

Prostate Health



Graham Beaton BHSc, ND

Doctor of Naturopathic Medicine

Ottawa Collaborative Care Clinics

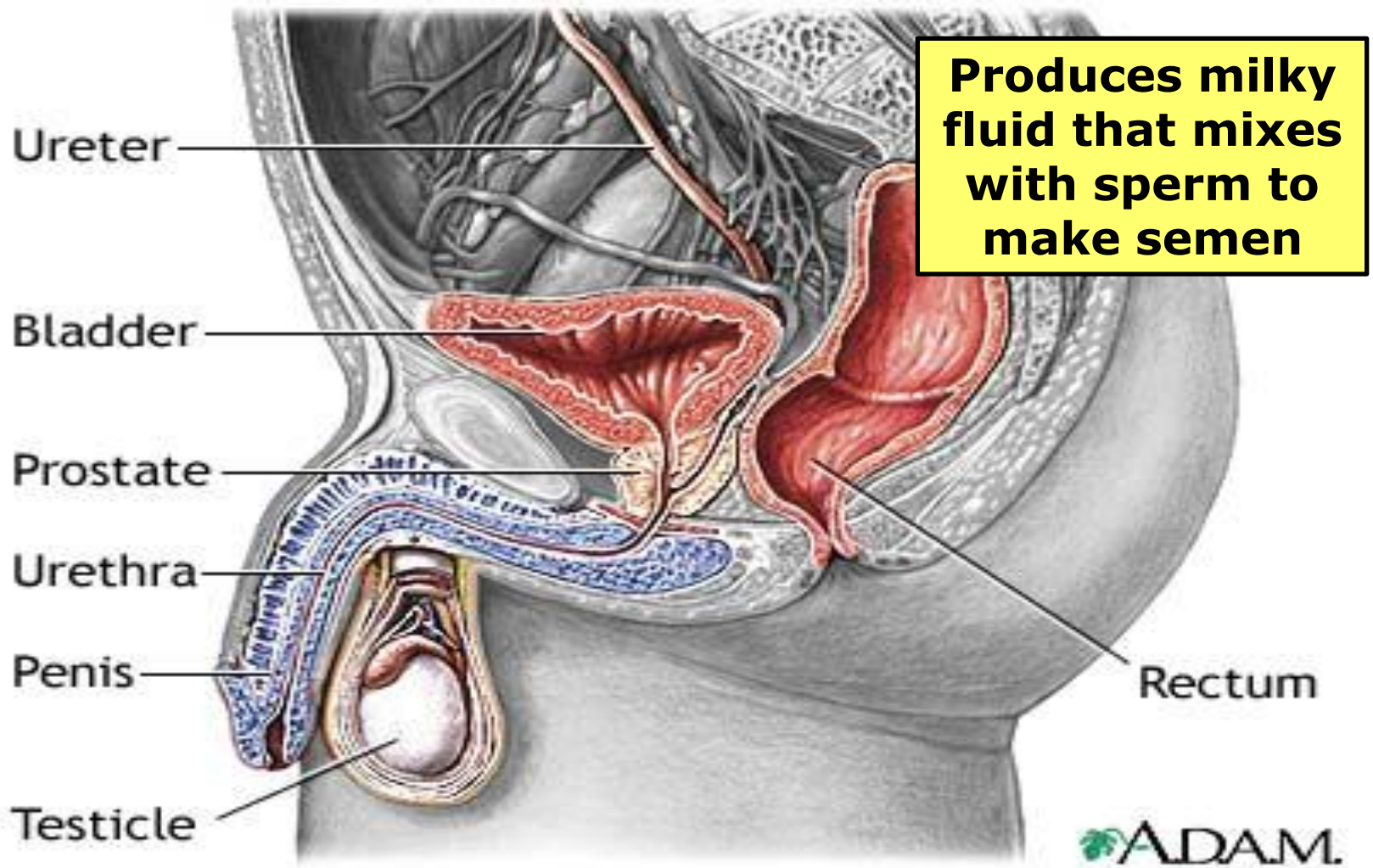
102 Lewis St. Ottawa, ON

Tel: 613-290-6115

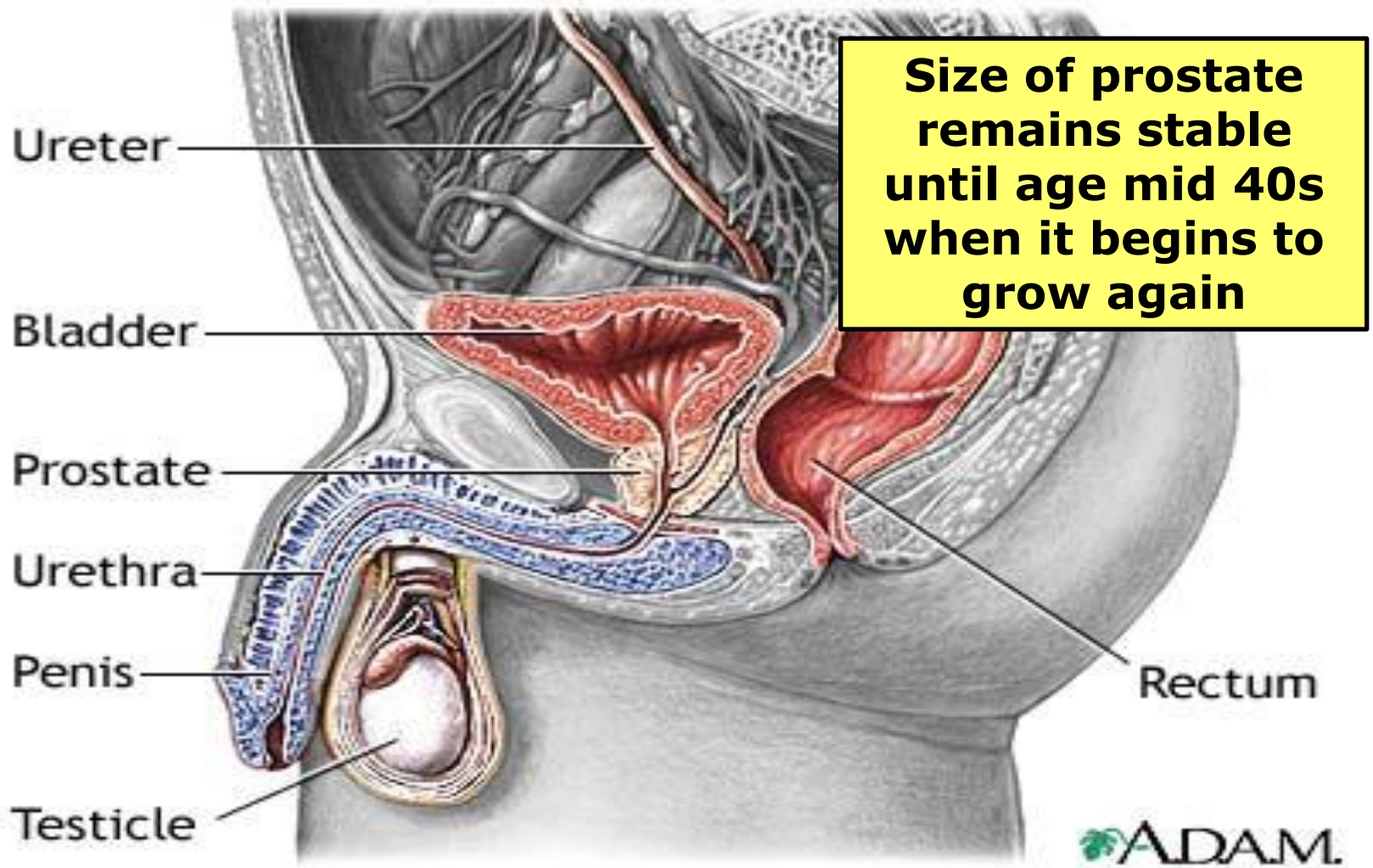
Overview

- Prostate
- Prostate Problems
 - Cancer
 - BPH and prostatitis
- Assessment
- Prevention and Treatment Approach
- What is Naturopathic Medicine

Prostate



Prostate



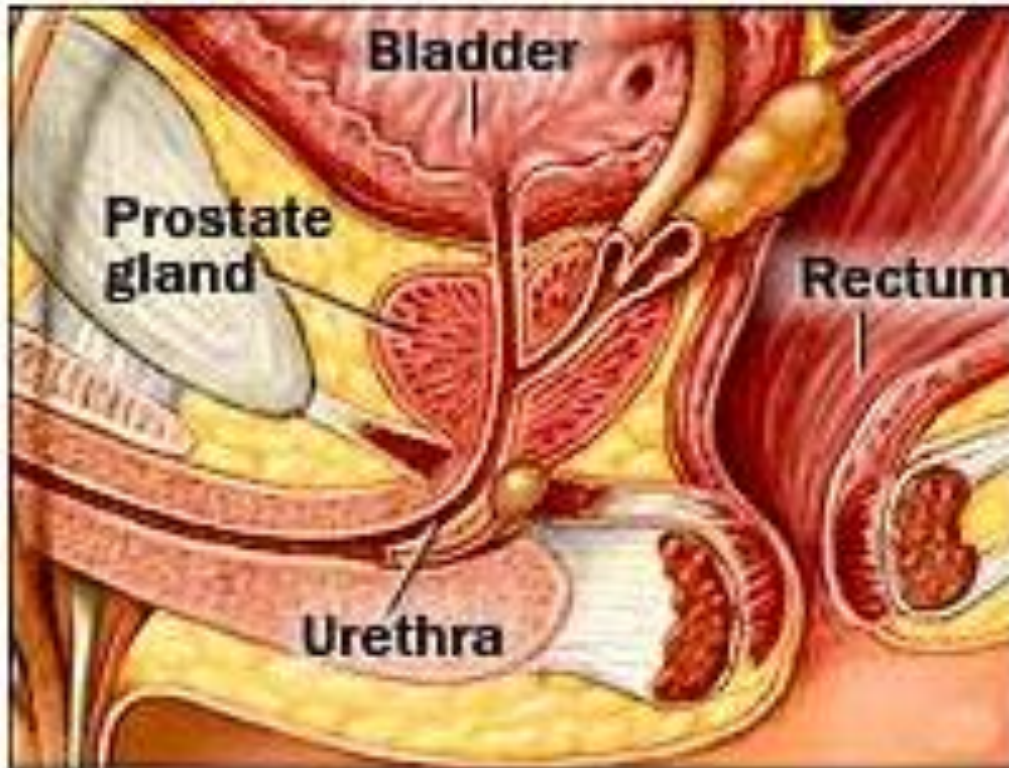
Prostatic Changes

- Non-malignant (non cancerous)
 - Benign Prostatic Hyperplasia (BPH)
 - Benign Prostatic Hypertrophy (BPH)
 - Prostatitis
- Malignant (cancerous)
 - Prostate cancer

Benign Prostatic Hyperplasia

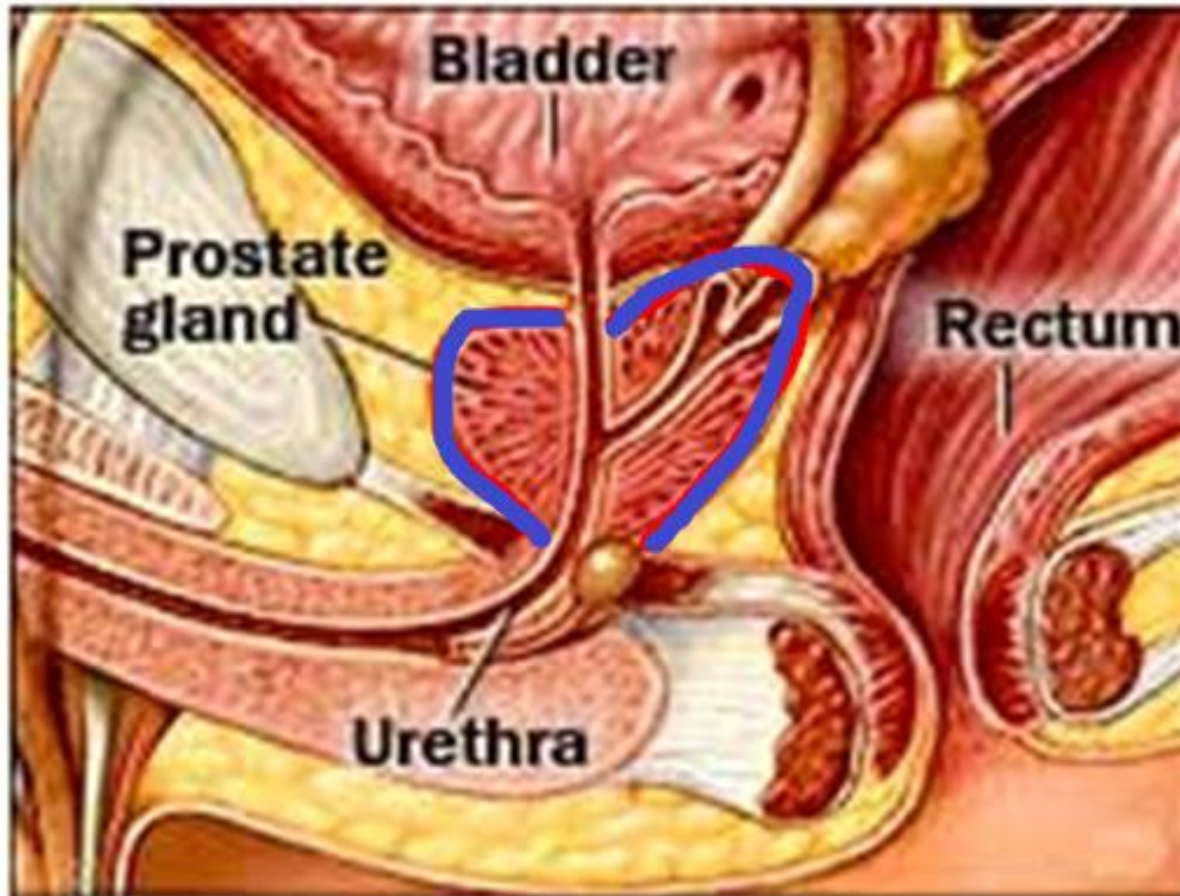
- **Non cancerous** cell growth of the prostate gland
- Affects most men
- Does not progress to prostate cancer

Benign Prostatic Hyperplasia



- Not sure specifically why it enlarges
- Does enlarge due to changes in hormonal balance as men age
- The enlargement begins at age 40

Benign Prostatic Hyperplasia

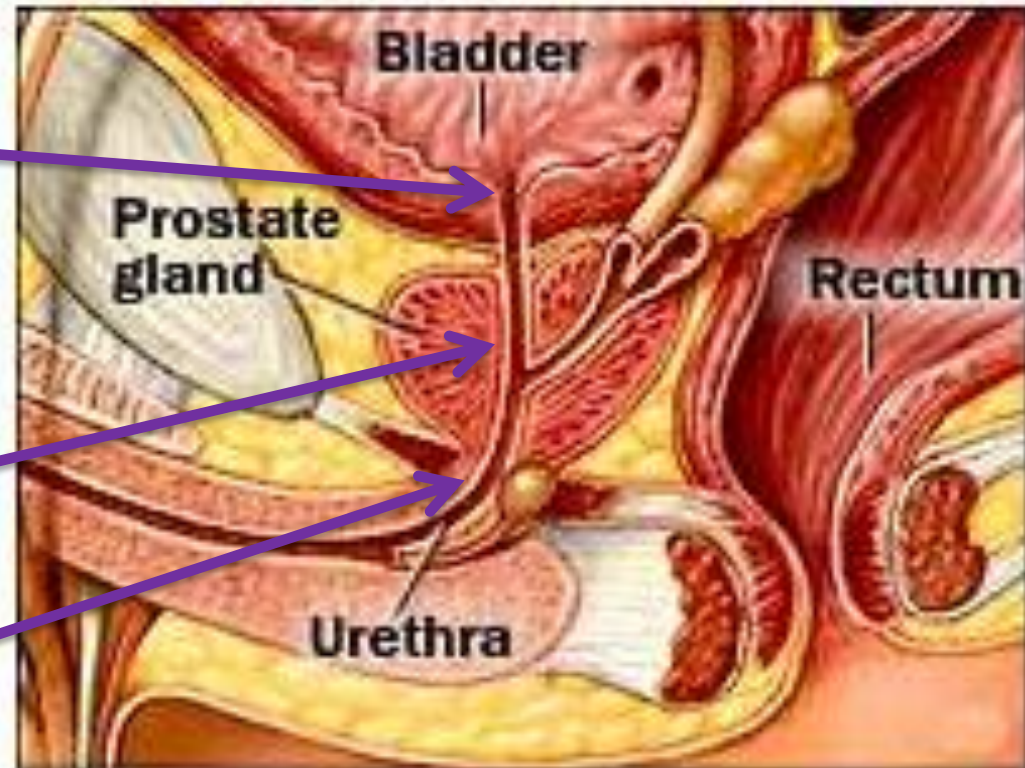


Benign Prostatic Hyperplasia

Pushing up
against the
bladder

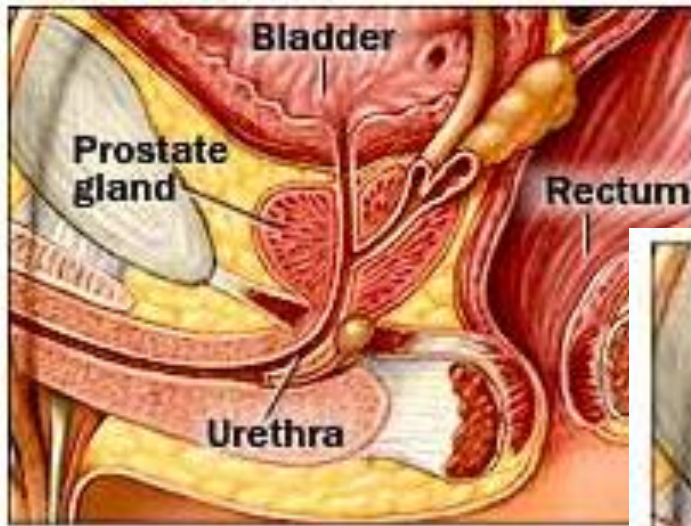
Compressing
inwards on the
urethra

Constricting
urethra at
base of
prostate



Benign Prostatic Hyperplasia

Normal Prostate



Pushing up against the bladder

Enlarged Prostate



Compressing inwards on the urethra

Benign Prostatic Hyperplasia - Epidemiology

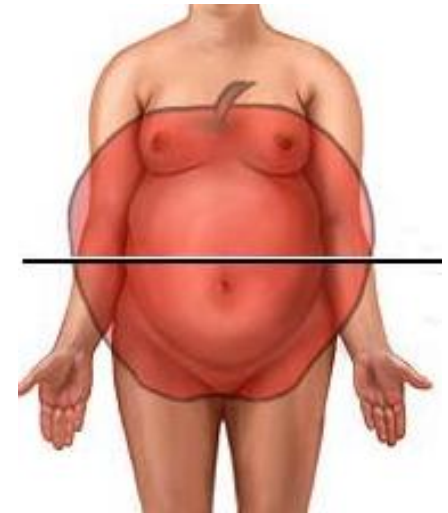
- Histologically
 - 8% of men aged 31 to 40
 - 50% of men aged 51 to 60
 - 70% of men aged 61 to 70
 - 90% of men aged 81 to 90
- Symptomatic
 - 26% in 5th decade of life
 - 33% in 6th decade of life
 - 41% in 7th decade of life
 - 46% in 8th decade of life

Benign Prostatic Hyperplasia – Risk Factors

- Age
- Family history
- Ethnic background
 - Caucasian and African descent at higher risk

Benign Prostatic Hyperplasia – Risk Factors

- Behavioural and co-morbid factors
 - Obesity
 - 10% increase risk for each 0.05 increase in waist to hip ratio
 - Lack of physical activity
- Diabetes



Benign Prostatic Hyperplasia – Risk Factors

- Dietary factors
 - Diets high in beef products
 - ↑ risk by 25%
- Alcohol consumption
 - Lowers risk

Benign Prostatic Hyperplasia - Symptoms

Enlarged Prostate



No Symptoms



Size of prostate does not
determine symptom severity

Benign Prostatic Hyperplasia - Symptoms

Enlarged Prostate



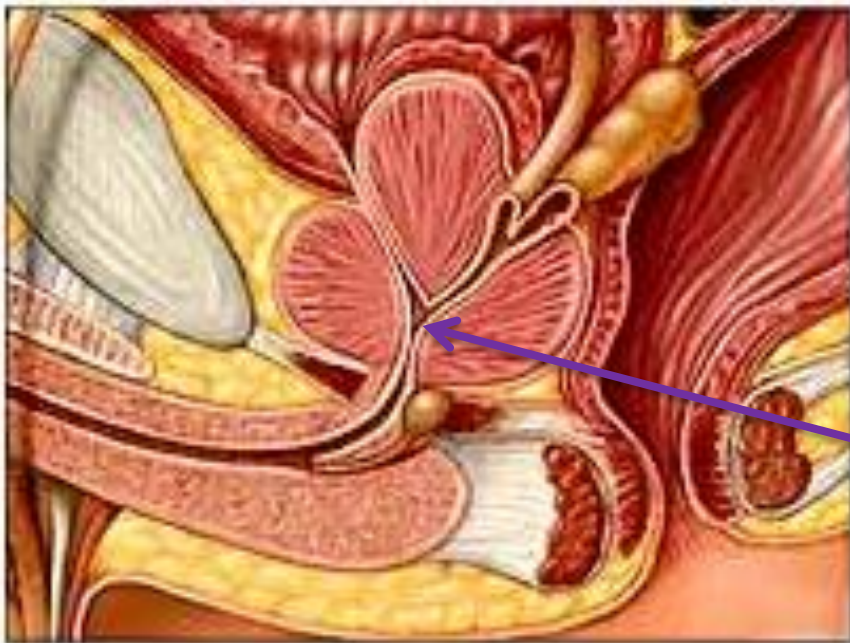
**Voiding/Obstructive symptoms
(urethra is affected)**

Or

**Storage/Irritative symptoms
(bladder is affected)**

Benign Prostatic Hyperplasia - Symptoms

Enlarged Prostate

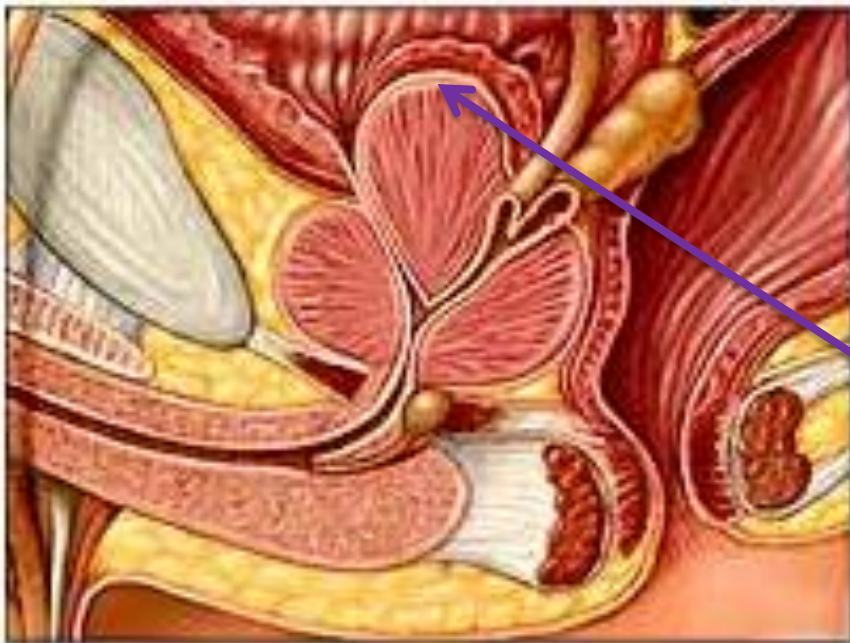


Voiding/Obstructive Symptoms

- Hesitation before urination
- Straining
- Weak or intermittent stream
- Sense of incomplete bladder emptying
- Dribbling at end of urination
- Leakage after urination

Benign Prostatic Hyperplasia - Symptoms

Enlarged Prostate



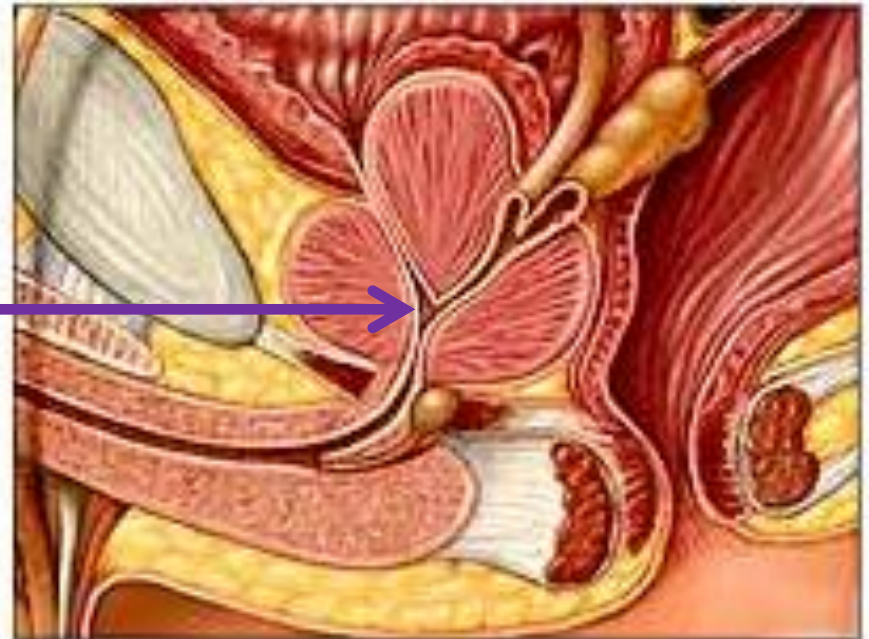
Storage/Irritative Symptoms

- Increased frequency of urination
- Urgent need to urinate
- Difficulty postponing urination
- Painful or burning sensation when urinating

Benign Prostatic Hyperplasia – Complications

- Acute urinary retention
 - Sudden painful inability to urinate

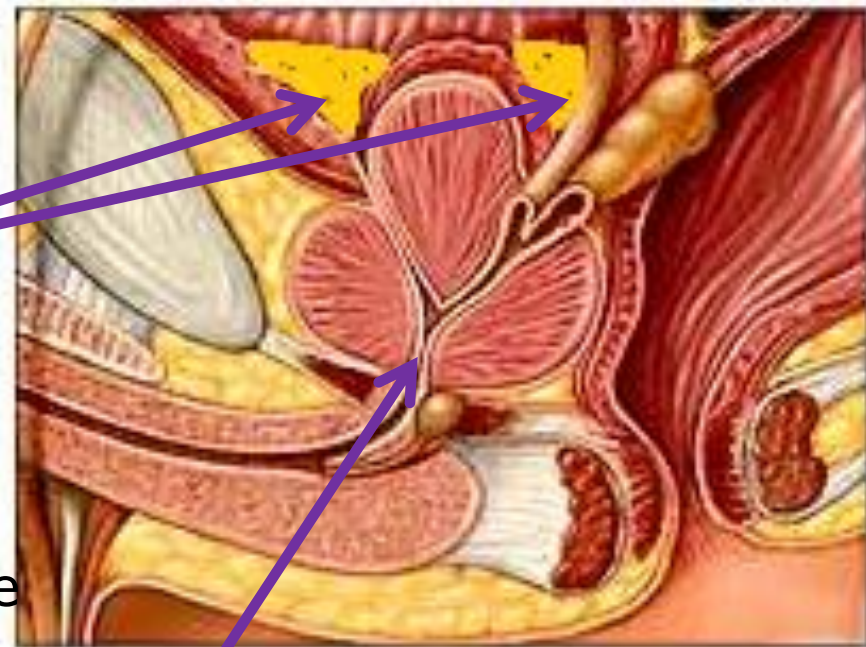
Enlarged Prostate



Benign Prostatic Hyperplasia – Complications

- Acute urinary retention
 - Sudden painful inability to urinate
- Bladder stones
 - Mineral deposits form due to inability to empty bladder fully
 - Mineral deposits irritate the bladder, increase chance of infection and blood in urine
- ↑ Urinary tract infections

Enlarged Prostate



Benign Prostatic Hyperplasia – Complications

- Bladder damage
 - Muscle wall of bladder stretched and weakened due to lack of emptying
- Kidney damage
 - High pressure in bladder due to urinary retention

Prostate Cancer



Prostate Cancer

- Third leading cause of cancer deaths in Canada
- 14% of Canadian men will be diagnosed
- 3.7% of Canadian men will die of prostate cancer

Prostate Cancer

- Extremely common, with estimated 50% to 70% of men over 80 showing histologic evidence of prostate cancer
 - But majority will never develop symptoms

Prostate Cancer - Risk

- Age
 - Average age of diagnosis is 72
- Race
 - African descent have highest incidence
 - Incidence low in Asian men

Prostate Cancer - Risk

- Genetics

- 1st degree relative affected, risk ↑ 2-3 fold
- Two 1st degree relatives affected, risk ↑ 4 fold
- Breast cancer gene mutations *BRCA1* and *BRCA2* to an increased risk of prostate cancer

- Obesity

- More aggressive forms of prostate cancer
- Poorer outcome following treatment

Prostate Cancer - Risk

- Diet

- High dietary saturated fat intake – especially alpha-linolenic acid (found in red meat and butter)
- Cooking practices
 - Meat cooked at high temperatures for long periods of time increase risk
- Moderate soy intake may be protective
- Dietary habits during adolescents
 - Risk ↑ with milk intake
 - Risk ↓ rye bread intake

Prostate Cancer - Symptoms

- Usually asymptomatic until advanced
- Voiding/Obstructive symptoms (urinary hesitancy, poor stream, chronic or acute retention)
- Increased frequency, nocturia, UTI
- Bone pain
- Other

Prostate Health - Screening



Prostate Health - Screening

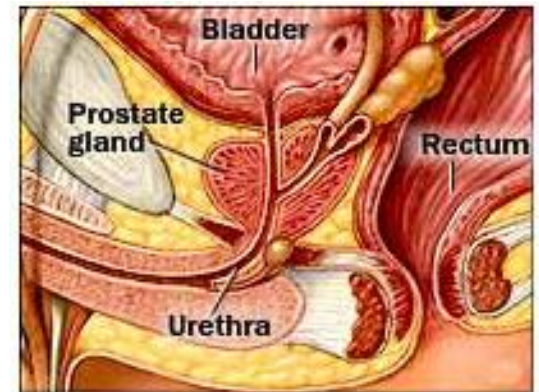
- History
 - Personal history
 - Family history
- Signs and symptoms
 - Urinary symptoms

Prostate Health - Screening

- Same tests for BPH and prostate cancer
 - Digital rectal exam (DRE)
 - PSA
 - Transrectal ultrasound guided biopsy

Prostate Health – Screening – Digital Rectal Exam (DRE)

- Used in diagnosis of both prostate cancer and BPH
- Better indicator for benign prostatic hypertrophy than for prostate cancer.
 - Main drawbacks:
 - Not all areas of the prostate is palpable
 - Not all tumors are palpable



Prostate Health – Screening – Prostate Specific Antigen (PSA)

- Used in diagnosis of both prostate cancer and BPH
- Normal reference range 0 – 4 $\mu\text{g/ml}$
- Main drawback is not sensitive in distinguishing prostate cancer and non-malignant lesions
 - 15% of people diagnosed with cancer have PSA levels $< 4 \mu\text{g/ml}$
 - 50% of people with PSA $> 10 \mu\text{g/ml}$ don't have cancer

Prostate Health – Screening – Prostate Specific Antigen (PSA)

- Baseline values
 - PSA velocity
 - Rate of PSA increase over time (usually over 18 months)
 - PSA density
 - Ratio of total PSA to prostate gland volume
 - PSA doubling time
 - Mostly used to predict recurrence after radical prostatectomy

Prostate Health – Screening – Prostate Specific Antigen (PSA)

- Free vs Total PSA
 - PSA can be found in the blood either bound to proteins or unbound (free)
 - BPH has higher free PSA
 - Cancer has higher total PSA
- Limitations:
 - Test must be collected and analyzed within 3 hours and stored at -70 degrees C.
 - Only potentially useful if free PSA levels within certain threshold (7%-10% and 20%-25%)

Prostate Health – Screening – Prostate Specific Antigen (PSA)

- PSA levels are variable
- PSA levels affected by certain medications
- If abnormal result, a follow-up test before going on to further testing

Prostate Health - Treatment



Prostate Health – Treatment - BPH

- Treatment based on severity of symptoms
 - International Prostate Symptom Score

	Not at all	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always
1. Over the past month or so, how often have you had a sensation of not emptying your bladder completely after you finished urinating?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
2. Over the past month or so, how often have you had to urinate again less than two hours after you finished urinating?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
3. Over the past month or so, how often have you found you stopped and started again several times when you urinated?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
4. Over the past month or so, how often have you found it difficult to postpone urination?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
5. Over the past month or so, how often have you had a weak urinary stream?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
6. Over the past month or so, how often have you had to push or strain to begin urination?	0 <input type="checkbox"/>	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
7. Over the past month, how many times did you most typically get up to urinate from the time you went to bed at night until the time you got up in the morning?						
0 <input type="checkbox"/> none	1 <input type="checkbox"/> 1 time	2 <input type="checkbox"/> 2 times	3 <input type="checkbox"/> 3 times	4 <input type="checkbox"/> 4 times	5 <input type="checkbox"/> 5 or more times	
Total IPSS Score = sum of questions 1–7 = _____						

Prostate Health – Treatment – BPH – Allopathic Approach

- Watchful waiting
- Medications
 - α -Adrenergic blockers
 - Relaxes pressure in prostate due to increased volume
 - Alfuzosin, Terazosin, Doxazosin, Tamsulosin
 - 5 α -reductase inhibitors
 - Block conversion of testosterone to DHT
 - Finasteride, Dutasteride

Prostate Health – Treatment – BPH – Allopathic Approach

- Minimally invasive therapies
 - Destruction of prostatic using microwave, needle ablation or water induced thermotherapy
- Surgical therapies
 - Resection, vaporization of the prostate, open and laser prostatectomy

Prostate Health – Treatment – BPH – Naturopathic Approach

- Lifestyle
 - Exercise
 - Risk of developing BPH ↓ by 25% with exercise
 - Weight Management
- Diet
 - Reduce intake of saturated fats
 - Moderate alcohol intake
- Supplements
 - Including zinc, saw palmetto, cernilton, plant sterols, lycopene, pumpkin seeds, pygeum, soy, stinging nettle root, etc

Prostate Health – Treatment – BPH – Naturopathic Approach

- Acupuncture
 - Reduce symptom severity
- Address contributory problems
 - Diabetes
 - Hypertension

Prostate Cancer – Allopathic Approach

- Watchful waiting
- Hormone therapy
- Radical prostatectomy
- Radiation therapy
 - Brachytherapy
 - Radioactive seed treatment
 - External beam radiation
- Cryotherapy
- Chemotherapy

Prostate Cancer – Naturopathic Approach

- Lifestyle
 - Exercise
 - Weight Management
- Diet
 - Reduce intake of saturated fats
 - Alter cooking practices
 - Increase intake of anti-cancer foods
- Reduce side effects of treatment (chemotherapy or radiation)

Summary - Prostate Health – What Should You Do

- Ask if getting regular exams done is right for you
 - DRE
 - Baseline PSA
- Report any changes in urinary symptoms
- Get yourself ready to make the lifestyle changes

Summary – Prostate Health – What do I do?

- Assessment and monitoring
- Individualized lifestyle recommendations to reduce risk
- Treatment

Summary: How I can help.

- Individualized plan
 - Reviewing risk factors
 - Treatment options
 - Diet
 - Stress
 - Weight Loss
 - Supplements
 - Exercise Prescription
 - Lifestyle
 - Smoking cessation
- Support you throughout the process
 - Problem solving for barriers and self management

What is Naturopathic Medicine?

- Primary Health Care
- Natural therapies to Promote Health and Treat Disease
- Treating the whole person and not just the symptoms
- Individual approach to you and your health
- Educate and empower patients to make healthy life choices

What is Naturopathic Medicine?

- Training
 - Minimum 3 years pre-medical university background
 - Followed by 4 years of training at an accredited Naturopathic College
 - Basic medical sciences and clinical assessment
 - Naturopathic principles and therapeutics
- Regulation
 - Practice is regulated by the Province of Ontario
 - 2 sets of North American licensing exams
 - 1 set of jurisdictional (Ontario) licensing exams

What do we treat?

- Allergies and food intolerances
- Anxiety and Depression
- Arthritis and chronic pain
- Cardiovascular disease (high cholesterol, blood pressure)
- Cold and Flu
- Diabetes
- Digestive disorders (Crohn's disease, Irritable bowel, Ulcerative colitis)
- Fibromyalgia and Chronic fatigue syndrome
- Infertility
- Insomnia
- Low energy
- Men's health (BPH, ED)
- Osteoporosis
- Prenatal and Postnatal care
- Skin conditions (Eczema, Psoriasis)
- Stress
- Thyroid disorders
- Weight loss
- Women's health (PMS, menopause, etc)

Questions?

Contact Information

Ottawa Collaborative Care Clinics

102 Lewis St.

Ottawa, ON

K2P 0S7

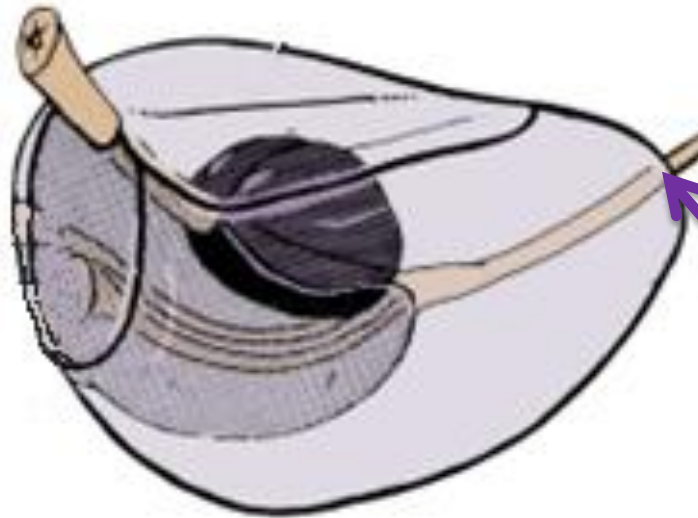
Tel: 613-290-6115

www.ottawand.com

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