BPH (BENIGN PROSTATIC HYPERPLASIA) TREATMENT CONSIDERATIONS

Compiled by Charles (Chuck) Maack – Prostate Cancer Advocate/Activist

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 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. 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 prostate cancer care.

IF TREATING FOR ENLARGED PROSTATE PRIOR TO TREATMENT FOR KNOWN PROSTATE CANCER (SCROLL FURTHER DOWN IF TREATING ONLY BPH):

If you reside in an area or willing to travel to an area that provides laser therapy, you might consider this therapy to relieve BPH. See: http://tinyurl.com/6tfj2py

Otherwise, I would suggest discussion with one's urologist administering at least a week of bicalutamide/Casodex one 50mg tablet daily (to stop a reaction known as "flare" that can occur when initially beginning an LHRH agonist) followed a week after beginning this antiandrogen with a 84-day dosage 22.5mg injection of the LHRH agonist Lupron and accompanied from day one by dutasteride/Avodart one 0.5mg capsule daily. This should rein in developing prostate cancer while at the same time reducing gland size. Near the end of the 84-days, gland volume could be assessed to determine if the androgen deprivation therapy should continue for further gland reduction. During this time one should be safe from cancer growth concern because of the employment of these medications.

Results of the pre-planned, 2-year interim analysis of the CombAT trial showed that the combination of dutasteride/Avodart and tamsulosin/Flomax was superior to either drug as monotherapy in improving BPH-related symptoms, peak urinary flow and BPH-related health status. So, tamsulosin 0.2mg daily could also be discussed as being in the above medication mix. <u>PLEASE TAKE NOTE:</u> If treating ONLY BPH, this combination of dutasteride/Avodart and

tamsulosin/Flomax has been found to reduce BPH by up to 25%. A further explanation if treating only BPH.

Alpha Blockers

Most of the alpha blockers can be used to treat high blood pressure as well as BPH. Unlike other drugs for high blood pressure that affect mostly the heart, the blood vessels around the heart, and the kidneys, alpha blockers work more on "peripheral" arteries and veins--those in the arms and legs. The alpha receptors that these medications block are also found in the prostate gland. Blocking these receptors on the prostate gland will reduce the size and progressive enlargement of the prostate. Since many of the older men who suffer from hypertension also have prostate enlargement, taking alpha blockers can help with both problems.

Drugs in the class

Alfuzosin (UroXatral)

Doxazosin (Cardura)

Prazosin (Minipress)

Tamsulosin (Flomax)

Terazosin (Hytrin)

5-ALPHA REDUCTASE INHIBITORS:

Dutasteride

Active Ingredients: Dutasteride Representative Names: Avodart

What are dutasteride capsules?

DUTASTERIDE (AvodartTM) can reduce the size of the prostate gland in men with benign prostatic hyperplasia (BPH). The prostate is a part of the male reproductive system that produces a milky fluid for sperm. Over the age of 50 most men develop an enlarged prostate. As the prostate gets bigger it can restrict the flow of urine. Dutasteride can help to reduce symptoms caused by BPH such as a weak or interrupted urine flow; a feeling that the bladder is not completely empty; a need to pass urine more often, especially at night; an urgent feeling that you must pass

urine right away; a delay or hesitation when you start to urinate. Dutasteride also reduces the risk of the need for BPH-related surgery. While some men have fewer problems and symptoms after 3 months of treatment, at least 6 months is usually necessary to see if dutasteride will work for you. Dutasteride is not for use in women. Generic dutasteride capsules are not yet available.

What should my health care professional know before I take dutasteride?

They need to know if you have any of these conditions:

- •if you are female (dutasteride is not for use in women)
- •liver disease
- •prostate cancer
- •an unusual or allergic reaction to dutasteride, finasteride (Proscar®, Propecia®), other medicines, foods, dyes, or preservatives

How should I take this medicine?

Take dutasteride capsules by mouth. Follow the directions on the prescription label. Swallow the capsules whole with a drink of water. You can take this medicine with or without food. Take your doses at regular intervals. Do not take your medicine more often than directed.

Contact your pediatrician or health care professional regarding the use of this medicine in children. Special care may be needed.

What if I miss a dose?

If you miss a dose, you can take it later that day. If you do not remember until the next day, take only that day's dose. Do not take double or extra doses. Try taking the dose at the same time every day to help you remember to take your dose.

What drug(s) may interact with dutasteride?

- •amiodarone
- •cimetidine
- •clarithromycin, erythromycin, or troleandomycin
- •diltiazem, nicardipine, or verapamil
- •isoniazid
- •male hormones (example: testosterone)
- •quinine
- •saw palmetto
- •some antidepressants (examples: fluvoxamine, fluoxetine, nefazodone)
- •some antifungal medicines (examples: ketoconazole, itraconazole, voriconazole)
- •some medicines for HIV infection (examples: delavirdine, efavirenz, indinavir,

ritonavir, saquinavir)

- •soy isoflavones supplements
- •zafirlukast

Tell your prescriber or health care professional about all other medicines you are taking, including non-prescription medicines. Also tell your prescriber or health care professional if you are a frequent user of drinks with caffeine or alcohol, if you smoke, or if you use illegal drugs. These may affect the way your medicine works. Check with your health care professional before stopping or starting any of your medicines.

What side effects may I notice from taking dutasteride?

Side effects that usually do not require medical attention (report to your prescriber or health care professional if they continue or are bothersome):

- •breast enlargement or tenderness
- •sexual difficulties (less sexual desire or ability to get an erection)
- •small amount of semen released during sex

What should I watch for while taking dutasteride?

Do not donate blood until at least 6 months after your final dose of dutasteride. This will prevent giving dutasteride to a pregnant female through a blood transfusion.

Contact your prescriber or health care professional if there is no improvement in your symptoms. You may need to take dutasteride for 6 to 12 months to get the best results.

Dutasteride is not for use in females. Females who are pregnant or may get pregnant must not handle dutasteride capsules. If a woman who is pregnant gets enough dutasteride into her body after swallowing it or through her skin after handling it, the medication could harm the unborn baby, particularly if the baby is male. If a pregnant woman comes into contact with dutasteride capsules she should check with her health care professional.

Dutasteride may interfere with PSA laboratory tests for prostate cancer. If you are scheduled to have a lab test for prostate cancer, tell your prescriber or health care professional that you are taking dutasteride.

Investigational new treatments to relieve symptoms of enlarged prostate, BPH, include aspirin, Viagra, Botox, and a number of promising new drugs. Current medical treatment for benign prostatic hyperplasia (BPH, or an enlarged prostate) relies on alpha-1-adrenergic blockers (alpha-blockers), which relax muscles in the prostate, or 5-alpha-reductase inhibitors, which lower androgen levels within the prostate. ...

The entire article may be viewed at http://www.johnshopkinshealthalerts.com/reports/prostate_disorders/1683-1.html or try: http://tinyurl.com/decm4n

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http://www.urotoday.com/browse_categories/prostate_cancer/dutasteride_a_review_of_its_use_in_the_management_of_prostate_disorders_abstract.html

OR TRY: http://tinyurl.com/2cmt2c

Prostate Massage is also a treatment for BPH, but it is important that the physician has known expertise in this treatment procedure.

The prescribing of Flomax is appropriate for helping urine flow while experiencing an enlarged prostate gland (also known as Benign Prostatic Hyperplasia). The prescribing of finasteride/Proscar to help reduce the size/volume of the prostate is also often done since it is a less expensive medication than dutasteride/Avodart. If you had known prostate "cancer," then I would recommend dutasteride/Avodart rather than finasteride/Proscar. That reasoning is as follows:

Finasteride/Proscar inhibits Type II 5AR enzymes from converting testosterone to the more powerful stimulant to prostate cancer cell growth, dihydrotestosterone (DHT).

Dutasteride/Avodart inhibits both Type I and Type II enzymes from converting testosterone to the more powerful stimulant to prostate cancer cell growth, dihydrotestosterone (DHT).

Efficacy of 5α -reductase inhibitors for patients with large benign prostatic hyperplasia (>80 mL) after transurethral resection of the prostate.

http://tinyurl.com/nen8pos

As specifically noted: "Three years after TURP, there were significant differences in prostate volume (PV), level of prostate-specific antigen (PSA), the maximum flow rate (Qm), and HU between the trial and control groups. Additionally, there were significant differences in the PV, PSA, international prostate symptom score (IPSS), patient quality of life (QoL) in the trial group alone between those treated with finasteride and those treated with dutasteride. CONCLUSIONS - After TURP for large BPH, administration of $5\alpha RIs$ for 3 years improved PV, PSA, Qm and HU. Additionally, dutasteride produced superior improvements in PV, PSA, IPSS and QoL compared with finasteride."

In Androgen Deprivation therapy, since a higher incidence of Type I is present in high-grade prostate cancer, the prescribing of dutasteride/Avodart is recommended to accompany an LHRH agonist and/or an antiandrogen since it inhibits both Type I and Type II enzymes from converting testosterone to the much more powerful stimulant to PC cell growth, dihydrotestosterone.

Accordingly, if it has been determined you do not have prostate cancer, then finasteride/Proscar can be used in company with Flomax to help reduce the size/volume of your enlarged prostate, though a combination of dutasteride/Avodart and the antiandrogen bicalutamide/Casodex is more preferred. There is another school of thought that an LHRH agonist such as Lupron, or Eligard, or Trelstar, or Zoladex – a medication that is injected – also be prescribed since shutting down testosterone production will also help to reduce the size of an enlarged prostate because of prostate cells being denied that testosterone for continued growth.

I do not know if photoselective vaporization of the prostate (PVP) using GreenLight laser system is available in your location, but I would recommend this much less invasive form of treatment if available before accepting TURP (transurethral resection of the prostate) as the procedure to reduce the size of your gland, particularly if your gland size is 60cc or larger. I would recommend asking your Urologist if available, and if not, then ask where it is available within reasonable traveling distance. If a referral is required by your health insurer, check both with that insurer if the GreenLight PVP is covered for BPH, and check with the administering facility if they accept the coverage by your health insurer.