Yoga and Alzheimer’s Disease

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The contents of this bibliography do not provide medical advice and should not be so interpreted. Before beginning any exercise program, see your physician for clearance.

In this general article on Alzheimer’s, the following statement regarding Kriya Yoga is included in the section on cognitive exercises: “Kriya Yoga, a discipline in meditative Yoga, has [been] shown to increase blood flow to critical areas of the brain as well.”

Franco, Lorry. Gentle Yoga and Stress Management for Caregiver’s of Alzheimer’s and Dementia Patients Program. Contact: lorryf000@yahoo.com.

Khalsa, Dharma Singh, M.D. Answers the question: Is it true that practicing meditation can help prevent, and even treat, Alzheimer’s disease? Yoga Journal, Sep/Oct 2000, p. 44. Article available online: http://www.yogajournal.com/health/95_1.cfm (retitled online: “Mind over matter: Meditation, mudras, and mantras can slow the progression of Alzheimer’s”).


“Dysfunction of the sixth chakra can also result in memory dysfunction. My extensive work with Alzheimer’s patients, as well as patients in various stages of the ubiquitous condition of age-associated memory disorder, has led me to believe that sixth-chakra dysfunction is a major element in memory loss. In innumerable cases, my patients with memory loss have benefited tremendously from Medical Medications that focus primarily upon the sixth chakra, and in particular from the vibratory effects of chanting . . .” (pp. 246-247).

In the “Ailment/Chakra/Medical Meditation Chart,” the chakras associated with Alzheimer’s are listed as the 6th, 7th, and 8th, according to the chakra model described by the author. The meditations recommended is the “Medical Meditation to Increase Cognitive Function” on p. 250 and the “Easy Medical Meditation for Cognitive Function” on p. 258.

On pp. 36-37, the author writes, “In Brain Longevity, Cameron Stauth and I showed how low levels of DHEA can be one of the worst risk factors for Alzheimer’s disease. One study we mentioned showed Alzheimer’s patients had only about half as much DHEA as healthy older people. In my own clinical practice, almost all of my Alzheimer’s patients have low levels of DHEA.

“. . . One of the most important things DHEA does is to protect against the ravages of the stress hormone cortisol, which can be the single most damaging hormone in the body, if too much is secreted. High levels of cortisol drastically increase the incidence of
Alzheimer’s, cardiovascular disease, depression, chronic anxiety, and many other conditions and diseases.”


“In Alzheimer’s disease, there is much scope for yogic therapy. The regular practice of the head stand from a young age may altogether prevent the formation of neuro-fibrillary tangles in risk groups. Senile dementia due to diffuse cerebral atherosclerosis (DCA), too, can be totally prevented by regular practice of head stand.”

Dr. Raman gives questionable advice for some disorders in his book *A Matter of Health* (we have had it reviewed by another M.D.), and offers no supporting evidence for any of his claims, so his recommendations need to be carefully considered.

**Yogananda, Paramahansa.** By excerpting Yogananda’s talks and writings, an answer is provided by current Yogananda disciples to the question: “A good friend’s mother has Alzheimer’s disease. After fifty years of being happily married she no longer knows her husband and frequently gets paranoid and violent. Where is her soul when this is happening? Is the soul still in the body? What is the soul? I have heard that the soul is unchangeable, but what is going on here is very hard to understand.” *Self-Realization*, Summer 2001, pp. 4-8.

**Of Related Interest**

**Curry “may slow Alzheimer’s.”** BBC News, Health Section, 28 Nov 2001. Article available online: http://news.bbc.co.uk/hi/english/health/newsid_1668000/1668932.stm. See also research citation by Yang et al. below.

“. . . A team from the University of California at Los Angeles believes that [curcumin, a compound in] turmeric may play a role in slowing down the progression of the neurodegenerative disease.

“The finding may help to explain why rates of Alzheimer’s are much lower among the elderly in India than in their Western peers.

“Previous studies have found that Alzheimer’s affects just 1% of people over the age of 65 living in some Indian villages . . .”

**The Cleveland Clinic.** Alzheimer’s Disease: Exercise. Article available online: http://my.webmd.com/content/Article/71/81400.htm.

**Deife, Julie.** Dr. Vasant Lad. *LA Yoga*, May/Jun 2003, p. 43.
Julie Deife: What does Ayurveda say about Alzheimer’s?

Dr. Lad: Alzheimer’s is kapha blocking vata, so that atherosclerotic changes in the cerebral arteries create vata aggravation and vata dries up the brain cells. It will take time for rejuvenation, but Alzheimer’s can be effectively treated with Ayurvedic management of treating the vata dosha, and rejuvenation of the tissue will give quite excellent results. If it is very serious and most of the brain cells are dead, nothing can be done.

Miesler, Dietrich W. Use care with Alzheimer’s patients. Massage & Bodywork, Dec/Jan 2000, pp. 110-112. (Massage for Alzheimer’s patients.)


Summary: New research on Alzheimer’s disease and aging finds that you can remain healthy when you exercise the mind and body.


“Huperzine A (HupA), an alkaloid isolated from club moss, slows the progression of this degenerative neurological disease. It specifically helps preserve a neurotransmitter called acetylcholine that affects memory and concentration. In Alzheimer’s patients, acetylcholine levels are often low. While the brain regularly churns out the substance, another one called acetylcholinesterase (AChE) breaks it down to keep things balanced. By inhibiting AChE activity, HupA helps Alzheimer’s patients conserve their already deficient supply of acetylcholine, which in turn benefits their memory . . .”


Abstract: Alzheimer’s disease (AD) involves amyloid (Aβ) accumulation, oxidative damage and inflammation, and risk is reduced with increased antioxidant and anti-inflammatory consumption. The phenolic yellow curry pigment curcumin has potent anti-inflammatory and antioxidant activities and can suppress oxidative damage, inflammation, cognitive deficits, and amyloid accumulation. Since the molecular
structure of curcumin suggested potential Aβ-binding, we investigated whether its
efficacy in AD models could be explained by effects on Aβ aggregation. Under
aggregating conditions in vitro, curcumin inhibited aggregation (IC\textsubscript{50} = 0.8 µM) as well as
disaggregated fibrillar Aβ\textsubscript{40} (IC\textsubscript{50} = 1 µM), indicating favorable stoichiometry for
inhibition. Curcumin was a better Aβ\textsubscript{40} aggregation inhibitor than ibuprofen and
naproxen, and prevented Aβ\textsubscript{42} oligomer formation and toxicity between 0.1-1.0 µM.
Under electron microscopy, curcumin decreased dose-dependently Aβ fibril formation
beginning with 0.125 µM. Curcumin's effects did not depend on Aβ sequence but on
fibril-related conformation. AD and Tg2576 mice brain sections incubated with curcumin
revealed preferential labeling of amyloid plaques. In vivo studies showed that curcumin
injected peripherally into aged Tg mice, crossed the blood brain barrier and bound
plaques. When fed to aged Tg2576 mice with advanced amyloid accumulation, curcumin
labeled plaques and reduced amyloid levels and plaque burden. Hence, curcumin directly
binds small β-amyloid species to block aggregation and fibril formation in vitro and in
vivo. These data suggest that low dose curcumin effectively disaggregates Aβ as well as
prevents fibril and oligomer formation, supporting the rationale for curcumin use in
clinical trials preventing or treating AD.

\textbf{Ongoing Research}

\textbf{Dolores Gallagher-Thompson, PhD, ABPP}

Stanford University
Menlo Park, California
http://www.alzheimers-illinois.org/articles/diverse.html

Dolores Gallagher-Thompson received a grant to assess two strategies to reduce stress in
Alzheimer-patient family caregivers who identify themselves as either non-Hispanic
white or Chinese American.

One strategy is based on the idea that self-generated positive reinforcement can reduce
caregiver stress. Caregiving often prohibits participation in enjoyable activities. This
circumstance can contribute to negative thoughts, which may make it more difficult to
cope with the emotional and physical demands of caregiving. The intervention strategy
seeks to reverse this cycle by helping caregivers identify specific enjoyable activities and
to schedule them into every day.

The other strategy teaches Yoga and meditation techniques to alleviate stress. Previous
research demonstrated that meditation may lessen symptoms of cardiovascular disease
and chronic pain. Studies have also shown an association between meditation and fewer
visits by older people to clinics or hospitals.

The control group in this research project will receive educational materials in English or
Chinese. Participants will be randomly assigned to one of the three groups. The research
team will assess the amount of caregiver stress and changes in stress levels by conducting
interviews and by testing for levels of a stress hormone.
This research may help investigators develop culturally appropriate interventions and adapt caregiving programs to be effective in more than one cultural context.