

The Serendipitous Facilitation of Lucid Dreaming Ability in a Single Subject

David R. May
Eldridge, CA

My usual reaction to first person accounts of dramatic and/or unusual occurrences during routine stimulus situations is to view them with many grains of salt, but never to entirely dismiss them as they, ultimately, are the basis of most hard scientific inquiry. The phenomenon to be described falls squarely within the anecdotal category, the lowest level of scientific evidence, and should be appraised only as such.

A while ago, I suffered a very painful back injury which left me with an inability to sleep more than 2-3 hours per night. I knew that the amino acid tryptophan had been used successfully both to alleviate pain and to promote sleep (and as an antidepressant). On the advice of my neurologist, I used 7 grams - divided into two equal parts, as I would usually awaken within 3-4 hours after administering the first dose. While this is a large dose, it is not as high as some therapists recommend for depression. (The best popular treatment of the subject I have encountered is Slagel, P., M.D., *The Way Up From Down*, 1986, Random House). Tryptophan in that amount was most effective in promoting sound sleep. One very prominent effect, though, was that dreaming became very erratic or altogether nonexistent " - an effect not at variance, though not fully explained, by the literature. I reasoned that my lucid dreaming work would consequently have to be placed on the back burner for a time.

After about 2 weeks on this regimen, a wholly unexpected phenomenon occurred: I would invariably fall asleep for several hours in evening, though I was now getting 7 - 8 hours of sound sleep. This phenomenon had never occurred in the past, especially after my back injury, and was quite puzzling. I soon noticed that I was having extremely vivid and prolonged dreams during these "naps." I thought little of this at first, but as the dreams became more and more powerful, I realized that this must be a REM rebound effect due to almost total suppression of REM sleep during the night. To understand physiologically what might be going on, I considered what I knew about the effects of tryptophan. (Actually, its natural end product, serotonin, the neurotransmitter, is the critical psychoactive agent operating here). First, it is well known that serotonin is a natural growth hormone releaser and that growth hormone can only be released during Slow wave, or NREM sleep. Further, the greatest concentration of serotonin-producing neurons is in the midbrain nucleus of Raphe, which is immediately proximal to the locus ceruleus and locus non ceruleus which via the neurotransmitter norepinephrine are antagonistic neurotransmitters, and the extreme over-production of one might easily affect the receptors of the other and thus modulate their action.

It belatedly occurred to me that this profound REM rebound might prove to be an ideal opportunity for attempting lucid dreaming. I found that with strong suggestions and a fierce determination to hold fast to consciousness (a la Ouspensky, I suppose), the waking world would suddenly evaporate and I would find myself fully lucid, often remaining lucid throughout the entire "nap". If lucidity was lost, brief awakenings would

often result in its reestablishment. Initially the shift from the waking state to the lucid dream state required great concentration and resolve, but with repetition this transition occurred almost effortlessly. Prior to this time, I typically experienced approximately 1 - 3 lucid dreams per month, but they were very pale in contrast to the power, vividness, and emotional intensity of these regular evening dreams. I cannot report on whether generalization might occur were the tryptophan to be discontinued.

I am only, of course, reporting on these occurrences as being a byproduct of a medical treatment. If anyone is tempted to experiment with this regimen I would highly recommend that he or she seek the advice of a pharmacologist and/or a nutritionist. I do know from my review of the literature that no one really understands the effects of amino acid precursor loading, which could lead perhaps to a radical imbalance of essential amino acids. A more temperate approach than I've described would be to take a single smaller dose soon before bedtime, hoping for a rebound effect during the later and more propitious hours of sleep.

It has been my hope in describing this serendipitous "experiment" to show that we are not wholly slaves to an unfathomable brain stem process. It clearly can be influenced, profoundly, and what has been reported is surely only one of the possible methods. With REM deprivation it may be possible to move directly from the conscious waking state to the REM state with little or no NREM in between. If this is so, lucidity should be far more easily and frequently attained.