

COQ-10 (COENZYME Q-10) – GOOD OR BAD? DRAW YOUR OWN CONCLUSION

by Charles (Chuck) Maack – Prostate Cancer Activist/Mentor

DISCLAIMER: Please recognize that I am not a Medical Doctor. I have been an avid student researching and studying prostate cancer as a survivor and continuing patient since 1992. I have dedicated my retirement years to continued research and study in order to serve as an advocate for prostate cancer awareness, and, from a activist patient's viewpoint, to voluntarily help patients, caregivers, and others interested develop an understanding of prostate cancer, its treatment options, and the treatment of the side effects that often accompany treatment. There is absolutely no charge for my mentoring – I provide this free service as one who has been there and hoping to make your journey one with better understanding and knowledge than was available to me when I was diagnosed so many years ago. Readers of this paper must understand that the comments or recommendations I make are not intended to be the procedure to blindly follow; rather, they are to be reviewed as my opinion, then used for further personal research, study, and subsequent discussion with the medical professional/physician providing your prostate cancer care.

Since the use of Coenzyme Q-10 (COQ-10) (ubiquinone) has returned as a subject for use for the prostate cancer patient, I am providing Dr. Myers concerns so that all are aware. Personally, CoQ-10 changed my wife's mounting creatinine level wherein she was being prepared for dialysis and even had a fistula surgically implanted in her arm. In researching the internet and finding a trial wherein the administration of CoQ-10 at 60mg three times per day significantly reduced the creatinine level in trial patients, my wife began this same regimen and her level returned to normal and has remained there since 5/25/06. She no longer requires dialysis. The fistula has been surgically removed. (See <http://www.epic4health.com/coqinandrenf.html>) And, I have since found other studies supporting the use of CoQ-10 for several health issues. Despite Dr. Myers concerns, I have been unable to find any adverse effects of CoQ-10, and for that reason include 50mg CoQ-10 three times per day in my own regimen as another precautionary measure in my own advanced prostate cancer treatment.

In a message dated 11/3/07 12:40:16 AM, maack1@cox.net writes:

Dr. Myers,

You remark: "Furthermore, I see no evidence that it is of any value as a treatment for prostate cancer."

In my research of COQ10 on the internet I found several supportive articles of COQ10 for prostate cancer. Here are just a couple:

<http://www.med.miami.edu/news/view.asp?id=403>

<http://www.newswithviews.com/Howenstine/james2.htm>

(Dr. Myers response):

"I am well aware of these "news releases", but they do not represent good science and are certainly not applicable to patients. Carl Folkers work is quite old. In fact, we were aware of it in the 1990s. We tried to duplicate his work and could never get it to work as we wondered why statins would kill prostate cancer so readily in the lab if they induced Q10 deficiency while Folkers claimed excess was therapeutic. When we started our attempt to duplicate that work, we wondered if the response curve was not biphasic: severe deficiency and excess would be equally therapeutic. Unfortunately, we were never able to find any anticancer activity with excess Q10.

If instead of the internet, you go to Medline or Pubmed and search the peer-reviewed medical and scientific literature, you will not find a valid study demonstrating activity of Q10 in patients with prostate cancer. Finally, I would say that the two media releases you quote are really excellent evidence in favor of my point, not evidence in favor of actually giving Q10 to patients without first having some clinical trial evidence to support it. One paper talks about applying it as an ointment, the other just rehashes the old Folkers data.

As I see it, the bottom line is that we do not have convincing evidence of therapeutic benefit in the treatment of human prostate cancer in patients and we do

have some disturbing safety issues raised in animal models. I would change my mind if we had a clinical trial showing a response rate or even a reduction in PSA doubling time linked with long term safety data in any therapeutic situation. For example, Q10 appears to have short term benefit for Parkinson's disease and they live a long time. If someone does a long term Parkinson's randomized controlled clinical trial and no unexpected side effects emerge in the treatment arm - in particular no evidence of accelerated aging in those on Q10, then I would reconsider my stance. For now, we have so many other, more exciting and promising leads to investigate with regard to prostate cancer treatment, I am at a loss to understand why anyone is even interested in this issue."

(Other information regarding CoQ-10 I have posted in the past or collected from others who have posted that should be reviewed and then left up to you, the patient, to determine whether you want to add this supplement to your daily intake follows):

I checked on a few of the references regarding COQ-10 LISTED IN THE APPENDIX OF DR. MYERS BOOK "BEATING PROSTATE CANCER: HORMONAL THERAPY & DIET), and of those I checked, rather than finding fault with COQ-10, rather indicated concern for the depletion of COQ-10 for various reasons (statins, for example).

Dr. Stephen Strum, another Medical Oncologist who specializes in prostate cancer research and treatment and co-author of "A Primer on Prostate Cancer- The Empowered Patient's Guide," recommends COQ-10 at 200mg/day, but remarks "use in conjunction with acetyl-L carnitine if heart disease present." One of the references in Dr. Myers book suggests Atorvastatin as decreasing COQ-10 levels in the blood of patients at risk for cardiovascular disease and stroke. So, apparently COQ-10 levels are of concern for these "at risk" PC patients. And possibly this is Dr. Myers concern that patients at risk for cardiovascular disease should not receive COQ-10 as part of his reasoning. However, since a large number of patients are likely not at risk, it would appear that the benefit COQ-10 provides should include this supplement for those patients. Both Dr. Strum, and references in Dr. Myers book, make note that it is an important supplement for those taking statin drugs to prevent depletion of COQ-10, so COQ-10 is recognized as an important nutrient in the system.

From another article: “Not only does CoQ10 help your heart, it boosts cellular energy throughout your entire body and fights fatigue. In addition, CoQ10 helps to reduce muscle pain and weakness, which are the most commonly reported side effects of cholesterol-lowering drugs. **CoQ10 Is Fuel for Your Heart** - Your heart, which beats about 100,000 times a day to get its job done,^[2] is fueled by CoQ10 which is why so many studies have shown that it confers powerful protection for your entire cardiovascular system. When your heart has the high levels of CoQ10 it needs, it works like a charm. But **when levels get low, your heart strains to do its job**, and ultimately your entire body suffers.^[3] Suboptimal heart function can result in the "mystery symptoms" that so many of us experience as we get older such as fatigue, pain and decreases in mental functions. The fact is, if you have health problems that seemingly won't go away, CoQ10 may be the natural solution you've been looking for.”

With all the positive articles I find supporting the importance of COQ-10, I have a hard time understanding reservations in its supplemental use for patients not at risk for cardiovascular disease and stroke.

<http://www.ncbi.nlm.nih.gov/pubmed/17516992?ordinalpos=5&itool=EntrezSystem>

<http://www.answers.com/topic/coenzyme-q10?cat=health>

http://www.mayoclinic.com/health/coenzyme-q10/NS_patient-coenzymeq10

<http://www.mskcc.org/mskcc/html/69186.cfm>

Read this paper regarding the importance of checking COQ-10 levels when experiencing Chronic Fatigue Syndrome (CFS):

<http://tinyurl.com/yzbfpp6>

It is obvious that I am a firm believer in the importance of this supplement in many areas of health.

"COQ-10 A Gentle Cancer Killer" (<http://www6.miami.edu/ummedicine-magazine/fall2005/fstory4.html>) describes COQ-10 inhibiting a protective protein on cancer cells resulting in cancer cell apoptosis for prostate cancer, breast cancer, and melanoma. This URL <http://www.med.miami.edu/news/view.asp?id=519> elaborates on the same research. Another attachment describes the use of COQ-10 to treat a number of malignancies.

Here is yet more information I found describing the use of COQ-10 for MITOCHONDRIAL DISEASE:

Mitochondrial Disease and its Management

You have been diagnosed with mitochondrial dysfunction based on an exercise study in which you produced abnormal amounts of lactic acid. Lactic acid is produced when normal metabolism using oxygen (oxidative phosphorylation) fails. Oxidative phosphorylation occurs in the mitochondria. Reviews of mitochondrial and their diseases can be found through www.mitomap.org. You do not have one the early onset mitochondrial diseases, such as MERRF, MELAS or Leigh syndrome (these have an incidence around 1: 400,000), but a common problem with inefficient mitochondrial function that may be do to various mutations within the mitochondria or within genes regulating mitochondrial function (these have an incidence of around 1:2000) (1-13). Hypothyroidism and carnitine deficiency should have already been ruled out, as these can cause secondary mitochondrial dysfunction (9). No one knows precisely the long-term prognosis of these problems, but it is suspected that they are relatively benign. Further work up including a muscle biopsy with various biochemical and genetic tests can be done, but may not find the abnormal gene responsible for the problem as assays are available for less that 50 of potentially thousands of relevant genes.

Several things can be done to improve your symptoms. First, you should try to adjust your schedule so that each day you stay under your "ceiling for energy expenditure". Second, anti-oxidants have been shown to be helpful (Vitamin C 500mg 2 times per day and vitamin E 200 IU 2 times per day) (14). Next, Coenzyme Q10 (ubiquinone or its analogue idebenone) should be used in split doses, starting at 100mg 2 times per day and working up to a maximum of 600mg per day in divided doses (15, 16). Each dose should be given 4-6 weeks to work. The best ubiquinone available is Q-Gel, which can be purchased through the Internet (<http://tishcon.com>). Locally available CoQ10 is variable in quality; the best is at Sam's or Wal-Mart's. Idebenone works better than ubiquinone for a few people and is also purchased over the Internet (www.harvesthealth.com). The

equivalent of 100mg ubiquinone is 45mg idebenone. Finally, creatine has been helpful to improve muscle function in patients with mitochondrial disorders (17-19). The usual dose is 1 – 2 grams given 2 times per day. Creatine can be purchased from any number of sources. I (the writer) do not have any information at this time regarding which is the best.

In addition, for those who are interested there is a support group for patients with these disorders in Western New York. Please contact Sue Epstein (suejepstein@yahoo.com) . Read and learn as much as you can. Also, remember that you will be less efficient at clearing infections than others, so it will take you longer to get over colds etc. Be patient (20) !!

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