

THERAPY WITH VITAMIN B COMPLEX AND AMINO ACIDS  
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In 1945 Dr. Max Jacobson reported on the combined effects of Vitamin B complex and amino acids. Since then additional work has been done in my department at the New York Polyclinic by Drs. Hans Hirschfield, Max Jacobson and Augusta Jellinek, with particular reference to the effect on deafness of the Vitamin B complex and amino acids. A report dealing with the results of administering the combination of Vitamin B complex with amino acids in cases of undifferentiated types of deafness has been accepted for publication. The preparation is upon the market for anyone to try. The effect of this therapy is obtained through its action on the relationship between enzymes, co-enzymes and vitamins which have been studied and reported by Northrop, Bauman and Stare, Heidelberg and Weiss, among others.

Using my associates' report and reducing their findings to the effects obtained upon individually deafened ears rather than on an individual case as a whole, I find that of the 156 ears tested for the speech frequency hearing losses, there was improvement found in 105 deafened ears. The whole average range frequency was improved in 116 ears. There was speech frequency loss during treatment in 13 ears and loss in the average frequency range in 33 ears. While under treatment, the speech range was stationery in 20 ears, while the average frequency range showed a loss in hearing acuity during treatment in 7 ears.

The treatment is given as follos During the first two weeks the patient receives 2 ccm. intramuscularly three times a week; during the following weeks they receive 2 ccm. twice a week. Generally a series of 12 injections is given and then there is a pause in the treatment. Where patients evidence resistance to treatment, a second series is given, after a pause of about 2 weeks. In some cases the treatment may be supplemented by oral administration of 3 capsules a day.

There is one observation which the work of Hirschfeld and his associates made which deserves special attention and that is the improvement shown in the audiometric curve for bone conduction. It has never been my opinion that the determination of nerve damage could be held as fixed permanently by an audiometric curve obtained under the conditions of masking. I have numerous examples in which certain specific frequency cycles show a drop in decibels which was noted for weeks in succession and then recovered to delete the drop, or so-called island of deafness shown in the earlier audiometric curve. Therefore I still use the calibrated tuning fork tests, testing the time in which the amplitude of the vibrating fork recedes and corroborating it with the audiometric curve obtained under conditions of masking.

The recovery of decibels in the test of the nerve by the audiometer under masked conditions is nevertheless impressive, indicating the possibility of rehabilitation in the nerve in the therapy used.

Furthermore, this therapy gives in quite a number of cases a presumptive sign as to the probable reaction of the patient to the therapy. Audiometric test conducted within 30 minutes after injecting the medicine shows an improved decibel curve by audiometric test. It may tentatively be advanced that when such improvement is noted, one may assume a favorable prognosis on the use of the therapy in question. This hearing improvement is transitory. It should only be construed as a test-result, and not as a therapeutic end-result.

The effect of this therapy cannot be judged entirely by the audiometrically determined hearing results. In spite of small percentage gains, the patient states that he hears better and his immediate family circle also gives favorable reports as to his conduct in listening and hearing. Jacobson's clinical report makes this comprehensible. He holds that the principal effect of this therapy seems the restoration of the balance of the autonomic nervous system, the lessening of fatigue due to

organic dysfunctions, and to the added energy given to the body

The effect of fatigue where dysfunction concerns a sensory organ like the ear cannot be overstressed. The deafened are fatigued by endeavoring to hear, listen and to differentiate and comprehend the meaning of sounds.

My personal experience with this medication is still too meagre. It is limited to about 50 cases. In the small numbers which I have submitted to this therapy I have been encouraged to continue its use in selected cases. My results were best in younger patients whose hearing losses were not too great, and whose deafness and tinnitus was not of too long duration before coming under treatment, and in whom bone conduction, studied under conditions of masking, did not give too great a decibel loss.