Surgery for fibromyalgia

(APRIL 2001)

TO THE EDITOR: In a One-Minute Consult feature, Dr Wilke describes, but clearly does not endorse, surgical correction of Chiari malformations as treatment for fibromyalgia and chronic fatigue.[1] He notes that studies are lacking. Indeed, there is no inherent reason to suspect that surgical decompression of the brain stem would do anything more than relieve the limb weakness specifically attributable to the particular compressed neurons.

The lack of evidence did not, however, translate into a lack of publicity. The Wall Street Journal and the ABC 20/20 team were there to report a new cure for chronic fatigue.

Another type of surgical treatment for chronic fatigue, one with some significant scientific support, is virtually ignored. Gliklich and Metson[2] demonstrated substantially diminished vitality and increased bodily pain in those with chronic rhinosinusitis. Medical Outcome Study Short-Form 36-item Health Survey (SF-36) scores were significantly less (indicating worse symptomatology) than those of a population 20 years older with congestive heart failure, chronic obstructive pulmonary disease, angina, or back pain. Others note a similar association. Interventional studies document improvement in fatigue and bodily pain after functional endoscopic nasal surgery.[3]

Nasal symptoms are common in those with chronic fatigue, yet the relationship between the nose and chronic fatigue is ignored despite intriguing evidence. Cranial surgery, devoid of evidence, is publicized. Why this is the case may relate to the virtual firewall that exists between the otolaryngologic and general medical literature.

Chronic sinusitis is the most common chronic condition in the United States, yet it averages only one paragraph in large medical texts and only two paragraphs in ambulatory medicine texts. There is no mention of the systemic symptoms associated with the disease. Furthermore, of approximately 20,000 articles published over 5 years in the five major medical journals, only one contained chronic sinusitis as a MEDLINE medical subject heading, an article predominantly devoted to asthma.[4]

Surgery may help those with fibromyalgia and chronic fatigue, but the evidence suggests it would be surgery closer to the palatine tonsils rather than the cerebellar.

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TO THE EDITOR: I have received a copy of a brief article recently published in the *Cleveland Clinic Journal of Medicine* entitled "Can fibromyalgia and chronic fatigue syndrome be cured by surgery?"[1] While I cannot speak for anyone else engaged in this or similar work, I would like to take this opportunity to explain precisely my perspective. At no time in the past and at no time in the future will I prescribe any form of surgery for the treatment of fibromyalgia or the closely related disorder, chronic fatigue syndrome. Patients who carry these diagnoses and who have undergone any form of surgery under my care have all been evaluated and found to have evidence of cervical myelopathy.

Patients are evaluated over a 2-day period by a neurologist, a psychologist, a neurosurgeon, and a rehabilitation team comprised of a speech and language therapist, an occupational therapist, and a physical therapist. They undergo imaging of the brain to exclude a Chiari type I malformation, and they undergo imaging of the cervical spine with both flexion and extension views in order to exclude spondylotic or congenital cervical spinal stenosis. Those patients who are felt to meet standard neurosurgical criteria for the diagnosis of cervical myelopathy and radiological criteria for the diagnosis of spinal stenosis and/or Chiari type I malformation are offered the opportunity of having

surgical correction of these latter two problems. Great care is taken to emphasize that the surgery is not being prescribed for the treatment of fibromyalgia or chronic fatigue syndrome; only those symptoms which are directly related to the cervical spinal cord compression or the brain stem compression can be expected to improve in any predictable way.

Over the last 2 1/2 years, ending in February 2001, we have evaluated 214 patients who rightly or wrongly carry the diagnosis of fibromyalgia or chronic fatigue syndrome or both. While I do not confirm the diagnosis of fibromyalgia by demonstrating the presence of 11 of 18 tender points, in many cases it is clear that the patient does not meet the basic requirements of that diagnosis. The literature indicates that patients must have pain above and below the waist in all four quadrants of at least 3 months' duration and with no known explanation. Many but not all of the patients I see do not meet these fundamental criteria and should actually never have been labeled as having fibromyalgia. Of 214 patients who were evaluated in the past 2 1/2 years, 63% gave a history of craniospinal trauma immediately preceding the onset of their symptoms. The predominant symptoms were as expected: neck and back pain, fatigue, exertional fatigue, paresthesias, cognitive impairment, dizziness, and instability of gait.

The neurological examination was quite consistent with cervical myelopathy. Eighty-four percent of the patients had some disorder of spinothalamic sensory perception, indicating a high thoracic sensory level. This is typical of cervical spondylotic myelopathy and is described as a false localizing sign of this latter condition. Seventy percent of patients had evidence of hyperreflexia in at least one limb. Fifty percent of the patients had evidence of inversion of the periosteal reflex, a finding described in neurology and neurosurgery textbooks as indicative of extrinsic compression of the spinal cord at the C5-C6 level. Twenty-nine percent of patients had a positive Romberg sign, 26% had ankle clonus, 28% had a positive Hoffmann sign (also diagnostic of cervical spinal cord pathology), 20% had impaired tandem walk, 16% had dysmetria, and 11% had dysdiadochokinesia. Some 30% had an absent gag reflex and 10% had asymmetrical diminished facial sensation to light touch in an onion-skin-like dermatomal pattern typical of involvement of the descending tract of the trigeminal nerve (which extends through the brain stem and into the cervical spinal cord).

While virtually every patient manifested some evidence of cervical myelopathy, only approximately 50% of patients have been offered surgery to date. In general, surgery has been reserved for patients in whom the findings of myelopathy are so severe or the extent of brain stem or spinal cord compression so great that conservative measures would be inappropriate. The remaining 50% or so of patients have been prescribed a conservative course of treatment aimed at eliminating the dynamic aspects of cervical spondylotic myelopathy. The neurosurgical literature is quite clear on the fact that cervical spondylotic myelopathy does not improve spontaneously. Quite the contrary. The literature is also quite clear that the ultimate response to treatment is directly related to the duration of the symptomatic cervical myelopathy. Furthermore, the neurosurgical literature is quite clear that cervical spondylotic myelopathy is one of the most difficult clinical diagnoses to make, especially in early stages of the disorder.[2]

Once again, I would like to emphasize that I offer no patient a treatment for fibromyalgia or chronic fatigue syndrome. None of my experience in any way addresses the issue of the prevalence of cervical myelopathy in the general population of patients with fibromyalgia or chronic fatigue syndrome. My experience does suggest that some patients who carry these diagnoses, rightly or wrongly, do in fact have cervical myelopathy. Whether cervical myelopathy is in any direct way associated with fibromyalgia or chronic fatigue syndrome is a very interesting question that does need answering. We can only begin to answer that question when the medical community realizes that in fact this is the question that must be answered.

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IN REPLY: I appreciate Dr. Chester's remarks about the health impact of chronic sinusitis. He finds a relationship between chronic sinusitis and symptoms which are encountered in fibromyalgia syndrome and chronic fatigue syndrome (FMS/CFS) in two reports.

In a 1995 report, Gliklich and Metson administered the SF-36 to chronic sinusitis patients and controls and demonstrated a significant association with impaired perception of health, low energy level, impaired social functioning, bodily pain, and lower mental health in chronic sinusitis.[1] These symptoms, which are found in FMS/CFS, further suggest significant distress accompanies chronic sinusitis. In a second report, chronic sinusitis patients were followed up after surgery.[2] Six subsets of the SF-36 improved after successful surgery including mental health, ability to perform daily activities, and perception of current health, all of which would be expected to improve distress and improve symptoms of bodily pain and low energy level.

In an unrelated manuscript by Berghuis and associates, 55% to 65% of patients with chronic idiopathic prostatitis were demonstrated to be significantly stressed vs patients with acute prostatitis, on the basis of elevated measures of depression and somatization documented by the MMPI.[3] These patients also experienced bodily pain and fatigue. The point prevalence of FMS is higher than in the general population in patients with rheumatoid arthritis, systemic lupus erythematosus, and Sjögren's syndrome, and is associated with higher levels of depression and distress.[4] Wessely and others have attempted to bring order to the classification of a variety of somatic syndromes including FMS/CFS by recognizing similarities among them.[5] Included, and pivotal, is shared psychological distress. While still an hypothesis, the notion of causation is compelling.

If this hypothesis is correct, none of these diseases is considered a primary cause of FMS/CFS, but the distress associated with them appears to be an important etiologic factor. I agree that a secondary relationship to FMS/CFS exists in patients with chronic sinusitis, and improvement in sinusitis disease manifestations after successful surgery would be expected to improve distress and symptoms of FMS/CFS.

I also very much appreciated Dr. Heffez's letter, and thank him for clarifying his position. Our own growing experience continues to demonstrate a relationship between severe neurologic conditions such as the Chiari syndromes and cervical myelopathy with symptoms of FMS/CFS. We believe that the primary etiologic relationship is also perceived distress which would be expected to accompany these chronic, subtle neurologic conditions.

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Human herpesvirus 6

(JULY 2001)

TO THE EDITOR: The article by Drs. Chemaly and Rehm on human herpesvirus 6 (HHV-6) infection[1] was very interesting but left out one particular associated symptom of this insidious virus. This symptom is chronic fatigue, which is markedly debilitating.

When HHV-6 was first defined by Salahuddin et al in 1986,[2] the virus was ubiquitous and the symptoms of the disease it causes were nebulous. Although little knowledge about HHV-6 has been added over the years, it seems that more than 90% of the population is exposed, most exposure does not lead to prolonged disease, and its common manifestations are low-grade infection, usually mild, accompanied by lymphadenopathy, debilitating fatigue, and retro-orbital headache. In some patients the malaise can be prolonged and can be the initial manifestation of chronic fatigue syndrome, the exact cause of which is still unknown.

It is possible that the HHV-6 virus, like its fellow herpesviruses, lurks in tissues or that in sensitized patients it produces elevated cytokines or other immune system effects that can manifest in prolonged symptoms.

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IN REPLY: We appreciate Dr. Enlander's query regarding possible links between human herpesvirus 6 (HHV-6) and chronic fatigue syndrome, a well-characterized illness of unknown etiology.

Because patients with chronic fatigue syndrome may have an abnormal immunologic status suggestive of immunosuppression, several ubiquitous viruses, especially the herpesviruses (ie, Epstein-Barr virus and HHV-6), were implicated in its pathogenesis.

However, multiple studies in patients with chronic fatigue syndrome, using a variety of markers of HHV-6 infection, produced results that were at best contradictory, with few suggesting an association between these diseases.[1–4] A recent case-control study[5] compared rates of infection with HHV-6A, HHV-6B, or HHV-7 among patients with chronic fatigue syndrome and control subjects. The authors found no evidence that infection with these herpesviruses is associated with chronic fatigue syndrome.

Furthermore, an association between HHV-6 and multiple sclerosis generated a considerable interest for the past few years but no causal link has been established.

Because of lack of compelling evidence linking HHV-6 infection with chronic fatigue syndrome or multiple sclerosis, we elected not to discuss this issue in our review of HHV-6 and infectious mononucleosis-like syndrome.

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