The Enlarged Prostate
Symptoms, Diagnosis and Treatment
Today’s Agenda

• What is BPH

• How it is diagnosed

• What are the treatment options
Overview of the Prostate

- Walnut sized gland at base of the male bladder
- Surrounds the urethra
- Produces fluid that transports sperm during ejaculation
The **prostate grows** to a normal size in teenage years and then begins to grow again around the age of 50.
### Prostate Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Prostatitis</td>
<td>• Swelling/Inflammation of the prostate</td>
</tr>
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</table>
| Prostate Cancer        | • Very common cancer among men  
                          | • Typically a slow growing cancer |
| Enlarged Prostate      | • Enlargement of the prostate gland |

Each condition affects the prostate differently

*Having one condition does not mean you will have another*
Aging and the Prostate

- Affects nearly 40 million men each year in the United States
- By age 60, 70% of all men have an enlarged prostate
- Affects nearly 90% of men by age 80

Berry, et al., J Urol 1984
Roehrborn, et al., Prostate Cancer and Prostatic Diseases 2006; 2015 U.S. Census population estimates
What is BPH?

- **Benign Prostatic Hyperplasia** (BPH) is the clinical term for enlarged prostate

- **Non-cancerous** enlargement of the prostate gland
  - BPH is not an indication or a predictor of cancer
  - PSA rises with both BPH and prostate cancer, so PSA alone cannot tell you which is the issue
Normal vs. Enlarged Prostate

- As the prostate enlarges, pressure can be put on the urethra
- Causes urinary problems
- *In general, the size of the prostate does not correlate to severity of symptoms*

What Happens if BPH is Not Treated?

Not treating enlarged prostate can lead to bladder deterioration.
Recognizing the Symptoms of BPH

- Frequent urination
- Multiple trips to the bathroom at night
- Sudden urge to urinate
- Difficult or painful urination
- Weak or slow urine flow
- Incomplete elimination of urine
- Stopping and starting of flow

Many men who suffer from BPH experience a reduction in quality of life:
- Avoiding travel
- Interruption of leisure activities
- Using the bathroom stalls instead of urinals
- Disruption of sleep patterns

For nearly half of men in the U.S. with BPH, their symptoms are severe enough to disrupt their lifestyle and cause them to seek treatment.
How is an Enlarged Prostate Diagnosed?

• Medical history

• Physical exam
  – Bladder scan (Ultrasound)
    • residual urine assessment
  – Digital Rectal Exam (DRE)
    • approximate prostate size
    • texture and symmetry

• Symptoms – AUA Symptom Score

• How much of a bother is it to you?
How is an Enlarged Prostate Diagnosed?

Optional Studies

- Uroflow
- Pressure flow studies
- Transrectal Ultrasound (TRUS)
  - With or without biopsy
- Cystoscopy
International Prostate Symptom Score (IPSS)

Symptoms
- Incomplete bladder emptying
- Frequency
- Intermittency
- Urgency
- Weak stream
- Straining
- Nocturia

How is the IPSS scored?
- 0-7 | Mild
- 8-19 | Moderate
- 20-35 | Severe

How is Quality of Life scored?
- 0-6

Regardless of the score, if your symptoms are bothersome you should notify your doctor.

Treatment Options for Enlarged Prostate

Different treatments are appropriate for different patients
Advantages

- No surgery
- Cheaper than drugs
- No side effects

Disadvantages

- May not have symptom improvement
- Risk that symptoms will worsen
Medications/Herbal Remedies

**Medication**  *Flomax, Avodart, Duodart, Cialis*

<table>
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<th>Advantages</th>
<th>Disadvantages</th>
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<tr>
<td>• No surgery</td>
<td>• Must be taken daily, from now on</td>
</tr>
<tr>
<td>• May provide enough symptom relief</td>
<td>• Potential side effects*</td>
</tr>
<tr>
<td></td>
<td>– Lowered sexual drive, erection problems, ejaculation problems, dizziness, lack of energy</td>
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<td>• No surgery</td>
<td>• May not have symptom improvement – none have shown benefit in clinical trials</td>
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<td>• Risk that symptoms will worsen</td>
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<tr>
<td>• No side effects</td>
<td>• Potential downstream issues</td>
</tr>
<tr>
<td></td>
<td>– Bladder stones; bladder health, kidney function</td>
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<tr>
<td></td>
<td>• Future treatments may be less effective</td>
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*Source: AUA Guidelines 2010, 2003*
Prostatic Urethral Lift (PUL)
The UroLift® System

Advantages
- In-office procedure
- Preserves sexual function
  - No new and lasting problem with erections or ejaculation
- Rapid, durable relief
  - Typically return to normal within 5-9 days
- Typically no catheter

Disadvantages
- Some discomfort
- Potential for blood in urine
- Increased urgency after procedure
How PUL Works

The delivery device is placed through the urethra to access the enlarged prostate.

Implants are placed through a needle that comes out of the delivery device to hold the enlarged prostate tissue out of the way.

The delivery device is removed, leaving a more open urethra.
Heat & Steam-Based Therapies

* TUMT – Microwave; TUNA – Radiofrequency; Rezum

**Advantages**
- In-Office procedure
- Oral sedative
- Paid by most insurers
- Fewer side effects than surgery

**Disadvantages**
- Catheter for days after treatment
- 4-6 weeks until symptom relief
- Potential for sexual dysfunction
How Heat & Steam Based Therapies Work

http://www.prostatetreatmentindore.in/treatment-of-prostate-cancer.php
Major Surgery
TURP – Resection; Greenlight – Laser Vaporization

Advantages
• Maximizes flow and symptom relief
• Removes prostate tissue
• Durable
• Low retreatment rate

Disadvantages
• Hospital procedure with general or regional anesthesia
• TURP requires hospitalization
  – Laser shows less bleeding and typically no overnight hospital stay
• Catheter for 1-5 days
• 6 weeks restricted activity
• 10% have erectile problems
• 40%-65% lose ejaculation
• 3% incontinence
• 7% strictures
How TURP & Laser Based Therapies Work
What Next?

• Pay attention to your symptoms before your appointment
  – Each solution has unique risks, benefits, and costs
  – Let’s find the right solution for YOU!

We are here to help improve your quality of life!
Financial support for this seminar has been provided by NeoTract, Inc., the manufacturer of the UroLift® System.