great stress, however, on the possibility, even probability of this being overdone, and he insists that every exertion should be followed by a period of rest. Where compensation is, however, lost, the greatest care must be exercised before beginning active exercise; the nature and the amount should be strictly laid down. Before beginning mountain climbing, baths, with a course of Swedish gymnastics, are advisable.

Franz believes that there is no danger whatever in patients with heart disease exercising so long as the palpitation induced by this work is quickly relieved by taking forced deep inspirations. The deep inspirations diminishes quickly the increased tension that is brought about in the pulmonary vessels.

Schott of Nauheim, who took part in the discussion which followed Franz's paper, contended that mountain climbing was only useful in a small number of cases, and that he had seen much harm follow its practise. He, however, strongly approves of exercise in a gentle way for the heart muscle. He therefore, although opposed to the extreme views of Oertel, is satisfied that much good can be effected in those cases with exercise when practised judiciously. Both he and Franz have seen a number of cases where mountain climbing has done irreparable damage to the already overtaxed heart when practised by the patients without first consulting a physician.