Dr. S. N. Chatterjee, long and widely known as a student of the nerve affections of leprosy, has asked that we comment editorially on his article on the mechanism of neural signs and symptoms which appears in this issue. It is recommended that everyone responsible for the care of patients with neural sequelae or otherwise interested give thought to his hypothesis. That is, that the manifestations of nerve involvement cannot be ascribed entirely to degeneration of the nerve fibers but are in part at least abnormalities of function due to local insufficiency of circulation, and that they can be benefited by measures which will improve the blood supply. Beyond this, Dr. Chatterjee may speak for himself:

> You know how long I have worked on thickened nerves in leprosy, noting many anomalies, and how sorry I was to see the sufferings of the patients on account of trophic ulcers, muscular paralyses, and deformities. I could see that amputation was not a solution of the problem of trophic ulcer, and that tarsorrhaphy produced only temporary improvement. It was also seen that cure means nothing to a patient if he goes back to society with deformities. Therefore I undertook to find out the real cause of the sequelae of nerve involvement in leprosy, and ultimately came to the conclusions given in my article. That there is lowering of temperature can be told by grasping a deformed, wasted hand, and that can be caused only by diminished blood circulation. Keeping this physiological phenomenon in view, I treated many cases and was able to prevent the development of neural sequelae, and often to correct, partly or completely, changes that were already present. Reports of this work were published from time to time, but in total it took me about 20 years to collect the material for this thesis, and another long period to prepare the report.

Nowadays we hear of physical therapy departments where the patients spend long periods flexing their fingers and hands. Obviously, this causes increase of blood flow to the muscles, and presumably that contributes to such improvement as occurs; certainly regeneration of destroyed nerve fibers cannot result from the exercises. Once upon a time we investigated the possibility of experimenting with an apparatus for producing alternating periods of vacuum and pressure as sometimes used for patients with certain diseases of the arteries, the limb under treatment being in a sealed-off boot of glass or transparent plastic, like a tall, round museum jar. Nothing came of that, partly because the arteries are not diseased in leprosy, and nobody suggested what Dr. Chatterjee now does. It might be worth while, where physical therapy is done, to experiment

with the effects of pulsed or intermittent vacuum on the limb to increase the blood supply passively at frequent intervals while the muscular exercises are being done. For the vacuum equipment a not-too-expensive milking machine might be used; a medium-sized one would activate a whole battery of boots on patients' limbs. —H. W. W.