Editorials

Hemifacial Spasm

Donald J. Dalessio, M.D.

For the last several years neurosurgeons have been developing the concept that compression of cranial nerves by vascular structures may produce a series of neurologic syndromes which are well recognized by the clinician. Stimulated primarily by the work of Jannetta and his group at the University of Pittsburgh, an impressive body of evidence has been gathered to suggest that cross-compression by normal or pathologic vascular structures of cranial nerves is the etiology for several paroxysmal complaints involving the face. Maroon, a member of Jannetta's group, has reviewed the literature on hemifacial spasm. His observations indicate that hemifacial spasm is most likely caused by normal or pathological vascular structures that cross-compress the facial nerve. Maroon finds that the critical area of compression is at the brain stem exit zone of the seventh nerve. In this area the central glial investment of the facial nerve changes to peripheral myelin. It is suspected that this anatomic junction zone may be of pathophysiologic significance when it is directly compressed or irritated. Maroon recommends a retromastoid craniectomy and vascular decompression operation to relieve hemifacial spasm while at the same time preserving facial nerve function. This is in contrast to the most commonly used destructive operations for hemifacial spasm. He emphasizes, however, that microsurgical techniques must be employed or high morbidity and mortality may occur when using the retromastoid approach. Interestingly, in Maroon's series of cases, facial pain or headache associated with clonic facial spasm was extremely rare. He emphasizes that the problem is primarily a movement disorder, that is, it is a painless dystonia related to prominent contractions of the orbicularis oculi and oris and zygomatic muscles. (Your author has recently had the opportunity to observe an elderly woman with a long history of intermittent trigeminal neuralgia involving the right trigeminal nerve, associated with clonic facial spasm on the left side of the face. The patient's trigeminal neuralgia responded well to anticonvulsant drugs. She declined any neurosurgical intervention for the clonic facial spasm, advising me that she would "live with the problem").

In a more recent review, Kaye and Adams have described 16 patients with hemifacial spasm treated by posterior fossa surgery and wrapping of sponge around their facial nerve.2 Good or excellent results were obtained in 14/16. Two patients noted "mild recurrence" of facial movements in about two years after surgery. Contrary to the experience cited above, Kaye and Adams found a definite vascular anomaly compressing the facial nerve in only four cases (25%). The authors suggest that circumferential fibrosis produced by wrapping the nerve is therapeutic in this situation.

REFERENCE

1. Maroon JC: Hemifacial spasm. Arch Neurol 35:481-483, 1978.
2. Kaye AH, Adams CBT: Hemifacial spasms; a long-term follow-up of patients treated by posterior fossa surgery and facial nerve wrapping. J Neurol, Neurosurg, Psychiat 44: 1100-1103, 1981.
Palindromata I Have Known

Donald J. Dalessio, M.D.

Human speech began in the Garden of Eden when Adam espied his mate and announced with a bow:

"Madam, I'm Adam." Thus the first words uttered were a palindrome, a word, phrase, or sentence which reads the same forwards and backwards. Ever since, palindromes have exerted a fascination which belies their relative rarity, especially for those characterized in their youth as "backwards."

It is commonly accepted that the most famous palindrome in the English language is that attributed to Napoleon, who, while contemplating his exile, is reputed to have said:

"Able was I ere I saw Elba."

Though this is a charming story, it must be inaccurate, for Napoleon spoke no English. But, given his extraordinary powers, Napoleon may well have remarked:

"Je pouvais tout faire avant d'avoir vu Elbe."

This translates into the plaintive palindrome quoted above. Napoleon was clairvoyant enough to understand that his phrase, upon its translation, would outlast memories of most of his military victories, licit and illicit amours, and other entanglements, and would forever immortalize him in the palindromic Valhalla.

He also knew better than to attempt such a palindrome in French, a language of remarkable grace and nuance which, however, takes poorly to monkeyshines.

Medical palindromes must occur rarely. I keep looking for them, hoping that physicians named Otto will perhaps coin a few, but to no avail. Palindrome is a useful medical term, however, being employed to describe a recurrent disease, most often palindromic rheumatism. This is a peculiar form of rheumatic disorder, wherein there are brief episodes of synovitis which quickly disappear, leaving no trace. Rheumatologists who specialize in palindromic rheumatism often achieve great fame, owing to the invariable success of their therapies in the management of this ethereal arthritis. It is rumored to respond especially well to paraffin dips, amongst other arcana, but control studies have not been done.

Once, while giving a luncheon seminar, I suggested to an audience, in a fit of pseudopalindromic musing, that polymyalgia rheumatic equals cranial arteritis. That is, polymyalgia, a common form of rheumatism which affects the elderly with pain and stiffness in the head, neck, back, and proximal portions of the limbs, may be associated with systemic signs of disease, including fever, malaise, and elevation of the erythrocyte sedimentation rate. Polymyalgia usually responds briskly to corticosteroids. Since a significant number of patients with polymyalgia rheumatica will eventually develop cranial arteritis during the course of their illness, I posited that the two diseases were in fact one, and that polymyalgia rheumatica represented an early stage of cranial arteritis or, perhaps, vice versa. To further emphasize this point I attempted to construct a disease palindrome if you will, using the two entities, but failed. Hence, I coined the non-palindrome cited above. The audience took no notice in any case, being in a fit of noontime torpor better suited to a siesta than a lecture; they would not have responded to Shakespeare, much less me.

Some other palindromes which I covet include:

(a) Dennis and Edna sinned
(b) Dog as a devil deified, diefied lived as a God
(c) A toyota
(d) Subi dura a rudibus

Now, (a) would make an excellent soap opera title, (b) is nonsensical to me but may interest theologians and the SPCA, and (d) is Latin which you must translate. If I were an engineer I would design a Toyota (c) which would look like the same from the front to back, and back to front, and which would travel at the same speed forwards and backwards. But my fancy wanders.

Finally, if asked to cite the greatest physician of all time, I could

Name no one man.