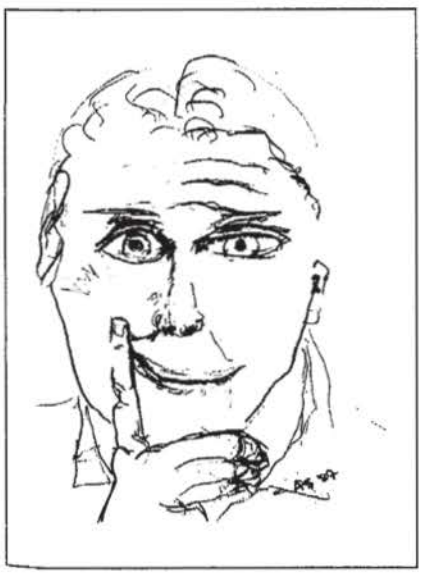
Letters to the editor should be submitted as an original and two duplicates. They should be typewritten double-spaced on plain bond paper; they will be subject to editing. If they are prepared on a word processor, do not justify the right margin. A copyright transmittal letter signed by all authors must accompany this (see "Instructions for Authors").

Distinguishing and Improving Dysarthria due to Facial Weakness

To the Editor.—An impairment of speech production can accompany a lesion of the seventh cranial nerve, producing paresis of facial muscles. The patients may become aware of their difficulties in speech production, particularly during telephone conversations when they may have to repeat themselves several times to be understood. The dysarthria is also apparent to the examining physician, raising the possibility that a brain-stem lesion is the cause of the speech disorder with the facial paresis being a separate manifestation of the central pathology. Several years ago, one of my patients with Bell's palsy and speech impairment showed me a method for transiently alleviating the dysarthria that has stood the test of time as a means for assuring myself that the patient's speech production problems were due to weakness of the perioral facial muscles and not to a disorder of central processes governing speech production. The patient placed the index finger approximately 1 cm above the corner of the upper lip on the weakened side of the face and gently pushed upward to elevate the corner of the mouth (Figure). There was an immediate clarification of the patient's pronunciation as the corner of the mouth was elevated. The effects were most evident on those consonant sounds requiring precise lip movements (ie, labial sounds such as "pa" and "ba," for instance). Speech production again deteriorated when the upward pressure on the face was removed.

To show maneuver for improving dysarthria in facial paresis.



I have used this method as a rapid clinical test to distinguish whether dysarthria is due to facial muscle weakness. Clinical judgment is, of course, also required to define whether the facial weakness is due to a central nervous system or a peripheral process. Furthermore, patients are delighted to have a simple means for improving the quality of their speech production that can easily be integrated into a natural posture of placing the elbow on a table or arm of a chair, supporting the chin in the palm of the hand, and elevating the corner of the upper lip with the index finger. The pose is reminiscent of Rodin's *The Thinker*, providing an aesthetic pose for this therapeutic maneuver.

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The letter is reprinted because "Roman numeral VII" was erroneously changed to "eighth" in the text.—ED.

Lyme Borreliosis: Discovery of the Causative Agent

To the Editor.—I would like to comment on the article by Finkel[1] in the January 1988 issue of the ARCHIVES. The overview is a valuable addition to the rapidly growing literature on this subject. Unfortunately, it omits the discovery of the causative agent and the seminal article in which it was described.

In September 1981, Burgdorfer recognized a spirochete in the mid-gut tissues of the deer tick, *Ixodes dammini*, from Shelter Island, NY. The finding was serendipitous since he was searching for *Rickettsia rickettsii*, the agent of Rocky Mountain spotted fever.[2,3] Sporadic cases of that illness had occurred in that region. Subsequently, serum samples of patients with Lyme disease were found to contain antibodies to that spirochete, the organism was isolated from the blood of two patients, and it was demonstrated in characteristic skin lesions.[4-6] The discovery in the European tick vector, *Ixodes ricinus*, of spirochetes indistinguishable from those in *I dammini* was made in the spring of 1982.[7]

Burgdorfer's finding underscores the importance of a prepared mind in scientific discovery. Because of his long experience with *Borrelia*-bearing ticks and his interest in Lyme disease and erythema chronicum migrans, the association was made. Medicine has already been greatly benefited by that discovery. Future benefits are likely to be even greater.

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