

Office Visit Note

67 yrs, 6 mo at the time of visit

Seen by Karl Lambert, ARNP

Date of Encounter: 07/26/2024

Subjective

1. MCG report and interpretation

Objective

- Data:
- 07/17/2024 MCG Report 07/26/2024
 - Interpreter: Karl Lambert, ARNP
 - Category E (High Dysfunction)
 - Strong evidence for metabolic related acute and chronic small and large coronary artery vessel disease. There severe evidence for left-sided, both small and large vessel disease (LAD). There is no evidence for right-sided. There is mild evidence for congenital heart disease. There is no evidence for stiffening through the ventricular pathway or the metabolic pathway. There severe evidence for increased elasticity or softening noted through the metabolic pathway. Myocardial damage due to ischemia, 5/5.
 - There is no evidence for mitochondrial dysfunction.
 - There is early, developing rhythm disturbance potential showing up with with ventricular arrhythmias and incipient arrhythmia. This did not mean the actual presence of arrhythmias, but the potential for these developing or worsening.

Assessment

1. Myocarditis I51.4
 - MCG is not diagnostic for myocarditis but certainly strongly suggestive for an inflammatory process to the heart. Micro clotting disease may be contributing to this. In comparing results, this is remain consistent.
2. Cardiomyopathy I42.9
 - Strong evidence for this certainly weighs more heavily on metabolic related, although need to consider other etiologies. Those differentials would include long covid and micro clotting disease. In comparing previous results, he certainly had worsening since the initial and no change since March, 24.

Plan

- Proc:
- Multifunction Cardiogram testing
 - Unlisted Cardiovascular Service or Procedure

Care Plan:

1. Alcohol intake: limit alcohol intake to no more than 2 alcoholic drinks per week, with red dry wine being the preferred drink.
2. Metabolic factors: Labs - Reviewed and optimal
3. Gut microbiome improvement: Consider the following probiotic online and take 1 capsule daily:
<https://www.silverfernbrand.com/products/ultimate-probiotic-supplement>. Add this to what you are taking
4. Autoimmune markers: Labs - Consider CRP, Sed. Rate, RA Factor, ANA; CMV; EBV and western blot to rule out autoimmune disease and Lyme disease
5. Hyperlipidemia: Labs - Reviewed and noted
6. Hypertension: BP evaluation daily. Report if BP above 135/85.
7. Sleep: Consider sleep apnea testing in the future if indicated. This was not picked up on this MCG report or previous ones.
8. Genetic disorders - Certainly not picked up on this MCG, but noted on the 4/25/23 MCG

Arterosil and Vascanox or Berkely Nitric Oxide. take 1 capsule twice daily of each of these for the following benefits

- Support a healthy cardiovascular system*
- Support and maintain blood pressure in the normal range*
- Support healthy circulation*
- Nitric oxide production for vasodilation*
- ***Endothelial repair***

10. Consider optimization of hormones and see a bioidentical hormone specialist to look at testosterone. Thyroid is sub optimal and would look at optimizing your Free T3 and Free T4. Your TSH needs to be less than 1.0. Your Vitamin D needs to be 90++. Need to know your Estradiol levels as well along with your DHEA-S levels.

11. Consider Spiked protein ab levels and micro clot score.

12. Exercise: High-intensity exercise 6-7 days per week with a heart rate between 115 - 120 BPM. Please start at 15 minutes daily and gradually increase to 50 minutes. If you feel worsening of SOB, please stop and rest. Excessive fatigue and SOB might be due to myocarditis.

Those who get less than 20 minutes per day of physical activity have the highest risk of death. 60 continuous minutes per day equals a decreased risk of death by 57%; 100 continuous minutes per day equals a death risk decrease of 76%. To lose weight, 45 continuous minutes per day is necessary.

After age 30, exercise is mandatory.

13. Mediterranean Diet is recommended -

The key components of the Mediterranean diet include: • Eating whole grains, fruits, vegetables and plant-based fats every day. • Eating fish, poultry, eggs, beans and legumes weekly. • Eating only moderate portions of dairy. • Eating a limited amount of red meat. • Drinking a sensible amount of red wine. • Taking part in regular physical activity. • Drinking water or unsweetened tea every day. • Using fresh herbs and spices for flavoring. • Making mealtime a social gathering with family and friends.

You will find more information on Mediterranean Diet here: <https://mcforms.mayo.edu/mc6800-mc6899/mc6815.pdf>

*** Additionally, a goal is to eat 25 grams of carbohydrates, or less every 4 hours. No not consume more than 25 grams in any given 4 hour period.

Intermittent fasting: Intermittent fasting protocol is EXTREMELY important. Minimal fast should be at least 16 hours in every 24-hour period. This fasting period should include sleep.

When you fast, you may drink black coffee and tea without added sugar, milk, creamer. Monkfruit and Stevia sweeteners are ok.

Best fasting protocol:

- Daily: 16-20 hour fast with a 4-6 hour window of food-consumption.
- Once weekly: 23 hour fast with a 1 hour window of food-consumption.

Consider purchasing a book by Dr. Jason Fung: "The Complete Guide to Fasting" for further insight and ideas.

Detoxification mutations: NAC, glutathione IV infusions 4-8 times per year or oral supplementation.

2. Repeat MCG in 3 months.

3. The benefits of Thyroid:

- Benefits of thyroid, specifically T3 at 4.4 or higher
 - a. Helps with reducing visceral fat and lowers cholesterol
 - b. Protects against cardiovascular disease.
 - c. Improves cognitive ability and reduces memory loss
 - d. Fatigue and weight gain
 - e. Improves bowel function

Internal Med News, 2004 December 15, Subclinical hypothyroidism is an independent risk factor for coronary heart disease. SCH as it is known is associated with increased total cholesterol and triglyceride levels. JAMA 2004 Dec 1: 292(21); 2600-2613; decreasing levels of Free T3 were associated with increased mortality and overall decline in global cognitive function.

Another article supported that low T3 levels are independently predictive of vertebral fractures in women older than 50 years.

The Thyroid-Cholesterol Connection. Prev Cardiol. 2001 Autumn; 4(4): 179-182 shows a relationship between decreased T3 and increased serum cholesterol. Even mild thyroid disease can affect the metabolism of cholesterol.

Ojamaa K. Thyroid Hormone Therapy of Cardiovascular Disease. CVR & R. 2002; 23:20-26 shows replacement doses of T3 sufficient to return serum levels to normal enhanced left ventricular function.

Teitelbaum J. More Than Meets the Eye. Healthy Aging 2(5); 75-78. Accessed on FEB 20 2013. Thyroid treatment is more likely to decreased one's risk of heart disease by lowering cholesterol.

Asvold, Bjorn O., et al. "Thyrotropin levels and risk of fatal coronary heart disease: the HUNT study" Archives of Internal Medicine 18.8 (2008): 855-860

Rodondi, N., et al. Subclinical Hypothyroidism and the risk of coronary heart disease and mortality; JAMA 2010 Sept 22; 304 (12); 1365-74 The Risk of CHD event and CHD mortality increased with higher TSH concentrations.

Obuobie, K., et al. Increased Central arterial stiffness in hypothyroidism; J. Clinical Endocrinology Metab; 2002 Oct 87*(10); 4662-6. Hypothyroidism is associated with increased cardiovascular risk by increasing augmentation of central aortic pressures and central arterial stiffness.

Yoong Joo Park, MD., et al. Subclinical Hypothyroidism Might Increase the risk of Transient Atrial Fibrillation After Coronary Artery Bypass Grafting. <https://doi.org/10.1016/althovascular.2009.03.032>

Liu, F. H., Hwang, J.S., et al., 2018 Subclinical Hypothyroidism and metabolic risk factors association: A health examination based study in Northern Taiwan. Biomedical Journal, 41(1), 52-58. doi:20:2016/j.bj.2018.02.002

4. Multiple testosterone Grade II outcome based studies have shown only benefit of optimize testosterone.

Unfortunately, most of my peers have relied on observational or low grade studies on the benefits of testosterone. For example, the absolute risk reduction of a heart attack or stroke with the use of bio identical testosterone is 50% compared to the use of statins, only 2-3%.



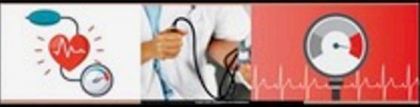



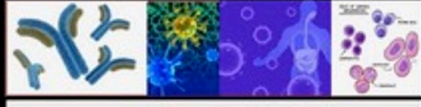
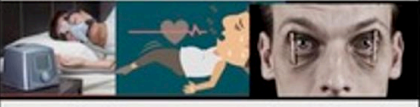



- Testosterone offers numerous advantages:
 - It enhances overall well-being.
 - It contributes to an increase in lean muscle mass.
 - It aids in reducing cholesterol levels.
 - It promotes better skin tone and increases collagen production.
 - It accelerates healing processes.
 - It extends the quality of life by mitigating age-related diseases.
 - It offers protection against cardiovascular diseases, diabetes, hypertension, and degenerative joint disease.
 - It bolsters cognitive functions, thereby reducing the risk of dementia.
 - It serves as a preventive measure and treatment for depression.
 - It reduces pro-inflammatory cytokines.
 - It curtails plaque formation.
 - It enhances sexual function.

5. Benefits of DHEA-S

- The Benefits of DHEA-S:
 - a. Reduces cardiovascular risk by reducing visceral fat
 - b. Stimulates the immune system, improves mood, decreases cholesterol
 - c. Improves memory, increases energy
 - d. Natural antidepressant
 - e. Anti-cancer properties by enhancing the immune system
 - f. It is an endocrine precursor to other hormones, prevents immuno-sensescence, loss of sleep, osteoporosis, atherosclerosis
 - g. Reduces insulin requirement

Original File: • Untitled.pdf

Signed electronically by Karl Lambert, ARNP on 07/26/2024 4:20 pm in ElationHealth

Diabetes/Pre-Diabetes 	Dyslipidemia 	Hypertension 
Gut Biogenome 	Inflammatory Disease States That Cause Cardiovascular Disease 	Obesity 
Autoimmune, Inflammatory Conditions, & Infections 		Sleep Disturbances/Sleep Disorders 
Genetic Disorders 	Mental Health Disorders 	Chronic Kidney Disease (CKD) 



Low Carbohydrate/Reduced Fat Diet

With insulin resistance, carbohydrates become a source of problems as carbohydrates break down with digestion into glucose (sugar) molecules. After years of following patients in the clinic and monitoring thousands of patients home glucose monitor reports in combination with advanced lipid evaluation, I have come to the conclusion that carbohydrates ingestion greater than 25 grams in a 4 hour period leads to the liver manufacturing large quantities of bad fats and bad inflammatory factors for approximately four days after each ingestion. **It is vital that every patient eat < 25 grams of carbohydrates every 4 hours strictly and consistently!**

Bread and fruit are almost “deal-breakers” when you attempt to stay under 25 grams of carbohydrates every 4 hours. It seems strange to say this but it is better to avoid bread and fruit altogether if you have any form of insulin resistance. I suggest that you try to avoid fruit and bread in your diet all together!

I suggest that insulin resistant patients **avoid pasta and rice** as well due to the amount of carbohydrates contained within pasta and rice. It is difficult to stay under 25 grams of carbohydrates every 4 hours when rice and pasta are included in a meal. Some dietitians/clinicians suggest that whole wheat pasta and brown rice are acceptable options due to the complex carbohydrates contained within these foods, but I see problems with this strategy and suggest that you avoid all pasta and all rice intake!

Low carbohydrate diets emphasize proteins as **“proteins are your friend!”** To succeed at our low carbohydrate-reduced fat diet you will be eating mostly meat, vegetables, soup, and salad.

Most vegetables are great for this diet except potatoes, corn, carrots, and beets. Some of the other vegetables contain a modest amount of carbohydrates but, in my experience, most of the other vegetables are well tolerated when reasonable portions are eaten.

Your carbohydrate allowance is strictly < 25 grams in a four hour period. If you skip a meal, you cannot eat 50 grams of carbohydrates in the next mealtime! **There is no credit system for your low carbohydrate diet you are being asked to eat!** If you miss eating a meal, you simply lose the 25 gram carbohydrate allotment that you could have eaten.

If you eat all 25 grams of the carbohydrates that you are allowed at a mealtime, you cannot eat a 12 gram carbohydrate snack in 2 hours. **If you want to snack between meals, you have to lessen your carbohydrate intake at mealtimes so that the total carbohydrates for the meal and snack do not exceed 25 grams total in a four hour period.**

Regarding fat intake, you want to be careful to avoid saturated fats, often obtained from red meat, eggs, and fried foods. **If the meat doesn't swim underwater or fly, it is probably bad for you!** You can cook your meats almost anyway imaginable except do not fry your food! Baking, broiling, grilling, rotisserie, roasting, smoking, or microwaving your meats all will be fine.

Adding > 40 minutes of nonstop, aerobic exercise daily to the above low carbohydrate-reduced fat diet will help remove the endothelial inflammatory factors and help you maximize your overall cardiovascular health status!

The **25-40 rule** is the summation of what every insulin resistant patient needs to have deeply embedded in their mindset! The 25 represents the absolute 4 hour limit of carbohydrate intake while the 40 represents the “minimum” amount of nonstop, aerobic exercise necessary to obtain removal of endothelial inflammation. Following the 25-40 rule is the key to successful lifestyle changes that facilitate a healthy cardiovascular system! After 6 months of daily aerobic exercise, you will need to increase your daily exercise regimen to > 50 minutes of nonstop, aerobic exercise that gets your heart rate to the 70% level and maintaining that heart rate for at least 30 minutes of your exercise session.