Issue Three/ June 2008

"On the road to excellence there is no finishing line."

ADVANCED UROLOGY
Eric R. Freedman MD, FRCS, DABU, FAAP
Compassion. Service. State-of-the-art.
www.advancedurologyca.com

For "Urine" Telligence

June is Men's Health Month

A going problem is a growing problem! - Today's management of BPH

BPH [benign prostatic hyperplasia] is the non-cancerous enlargement of the prostate gland, that occurs with age. This can affect up to 50% of 50 year-olds, and almost all men over the age of 80. Of the over 20 million men with symptomatic BPH in this country, only 3 million are on medical therapy. Often men consider BPH symptoms to be a normal part of aging. And as our population is aging, the number of men with BPH is growing.

Men seldom bring voiding symptoms to their physician's attention, and many men do not know that the symptoms of BPH are treatable. There is also a strong association between symptomatic BPH and ED [erectile dysfunction], and the treatment of one can improve the other.

Symptoms

The prostate is that organ which surrounds the urethra, immediately below the bladder. **Irritative symptoms** relate to OAB [over active bladder], include urinary frequency, urgency, and nocturia [voiding more than two times at night], & urge incontinence. This is due to detrusor over activity, and occurs in approx. 50% of men with obstructive BPH. **Obstructive symptoms** are due to BOO [bladder outlet obstruction] and include a weak urinary stream, straining to void, incomplete bladder emptying, and in severe cases urinary retention. The actual obstruction and voiding resistance comes from both a **static component** [the bulk of prostate tissue narrowing the urethral lumen], and a **dynamic component** [smooth muscle tone in the prostate & bladder neck].

Cont. P.2

In this Issue:

Writer/Editor.....Eric Freedman, M.D.
Editor/Publisher..Ruth Brunker , MBA

Advanced Urology's Newsletter For Primary Care

Welcome to issue three!

As medicine evolves rapidly, keeping up with developments of sub-specialties is often difficult and time consuming.

For "Urine" Telligence is designed to introduce some of the newest, cutting-edge, and technological advancements in Urology that are, or will be, available to your patients.

Thank you for your support of Advanced Urology and Dr. Eric Freedman, and for entrusting your patient care to us. Our team will continue to strive for excellence in patient care.

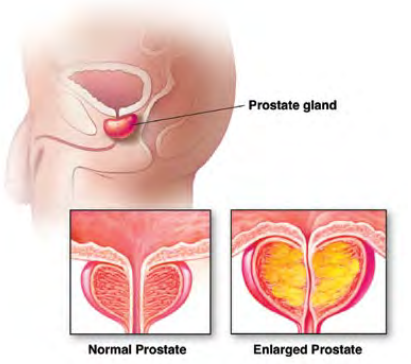
Mission Statement

Advanced Urology is dedicated to partnering with patients and healthcare practioners to provide the highest standard of urological care

Did you know? Sperm quality and count is decreased amongst men who use their cell phones for more than 3 hours per day, and amongst men whose mothers consumed a lot of beef during their pregnancy.

BPH Management Cont.

This constellation of abnormal voiding symptoms are known as **LUTS** [lower urinary tract symptoms], and while usually not life threatening, can be socially bothersome. Men cope with these symptoms by reducing fluid intake, and avoiding travel, outdoor sports, longer movies etc. Chronic urinary retention can result in decompensation of the detrusor [bladder] muscle due to chronic ischemia, & is also associated with UTIs, bladder stones, overflow incontinence, and renal damage (with hydronephrosis and azotemia in up to 15% of these patients).



Diagnosis

All urologist use the validated **AUA BPH Symptom Score** (enclosed) to help assess the patient's initial symptoms, and their degree of improvement or deterioration over time. This is an easy tool to incorporate into one's clinical practice.

Prostate size estimate by **DRE** [rectal exam] is commonly inaccurate, but important to rule out any suspicious nodules or induration. The volume can be measured by transrectal ultrasound. The **serum PSA** value gives a good correlation to prostate size when there is no prostate cancer. Urinalysis, Uroflow, Ultrasound measurement of post void residual (abdominal exam underestimates this), Cystoscopy, & sometimes Urodynamics are common assessment tools.

Referral to a Urologist

Should be considered for a suspicious DRE, hematuria, UTI, abnormal PSA, pelvic pain, palpable bladder (or large residual urine vol.), LUTS unresponsive to medication trial, renal failure, or neurological disease (eg. CVA, MS, Parkinsons).

Treatment Options

LUTS and its negative impact on QOL [quality of life] typically drives the clinical management. Treatment should be goal directed from the patient's prospective; minimal treatment for minimal bother. The costs / benefits of all the therapies need to be weighed: Watchful Waiting [surveillance], Medications, minimally invasive Office Therapies, & Surgery.

Medications are commonly first line for Primary Care Practitioners. These include Alpha Blockers, 5 Alpha Reductase Inhibitors, Anticholinergics. Many patients may already be on supplements, such as Saw Palmetto (whose efficacy has not been validated).

a} Alpha Blockers work by blocking peripheral adrenergic & central serotonergic receptors. Flomax (Tamsulosin) & Uroxatrol (Alfuzosin) are more **uroselective** than Hytrin (Terazosin) or Cardura (Doxazosin) so there is less dizziness & hypotension (& they do not require titration). This drug family works by relaxation of the muscle of the bladder neck & prostate, to reduce the static component of BPH; but there is no reduction of size. The side effects include dizziness, rhinitis, and reduced or absent ejaculation (less so with Uroxatrol). Some newer studies suggest that they may also improve ED as a concomitant symptom. Improvement in voiding symptoms and stream usually occurs quickly with these medications, & can often remain stable for up to 5 yrs. While these agents act synergistically with other antihypertensive medications, caution must be exercised when using the PD5 Inhibitors such as Viagra.

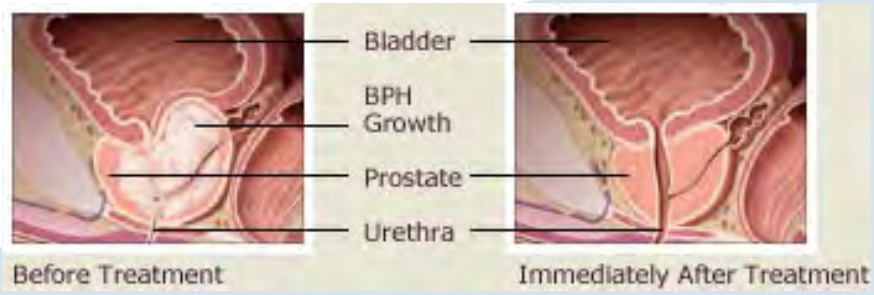
b} 5 AR Inhibitors work by blocking the conversion of testosterone to dihydrotestosterone [which has a much greater affinity for the androgen receptors], thereby reducing the bulk & vascularity of the prostate. Proscar [finasteride] and Avodart [dutasteride] have similar efficacy , work slowly over a few months, and can have similar side effects including impotence, decreased libido, reduction in semen, & breast

tenderness. Typically they reduce the PSA value to one half, & the prostate volume by one-third at 6 months of therapy. Recent studies have shown a reduction in the incidence of prostate cancer with these medications, so they may be used for **chemoprevention**.[re-analysis of older data showed that finasteride does **not** encourage higher grade cancers] They are not however very useful in treatment of prostate cancer. I do not initiate these medications when the PSA is less than two, or the prostate volume is small. If the PSA is not 50% of baseline at 6 months, this may be an indicator of prostate cancer and warrants a prostate biopsy.

c} **Combination therapy** (alpha blocker and a 5 ARI) in symptomatic **large** prostates is synergistic & safe, but costly. If there is good symptom response the alpha blocker could be discontinued after 6 months or so. A combination drug will be on the market very soon.

d} **Anticholinergics** can also be used concomitantly to treat the OAB symptoms [frequency/urgency]. This family has significant side effects, and should not be used in men with large residual urine volumes as they can provoke acute urinary retention.

The Cons to Medications



Increasingly, urologists and primary care practitioners are seeing older male patients who present with BPH and a host of comorbidities for which they take multiple medications. While medical therapy for BPH is generally safe and effective, the clinician should be hesitant to add to the patient's already lengthy list of medications. Side effects and drug interactions do occur, and the patients must be monitored over time. We have all witnessed the growing number of TV adds for BPH medications; the real "growing problem" is the relentless pressure that drug makers place on baby boomers to take more pills. Furthermore, medication therapy is a long-term financial commitment for the patient. And most drug studies reveal an almost 50% dropout rate by 12 months due to side effects, or perceived lack of efficacy.

> "Medication is of course important, but do not conclude that a pill dissolving in your stomach is necessarily more powerful than a healing thought dissolving in your mind."

Minimally invasive *office therapies* include microwave thermotherapy (**TUMT**) and radiofrequency ablation [**TUNA**]. These represent a practical first-line option for therapy of BPH symptoms. This is especially true for patients having side effects from medications, not wanting to be on mo**re** medications, or where medication costs are a concern. These heat therapies have a **thermocoagulation** affect that causes necrosis of the blocking prostatic tissue. For my office, I selected the latest generation ***Prolieve microwave*** system from Boston Scientific, as this is the only unit to combine high power, urethral cooling, and balloon dilatation in a single 45 minute treatment. Discomfort is minimal, and need for post procedure catheterization is rare [as compared to its competitors thermatrix and urologix]. This therapy is covered by most insurances including Medicare. The improvement of BPH symptoms is generally better than medications, with an approximate

Websites for more information on BPH

www. prostatedisease.org
www.understandbph.com
www.UrologyHealth.org

BPH Cont.

70% response rate. This is a one time treatment that usually carries its efficacy through 3 to 5 years. There is no worry about potential drug interactions, so this represents an excellent first-line alternative to medical therapy. And can be performed on patients with anticoagulants.

Surgery is indicated in very large symptomatic prostates, patients with obstructing middle lobes, and patients with impending urinary retention. Goals are safe, effective, and rapid resolution of the problem. Typically these patients have already been on medications for years. TURP [transurethral resection of the prostate] is the gold standard, but has been usurped by the equally effective and more *minimally invasive* **laser** prostate surgery. I selected the high power Lumenis **Holmium** laser for Sonora Regional Hospital because of its safety & versatility in treating prostates as well as all types of urinary stones. The depth of penetration with this laser is only .5 mm, while the competing Laserscope KTP Green light laser penetrates 4 times deeper which can cause more irritative symptoms from tissue necrosis. Other laser wavelengths are also being developed and used. Laser prostate surgery results in less blood loss, reduced chance of impotence or incontinence, and rapid recovery as an outpatient or 23 hr. short hospital stay.

Future therapies include new hormone modifiers, different receptor blockers, Botox injections into the prostate for muscular relaxation, improved recognition & treatment of both *sleep apnea* [which exacerbates nocturia], and the *Metabolic Syndrome* [obesity, hypertension, hyperlipidemia, & insulin resistance, which exacerbates LUTS & ED]. Future studies will define whether we can alter BPH and or prostate cancer with special diets or micronutrients, but at present this appears to have minimal impact.

SUMMARY

BPH is a very common, and bothersome symptom complex (LUTS) in aging men, that should be identified by primary care practitioners. The goal should be an improvement in quality of life, and education of the patient as to the various treatment options.

Are you aware?

Dr. Freedman, along with the other local urologists, are now servicing a urology clinlc at the Forest Road Health and Wellness Clinic for Medi-Cal and underinsured patients at 193 S. Fairview, Suite B in Sonora - call 536-5110 for appointments.
Dr. Freedman will continue to offer similar service in Angels Camp at the Mark Twain outpatient clinic. Call our office to schedule in Angles Camp.

We appreciate your feedback:

(Circle One)

I found this newsletter to be helpful and informative? Yes No

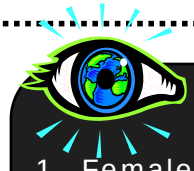
I would like to receive future issues? Yes No

Suggestions for future topics?_____

Would you like to receive this newsletter by mail, email or both?_____

Email Address?_____

Do you know others who would like to receive this newsletter?
NAME_____CONTACT:_____
Is your office interested in educational lunch sessions? Yes No
We will provide lunch. How many providers in your office?_____
Please call the office with any questions (209) 532-5244



Look for future upcoming Newsletters

1. Female incontinence. “Slings & Things.” (the latest in minimally invasive surgeries and office based rehabilitation therapies.)
2. Hematuria (when, where, and how to worry!)