# ERECTILE DYSFUNCTION – UNREASONABLE EXPECTATIONS Compiled 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.

When asked my opinion by patients/caregivers regarding when they should expect a return of normal erectile function, I provide <a href="http://tinyurl.com/3rtah63">http://tinyurl.com/3rtah63</a>. For those interested in knowing more regarding erectile dysfunction (ED), I provide <a href="http://tinyurl.com/3oz7u81">http://tinyurl.com/3oz7u81</a>. KEY WORDS: Erectile Expectations! And with those words it is important to be aware immediately that the return of an erection without the use of medications or penile injections ARE NOT LIKELY GOING TO HAPPEN FOR MANY in any short time frame. Unfortunately, not enough attention is provided by treating physicians to tell you ahead of time that percentage-wise you may very well experience erectile dysfunction for up to a year and for many a couple years, and for still others, normal erectile function will never occur without medicines to stimulate an erection. Surgical removal of the prostate gland despite saving the adjacent neurovascular bundles is going to have a traumatic effect on those bundles that are not going to recover in any "near-time." If only one of those bundles is saved, again, there will be no early recovery. And if both bundles are NOT saved, the use of PDE5 inhibitors (explained below) will

have no effect on erectile function; only medications used in penile injections will be able to help bring about an erection. External Beam Radiation to the prostate gland and its periphery will include the neurovascular bundles as well as the penis that may result in similar erectile dysfunction that can then take quite some time to recover. ED in the first year following external beam radiation in any form may be negligible, but after the first year potency declines and ED elevates. Certainly advanced age, the use of androgen blockade, as well as comorbidities (vascular diseases, diabetes), contribute to impotence. The better the sexual function before radiation, the more likely patients may maintain function after treatment. Yet, about 30-40 percent of potent patients become impotent 5-10 years after RT. It usually does not occur right after radiation therapy but slowly develops over the years.

Freezing of the prostate gland (Cryotherapy) more often than not includes the neurovascular bundles, and when that occurs – as with removal of those bundles – only medications used in penile injections can provide an erection.

The trigger for penile erection is sexual stimulation reaching the brain. This paper provides an explanation of the somewhat complex activity that then ensues to bring about penile erection: <a href="http://tinyurl.com/ldpvpro">http://tinyurl.com/ldpvpro</a>. The brain responds to the stimulation by signaling the heart to pump more blood into the penile arteries. These arteries promptly dilate to twice normal size. Blood-flow jumps sixteen times normal. As blood-flow increases in the arteries, it partly blocks the veins and traps the arterial blood. The two channels of the penis called "Corpus cavernosa" become so full of blood the penis lengthens and can double its cubic size. All of this can take place in a normal man within 60 seconds!

This marvelously elaborate system happens, or it doesn't, depending on the flow of blood. If any part of the process breaks down, getting or keeping an erection becomes impossible. The system can break down from many causes; surgical removal of or radiation to the prostate gland, mental/emotional problems, a new partner, stress, anxiousness, fear of sexual failure, disease involving the blood vessels, hypertension, diabetes, elevated cholesterol, some medications for high blood pressure, diffuse arterial disease (blockages in the small penile arteries), venous leak (though blood flows properly into the corpus cavernosa, the veins are not compressed to hold it where it is needed). Age plays a role since as men get older, the corpus cavernosa can lose their ability to stretch. When this happens, the chambers do not enlarge to accept an increase in blood sufficient to squeeze the

veins and hold the blood in place. Other causes: low testosterone, damage to the nerves, muscles, or bones in the groin area, and even tobacco. Alcohol's impact on the libido and sexual capability is well put in the saying "As whiskey make desire go up, ability goes down." The methods to counter some of these problems are nearly the same today as they were those several years ago. PDE-5 inhibitors were not yet available. Trazadone and Ginseng where sometimes considered as aphrodisiacs that might dilate the penile arteries to an indefinite, varying extent. L'Arginine is another form of aphrodisiac but read my review below.

The current primary "aids" to hopefully still enable an erection and hopefully bring about natural erections are now PDE5 inhibitors (sildenafil as Viagra, vardenafil as Levitra, or tadalafil as Cialis – the most common names we are used to – as well as vardenafil HCI as Staxyn, and avanafil as Stendra) and penile injections (usually bimix or trimix), since both enhance arterial blood flow as well as necessary oxygenation of penile tissue.

A suggestion in the event venous leak may be the culprit is to take a ring from a Vacuum Erection Device (VED) and with penile injection move the ring to the base of the penis to hopefully hold the blood in for sufficient time for intercourse.

Since there are men who recommend the use of L-arginine, I see it important that I elaborate on the use of L-arginine:

A man taking this product also asked what I thought of L-Citrulline, since he had read that it is found in various fruits and supposedly is another form of aphrodisiac. Since Citrulline is a precursor to Arginine I felt an explanation of both the good as well as (and I think more importantly) the dangerous effects that could come from taking L-Arginine. Though many have apparently fared without problems with use of this product, there is much evidence of the harm that can come from side effects and drug interactions to those making use of the product without studying the product and having a physician participating in overseeing its use who is, himself/herself, reasonably knowledgeable in the product.

My advice when it comes to L-Arginine: Every so often L-arginine is recommended to those experiencing Erectile Dysfunction (ED). All well and good IF the side effects AND drug interactions are known before consuming. Use by those with heart issues and/or those already experiencing heartburn or ulcers should be avoided. Pay particular attention to the "Possible Drug Interactions" identified below. L-Arginine is not an herb appropriate to everyone.

What to know about L-Arginine before consuming:

### Erectile Dysfunction•

L-arginine has been used for erectile dysfunction. Like the drug sildenafil citrate (Viagra), L-arginine is thought to enhance the action of nitric oxide, which relaxes muscles surrounding blood vessels supplying the penis. As a result, blood vessels in the penis dilate, increasing blood flow, which helps maintain an erection. The difference in how they work is that Viagra blocks an enzyme called PDE5 which destroys nitric oxide and L-arginine is used to make nitric oxide.

In one study, 50 men with erectile dysfunction took either 5 grams of L-arginine per day or a placebo. After six weeks, more men in the L-arginine group had an improvement compared to those taking the placebo. Unlike Viagra, L-arginine must be taken daily.

#### Wound healing

L-arginine's possible activity in wound repair may be due to its role in the formation of L-proline, an important amino acid that is essential for the synthesis of collagen.

#### Other Conditions

L-arginine is also used for high blood pressure, migraines, sexual dysfunction in women, intermittent claudication, and interstitial cystitis.

## Sources of L-Arginine

L-arginine is conditionally essential, which means that the body normally has enough. It's produced in the kidney and to a lesser extent, in the liver.

Food sources of L-arginine include plant and animal proteins, such as dairy products, meat, poultry, fish, and nuts. The ratio of L-arginine to lysine is also important - soy and other plant proteins have more L-arginine than animal sources of protein.

Severe burns, infections, and injuries can deplete the body's supply of arginine. Under these conditions, L-arginine becomes essential and it is necessary to ensure proper intake to meet the increased demands.

L-arginine is also essential for children with rare genetic disorders that impair the formation of L-arginine.

Side Effects of L-Arginine (MY NOTE: This is the important stuff to be aware)

L-arginine may lower blood pressure because it is involved in the formation of nitric oxide. It may also result in indigestion, nausea, and headache.

L-arginine should not be used following a heart attack. If you have a history of heart disease, consult your doctor before taking L-arginine.

Higher doses of arginine can increase stomach acid, so it may worsen heartburn, ulcers, or digestive upset cause by medications. Arginine appears to increase stomach acid by stimulating the production of gastrin, a hormone that increases stomach acid.

L-arginine may also alter potassium levels, especially in people with liver disease. People with kidney disease and those who take ACE inhibitors or potassium sparing diuretics should not use supplemental L-arginine unless they are under professional supervision. It may also alter the levels of other chemicals and electrolytes in the body, such as chloride, sodium, and phosphate.

Arginine may increase blood sugar levels, so it shouldn't be used by people with diabetes unless under a doctor's supervision.

People with genital herpes should not take L-arginine because it may aggravate their symptoms.

Possible Drug Interactions

L-arginine may counteract the benefits of lysine to treat herpes.

NSAIDS (non-steroidal anti-inflammatories) or other drugs that are hard on the stomach should not be combined with L-arginine.

Drugs that alter potassium levels in the body, such as ACE inhibitors and potassium sparing diuretics.

In closing, A check of the internet can find both pros and cons regarding the use of L-arginine. I listed some of the areas of concern, and here is a comment regarding this product and cancer:

"Administration of large amounts of arginine to animals has been found both to promote and to interfere with cancer growth. In preliminary research, high intake (30 grams per day) of arginine has increased cancer cell growth in humans. On the

other hand, in people with cancer, arginine has been found to stimulate the immune system. At this time it remains unclear whether arginine is dangerous or helpful for people with cancer."

That comment still makes me wary. Possibly lower intake would have much less effect, but, personally, I opt for safety. I encourage those interested in supplementing to do so only under the oversight of a physician who is knowledgeable regarding L-arginine AND its side effects, and even then, be certain to have regular diagnostics to insure this product is not effecting vital organs.

I also doubt that nowadays any physician would prescribe Trazadone for erectile dysfunction issues; somewhat a "bad news" anti-depressant.