

Module VIII

Module VIII: The Autonomic Patient: Successfully Treating the Organ-Brain Connection

You probably already know that heart disease is America's #1 killer. However, are you also aware that research has found that heart attacks start in the brain? It is true. (The following is an excerpt from *A new cardiovascular perspective using applied kinesiology as functional neurology: a case series* by Dr. Allen.)

Case Study: A 57 year old female patient presented with a chronic thyroid issue, presented diagnosed with a Hashimoto's syndrome, chronic lymphocytic leukemia and polyneuropathy. Two days after her thyroid condition was treated she noticed she lost 5 pounds, had less neuropathy, slept better and noticed her energy significantly increased.

“The normalization of efferent autonomic drive (EAD) via functional neurological means may help reduce the incidence of cardiovascular disease and sudden cardiac

death (SCD). Cardiovascular disease, including heart disease and stroke, is the number one killer worldwide. Cardiovascular disease statistics remain high despite myriad medical treatments. Sudden death from cardiac arrest—a demise resulting from an abrupt loss of heart function (cardiac arrest)—is a

Case Study: A 34 year old female patient presented with complex regional pain syndrome and atrial fibrillation. Her arrhythmia occurred every third beat and her heart rate was 97 beats per minute. After the end of that treatment her arrhythmia happened after the 32d beat once, and not thereafter, and her heart rate was down to the normal 72 beats per minute.

major health problem, yet it has received much less publicity than heart attack. SCD accounts for approximately 325,000 deaths per year in the United States and a large portion (as many as 40%) go unwitnessed, and only an estimated 20% of patients who have out-of-hospital cardiac arrest survive to hospital discharge; more deaths are attributable to SCD than to lung cancer, breast cancer, or AIDS. This represents an incidence of 0.1-0.2% per year in the adult population. Most cases of SCD are related to cardiac arrhythmias. SCD is often the first expression of coronary artery disease (CAD) and is responsible for approximately 50% of deaths from CAD. The

time and mode of death are unexpected and occurs within minutes after symptoms appear. The American Heart Association (AHA) supports implementing an early recognition of the potential for an event with a specific survival protocol to rescue people who suffer a cardiac arrest in the community. (American Heart Assoc., 2010)

“The causes of cardiovascular disease are generally the same in every region and race, and stress seems to play a more important role in its production. The frequency of SCD in Western industrialized nations is similar to that in the United States. The incidence of SCD in other countries varies as a reflection of the prevalence of CAD or other high-frequency cardiomyopathies in those populations. The trend toward increasing SCD events in developing nations of the world is thought to reflect a change in dietary and lifestyle habits in these nations. It has been estimated that SCD claims more than 7,000,000 lives per year worldwide.

“Heart diseases can naturally lead to cardiac arrest and SCD. The cardiac arrests that lead to SCD are most often the result of either ventricular tachycardia or ventricular fibrillation, or both. Cardiac arrhythmia can cause arrest. Some cardiac arrests are due to extreme bradycardia.

“In 90 percent of adult victims of SCD, two or more major coronary arteries are narrowed by fatty buildups. Scarring from a prior heart attack is found in two-thirds of victims. When sudden death occurs in young adults, other heart abnormalities are more likely causes.

“The hypothesis—heart function outcomes can be influenced by changing its EAD—led to a Medline search to answer the question, “What can be done for patients who have cardiac symptoms but no definitive diagnosis for cardiac treatment?” This search yielded several perspectives related to brain-heart involvement but none that relate to the stimulation of the primary afferents. (Lane et al., 2009; Taggart et al., 2009; Ziegelstein, 2007; Gray, et al., 2007; Hilz et al., 2006)

“Although the neurogenic mechanisms are poorly understood, stress may precipitate cardiac arrhythmia and sudden death in vulnerable patients, (Critchley et al., 2005) presumably via centrally driven autonomic nervous system responses. Critchley *et al*, suggest that SCD is most probable during an induced proarrhythmic state caused by a dysfunctional EAD. The nominal EAD is the effect of globally and appropriately facilitated cortical centers that result from a functionally reciprocal afferent system arising in joint mechanoreceptors of skeletal muscle both axially and peripherally.

“We measured the effect of mental stress on heart function using manual muscle testing. We chose the subscapularis muscle on the assumption that it is heart-related as yet unreported in the literature. (Cuthbert and Goodheart, 2007).”

Module VIII is an exciting and very hands-on, clinically oriented class, but ***because of its complexity Module VIII is only open to those doctors who have completed Modules I-VII.***

Do not miss this life—and practice—changing module!

If necessary, Dr. Allen will teach you the basic manual muscle tests needed for this and future class:

- *Pectoralis major (clavicular division)*
- *Subscapularis (It is important to understand the fundamental subscapularis testing procedures. Modifications will be taught and discussed.)*

Table 1: Review of Complaints				
Complaint	Number	Males (%)	Females (%)	% Total # Symptoms (86)
Palpitations	16	5 (31)	11 (69)	19
Chest pain (Angina)	14	5 (36)	9 (64)	16
Dysrhythmia	10	6 (60)	4 (40)	12
Shortness of breath (Dyspnea)	10	4 (40)	6 (60)	12
Tachycardia	6	5 (83)	1 (17)	7
Family history CHD	5	2 (40)	3 (60)	6
Atrial fibrillation	4	3 (75)	1 (25)	5
Faintness (Syncope)	3	---	3 (100)	3
Chronic cough	2	1 (50)	1 (50)	2
Extremity pain	2	1 (50)	1 (50)	2
Other (<i>one each: bradycardia, valvular dysfunction, vertigo, migraine, aortic stenosis, chest heaviness, sweating, anxiety, abnormal vessels, edema, left ventricular hypertrophy, high blood pressure, atrial stenosis, history MI</i>)	<u>14</u> 86	11 (79)	3 (21)	<u>16</u> 100%

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Top News in Internal Medicine

Association between obesity, atrial fibrillation and prevalence of cardiovascular disease

American College of Cardiology News

“Numerous trials and meta-analyses have shown a strong obesity paradox in atrial fibrillation (AFib), in which overweight and obese patients with AFib tend to have a better prognosis than normal or underweight patients. Despite this, recent evidence found that weight loss, physical activity and exercise, and increases in cardiorespiratory fitness (CRF) help with the primary prevention and reduction of AFib recurrences, according to a state-of-the-art review published October 9 in the Journal of the American College of Cardiology.

“The prevalence of AFib in adults is expected to increase by nearly three-fold over the next 30 years, from 5.2 million to 12.1 million affected people in the U.S. alone, causing experts to categorize this as an AFib epidemic. Meanwhile, evidence shows an association between the increasing obesity epidemic and an increase in the risk of developing AFib. Additionally, in recent epidemiological studies, obesity has emerged as an independent risk factor for AFib.”

This article reminds us of why we need to improve our diagnostic skills. Cardiovascular disease is the leading cause of death globally. Our regular skills are not doing the job well enough to change these statistics. Learn more about cardiovascular testing to better help those people who depend on your for their healthcare.