Nihilism and Stroke Therapy
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In spite of recent advances in supportive management and prevention of stroke, it is not uncommon to hear nonneurologists as well as neurologists express the opinion that "nothing can be done for a patient with a stroke." These individuals are expressing an attitude of therapeutic nihilism. The word nihilism is derived from the Latin nihil, meaning "nothing." A therapeutic nihilist is one who shows skepticism regarding the therapeutic value of drugs. Since ancient times, therapeutic nihilism has been accepted in relation to diseases of the nervous system, particularly stroke.

To trace the roots of nihilistic attitudes toward stroke, one must begin by analyzing the definition of apoplexy or stroke. Apoplexy means "struck with violence" in Greek and "being thunderstruck" in Latin. Stroke was not seen as an affliction from within the body, but the result of a force from outside the body, perhaps even celestial. This view is reflected best by the definition of stroke in the 1599 Oxford English Dictionary as a "stroke of God's hands." The logical deduction was that if the disease were caused by divine intervention, no human intervention such as drug therapy could possibly alter the outcome. Often, stroke has been referred to as a "cerebrovascular accident," a term that supports the concept of stroke as a random, unpreventable catastrophe. The term "cerebrovascular accident" should be banished from our vocabulary.

Historical writings about stroke provide some insight into the evaluation of therapeutic nihilism. Hippocrates wrote that "to get over a strong attack of apoplexy is impossible, over a weak one, not easy." An indication of early thoughts about the prognosis of stroke is contained in the writings of Aretaeus of Cappadocia during the second century AD. He wrote that "should indeed the apoplexy be severe, they cannot survive the greatness of the illness combined with the misery of advanced life." Paul of Aegina expressed that, "in some patients, the power of speech was lost and if it did not return in 14 days, the physician should do something about it." In 1892, Osler stated that in cases of hemiplegia "the friends should at the outset be frankly told that the chances of full recovery are slight." He also wrote that "when hemiplegia has persisted for more than 3 months and contractures have developed, it is the duty of the physician to explain to the patient or to his friends, that the condition is past relief, that medicines and electricity will do no good, and that there is no possible hope of cure." The lack of urgency for intervention after a stroke has been a theme for many years. Attempts to alter the course of cerebral infarction have led to the development of some peculiar remedies, some of which continue to be used in some locales. These unusual treatments include purgatives, bleeding with leeches, and "opening of the bowels."

From this historical perspective, one senses that a recurring theme in stroke therapy has been an attitude of hopelessness, with a tendency to view stroke as a disease rather than as a disorder with many different etiologies. The lack of urgency in the diagnosis and management of stroke on the part of physicians has fostered a nihilistic attitude, and many of the misconceptions of our predecessors have been carried into the present age of stroke therapy. The nihilistic attitudes of physicians have resulted in an equally misinformed public.

Although there have been no definitive breakthroughs in the treatment of stroke, striking progress in that direction has been made during the past several decades. We are much more knowledgeable about stroke epidemiology and prevention, diagnosis of stroke, and pharmacological therapy after stroke. Until the early 1980s, a decline in the incidence of stroke over the preceding 30 years had been observed. This decline was attributed primarily to better management of hypertension. The exact cause for the recent reversal of this trend is not known. Recent estimates of the incidence of acute cerebrovascular disease indicate that 150 such events occur per 100,000 population per year. Close follow-up of these trends provides important information about therapeutic efforts.

Diagnosis of stroke continues to rely primarily on clinical features. However, advances in neuroimaging techniques allow early documentation of stroke and differentiation between hemorrhagic and bland infarcts. More detailed information about cerebral arterial thromboembolism can be obtained with visualization of a hyperdense cerebral artery on noncontrast computed tomography or with the absence of a flow-void phenomenon on magnetic resonance imag-
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carotid artery stenosis. 13 Studies are under way to provide additional benefit among patients with <30%
contrast, the ECST demonstrated that surgery did not operation was effective in preventing fatal and disabling outcome for symptomatic patients with distal internal strokes and ipsilateral 70-99% narrowing of the ca-
tery transient ischemic attacks or nondisabling antiplatelet therapy, for patients with carotid artery
ment are emerging. First, it is likely that there is a narrow therapeutic window for pharmacological in-
tervention after stroke, probably less than 6–12 hours for most agents. This will place further emphasis on
the importance of viewing stroke as a neurological emergency in order to preserve vulnerable brain tissue. Second, it has become clear that the best way to evaluate therapies is with randomized, double-blind, placebo-controlled, multicenter studies. This mechanism of critical evaluation provides many im-
portant advantages for the assessment of stroke prevention and treatment. Finally, it may be that a combination of drugs, each affecting a different cellular mechanism or process, initiated acutely after stroke will be the therapy of choice.
This review of recent advances in the evaluation of stroke-prone patients and therapeutic strategies to alter cellular mechanisms early after stroke elevates us from an age of therapeutic nihilism to one of cautious optimism. It is hoped that a successful drug therapy for stroke will emerge that will reverse the trend of nihilism. This feeling of optimism should be conveyed to the public, especially in light of the importance of early therapy. The symptoms of stroke should be as well known to the nonphysician as are the symptoms of myocardial infarction, and the treatment of stroke should be considered just as urgent.

References
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