

"Dr. Eli highlights an additional shortcoming of the Position Statement and the contemporaneous article by the same authors (but without endorsers) in Scientific American: that efforts to stigmatise the concept of anti-aging medicine act against the interests of the elderly by discouraging them from making use of existing products that confer genuine benefits, and that this stigmatisation, based as it is simply on the fact that those benefits do not necessarily include extended lifespan, thus does more harm than good."

- Aubrey de Gray, PhD, Editor Rejuvenation Res. 2005 Fall; 8(3):199-200 (Published).

The Truth about the Fountain of Youth

I was a subscriber and avid reader of Scientific American. In June of 2002 they published an essay entitled "No Truth to the Fountain of Youth"¹ warning the public against the use of ineffective and potentially harmful anti-aging interventions. The article also refers the reader to a "Position Statement on Human Aging"². In it, the authors go much further and forcefully argue:

"But replacing and reprogramming the brain that defines who we are as individuals, is, in our view, more the subject of science fiction than science fact..

At present there is no such thing as an anti-aging intervention."

Also, in June of 2002, unable to obtain relief for my osteoarthritis with prescription drugs, I tried pregnenolone, a compound popularly described as an anti-aging medicine. It soon provided substantial, though not complete, relief. The experience with pregnenolone aroused my curiosity about the world of anti-aging medicine, as I had other age-related difficulties. These included: insomnia, high blood pressure, cerebral atrophy and cerebral hypoperfusion (inadequate blood flow to the frontal lobes of my brain.) The cerebral hypoperfusion was caused by the loss of cerebral autoregulation. All of these problems were the result of brain damage that I suffered at birth.

For the benefit of those readers unfamiliar with these terms, I will briefly explain what cerebral atrophy and cerebral hypoperfusion mean. Inadequate blood flow to the frontal lobes is associated with what is called a frontal personality. It differs from a brain lesion (an area of the brain with dead or missing brain cells) only in degree. The most striking illustration of this condition is the famous case of Phineas T. Gage. As the result of an industrial accident, an iron rod passed through the front part of his frontal lobes (specifically the ventromedial areas of the prefrontal cortex.) After a seemingly complete recovery, Gage was soon back at work. However, whereas previously he had been hard working, responsible and popular with the men under his charge, his personality seemed to have been radically altered following his accident, Dr. Harlow (Gage's doctor) reported:

I remember well the tremendous difficulty that I used to have in making decisions and I rarely finished what I started. Unlike the damage from an iron rod through the brain, cerebral hypoperfusion only diminishes the function of brain cells; it does not terminate it. On the other hand, the ventromedial area of the frontal lobes comprises only a fraction of the total volume of the frontal lobes

Before writing this letter, I revisited my study of Phineas Gage and the frontal personality. I asked myself if the anti-aging drugs that I took did reprogram the brain that defined who I was in June of 2002. When I look at the letters that I wrote before June of 2002, as compared with those written after June 2002, the change that is most apparent to me is that I now can appreciate the feelings and emotions of others and, I believe, that I now have the capacity to feel what they feel. This quality is probably why Phineas Gage was once so popular with the men under his charge. An iron rod reprogrammed the brain that defined who Phineas Gage was and he eventually wound up working for Barnum's circus. Cerebral atrophy and cerebral hypoperfusion are age-related phenomena. They are often responsible for the personality changes that are seen in the elderly and the consequent shame, humiliation and verbal abuse that they must endure, illustrated by such derisive expressions as "codger" and "old fogey". I suffered all of this when I had dementia and the pain of this experience is etched deep in my mind.

"He is fitful, irreverent, indulging at times in the grossest profanity (which was not previously his custom)...capricious and vacillating, devising many plans of future operation, which are no sooner arranged than they are abandoned.³

In general, the medical profession agrees with the "Position Statement on Human Aging" and considers the aging process a normal healthy process, implying that medical intervention in the aging process is improper. This bias is illustrated by the accepted use of the terms "normal aging" and "healthy aging" in the medical jargon despite the fact that the medical definition of a disease is, "an interruption, cessation, or disorder of body functions, systems and organs".⁴ By including the loss of function in the definition, aging necessarily becomes a disease. Nearly every function of the body and mind is impaired by the mere passage of time. Therefore, the treatments for all chronic conditions in aging patients are also anti-aging interventions. The supporters of the position statement are not really condemning anti-aging interventions, they are arbitrarily deciding which anti-aging interventions are okay and which are not. In effect, they are making bioethical medical decisions on behalf of the aging patient.

By using the words "fountain of youth" in the title, by calling anti-aging medicine "science fiction", and, by scientists and doctors endorse their article (Emphasis Added), the authors intimidate the aging patient from even considering the risks and benefits of anti-aging drugs. In doing so, they discourage any input from the aging public into the bioethical medical decisions that may have a profound effect on the quality of their remaining years. The aging process itself is marked by doubts about self-worth, as the aging patient is slowly robbed of the powers of body and mind that are bestowed on the young. The constant struggle to retain these powers, to have a stronger mind, a stronger heart and a healthier body, is what medicine is really about. The young are encouraged to

make the most of their powerful bodies and minds. Why should not the old be encouraged to do the same?

References

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by Robert Eli, JD