Prostate Cancer Awareness & Prevention

Men's Health Day 2024

Hani Rashid, MD

Professor of Urology

University of Rochester Medical Center

MEDICINE of THE HIGHEST ORDER



Prostate Cancer 101

- Most common solid cancer in men
- •In 2024: US 299,010 cases a year, 35,250 deaths
- •3% increased incidence a year
- •5% increase in dx with advanced prostate cancer
- •1 in 8 men dx in their lifetime
- Average age 67 years old
- Higher risk in African American and Caribbean men of African ancestry



Prostate Cancer Symptoms

- Asymptomatic in most patients (early stages).
- •Some men, however, will experience symptoms that might indicate the presence of prostate cancer, including:
- Seminal vesicle

 Prostate gland

 Tumor

- Blood in urine or semen.
- Painful or burning urination.
- · Difficulty in having an erection.
- Painful ejaculation.
- Frequent pain or stiffness in the back and/or bones.
- Progressive constipation or narrowing of stool caliber.





How is Prostate Cancer Diagnosed?

- •PSA
 - Controversy
 - •Ages 55-70
 - Younger if AA, Family history of prostate cancer
- •Exam-
 - Incidentally found on imaging



False Positive PSA Results

Causes

- Prostatitis
- BPH
- Recent ejaculation
- DRE ?
- Lab error

Refinements to reduce the number of false positive results

- Free PSA: PSA unbound to plasma proteins in blood.
- PSA velocity: rate of change of serum PSA
- PSA Density: The ratio of PSA to gland volume
- Age adjusted PSA





When to See Urologist and What We Do

- PSA elevated, ? Rising PSA, Prostate nodule, Radiology finding
- Repeat PSA
- •PHI/4K/PCA/Age specific PSA etc
- Prostate MRI
- Prostate biopsy



Prostate Biopsy

- Transrectal vs Transperineal
- MRI guided
- Does not cause cancer to spread
- Side effects



Prostate Cancer Treatments

- Active surveillance
- •HIFU
- Cryoablation
- •TULSA
- Steam
- Surgery

- Radiation: seed implementation, HDR, external, proton, cyber knife
- Androgen Deprivation Therapy
- Chemotherapy
- Immunotherapy



ACS Guideline for Diet and Physical Activity for Cancer Prevention

- Achieve and maintain a healthy weight throughout life.
 - Keep your weight within the healthy range, and avoid weight gain in adult life.
- Be physically active.

• Adults:

• Get 150-300 minutes of moderate intensity or 75-150 minutes of vigorous intensity activity each week (or a combination of these). Getting to or exceeding the upper limit of 300 minutes is ideal.

• Children and teens:

- Get at least 1 hour of moderate or vigorous intensity activity each day.
- Limit sedentary behavior such as sitting, lying down, watching TV, and other forms of screen-based entertainment.







Healthy Eating

- •Eating a vegan, vegetarian or lacto-ovo vegetarian diet significantly reduces the overall risk of developing cancer, heart disease and dying early from cardiovascular disease, according to a new "umbrella" analysis of more than 20 years of research.
- •In addition to lowering cardiovascular risk factors such as blood pressure and cholesterol, the umbrella analysis found a "protective effect" for specific cancers, including "liver, colon, pancreas, lung, prostate, bladder, melanoma, kidney and non-Hodgkin lymphoma



Obesity and Cancer Risk

- Being overweight or obese is clearly linked with an increased risk of several types of cancer, including:
- Breast cancer (among women who have gone through menopause)
- Colon and rectal cancer
- Endometrial cancer (cancer in the lining of the uterus)
- Esophagus cancer
- Kidney cancer
- Liver cancer

- Ovarian cancer
- Pancreas cancer
- Stomach cancer
- Thyroid cancer
- Multiple myeloma
- Meningioma (a tumor of the lining of the brain and spinal cord)
- MAY increase AGGRESSIVE FORMS OF PROSTATE CANCER



Body Weight and Cancer Prevention



- •The dietary factors most often linked with excess body fat include sugarsweetened beverages, fast foods, and "Western type" diets (diets high in added sugars, meat, and fat), whereas foods containing fiber and "Mediterranean" diet patterns may reduce risk.
- Aerobic physical activity, including walking, is linked with a lower risk of excess body weight, whereas sedentary behaviors (sitting and lying down) and more screen time (such as looking at a phone or computer, or watching TV) is linked with a higher risk.
- Excess body weight is thought to be responsible for about 11% of cancers in women and about 5% of cancers in men the United States.



Benefits of Physical Activity

- Physical activity has been linked to a lower risk of several types of cancer, including:
- Colon cancer (for which the link is strongest)
- Breast cancer
- Endometrial cancer (cancer in the lining of the uterus)
- Bladder cancer
- Esophagus cancer
- Stomach cancer
- MAY reduce risk of Prostate cancer





150-300 minutes of moderate intensity or 75-150 minutes of vidorous intensity activity each wook for a combination of

these). Getting to or exceeding the upper limit of 300 minutes is ideal.		
	Moderate intensity	Vigorous intensity

Jogging or running, fast bicycling, Walking, dancing, leisurely

bicycling, ice and roller skating,

Volleyball, golfing, softball,

tennis, downhill skiing

garden maintenance

or machine repair)

baseball, badminton, doubles

Mowing the lawn, general yard and

Walking and lifting as part of the

job (custodial work, farming, auto

horseback riding, canoeing, yoga

Exercise and leisure

Sports

Home activities

Workplace activity

circuit weight training, aerobic

Soccer, basketball, field or ice

Digging, carrying and hauling,

Heavy manual labor (forestry,

construction, fire fighting)

masonry, carpentry

hockey, lacrosse, singles tennis, racquetball, cross-country skiing

swimming

dance, martial arts, jumping rope,

PC Survivors-Barriers to Lifestyle Modifications

- Lack of clarity on scientific evidence
- Treatment side effects as a barrier to physical activity
- Lifestyle modification was perceived as unnecessary and survivors were unwilling to make Life style changes
- Lack of time to make lifestyle changes
- •Older age making lifestyle changes difficult



PC Survivors-Barriers: Lack of clarity on Scientific Evidence

- Clarity of evidence thought to be confusing and contradictory
- Uncommon to receive advice from HCP unless prompted
- Since HCP not prompt- consider this not important



PC Survivors-Barriers : Treatment side effect

- Androgen deprivation therapy/Immunotherapy
- Incontinence
- Lack of confidence



PC Survivors-Barriers: Perceptions as change as unnecessary

- If prostate cancer treated, lifestyle change would not influence health or QOL
- Perception that they have healthy lifestyle
- Cost of healthy food
- Lack of willpower



PC Survivors-Barriers: Age

- "Cant teach old dogs new tricks"
- Physical limitations



PC Survivors-Barriers: Time Pressure

- Employment responsibilities
- •Family obligations
- Fatigue



Facilitators of Lifestyle Change

- •Receiving advice and guidance from healthcare professions, nutritionists or exercise physiologist
- Having support groups
- Support from family and friends
- Using lifestyle as coping strategies
- •Feeling better after lifestyle changes





MEDICINE of THE HIGHEST ORDER