The Digital Examiner

Exercise and Survivorship

The underlying theme of April’s Digital Examiner and TWO meetings we will hold in April is Survivorship.

In the inside two pages, commentary on several studies address the impact of physical activity and exercise on prostate cancer, before diagnosis, after treatment, and during long-term survivorship.

On April 8th, our Warriors, their wives and partners and/or caregivers will hold a closed focus group meeting. The meeting will be professionally facilitated and the learnings from this session used to help inform the development of new information resources for men living with advanced prostate cancer.

For our General Meeting on April 8th, Dr. Nicole Culos-Reed from the Health and Wellness Lab at the University of Calgary will be our guest speaker. Dr. Culos-Reed has conducted research specifically on exercise for prostate cancer survivors. This spring, Dr. Culos-Reed is recruiting specifically for a trial in Calgary and in addition, is leading the Lifestyle Management programming for Prostate Cancer Centre you will hear more about this fall.

Finally, on April 29th, we will be fortunate to have Glenda and Rick Standeven speak to us about their journeys with cancer. See back page for information.

Our journeys continue .........

Stewart Campbell
Executive Director

Tuesday, April 8th, 2014
Meeting Schedule

4:00 PM - 6:00 PM: A closed Warriors focus group meeting at the Kerby Centre on Survivorship for Warriors and their Partners. A light meal will be served from 6:00 - 7:00 PM.

5:00 PM: No-host dinner at Moxies. Park and sign-in at the Kerby Centre. Walk east along the LRT to Moxies in the Sandman Inn. We have room for you at the table!

6:30 PM: PCCN Calgary Newly Diagnosed & Active Surveillance meet in Room 331 at Kerby Centre, Ron Singer, Facilitator

7:30 PM: General Meeting. Kerby Centre Lecture Theatre

Dr. Nicole Culos-Reed
Health and Wellness Lab
Faculty of Kinesiology
University of Calgary

Refreshments will be served and there will be lots of time to socialize.

Come join us on April 8th and April 29th at the Kerby Centre.

Ladies, family members and caregivers are always welcome at our meetings.

Casino Volunteers Needed

Cowboys Casino. June 6th and 7th.
Day and Evening Shifts. We need 10 more volunteers primarily for the evening shifts: Cashiers, Chip Runners, Count Room Staff and backups.

Contact Stewart Campbell at 403 455 1916
Why Men Ought to Exercise

New research adds credence for why men ought to exercise before and after a PCa diagnosis to maximize their chances of longer survival and/or improved quality of life.

January 27, 2014 -- In findings presented at the American Association for Cancer Research – Prostate Cancer Foundation Conference on Advances in Prostate Cancer Research, men with a history of brisk walking prior to a diagnosis of PCAs had healthier-looking, more normally shaped blood vessels in their prostate tumors after diagnosis.

The researchers had previously shown that small, irregularly shaped vessels in human prostate tumors were linked to an increased risk of death in men with PCAs. “We hypothesized that brisk walking and vigorous activity would be associated with larger, more regularly shaped vessels in human prostate tumors,” said the researchers.

To test their theory, they reviewed the physical activity levels of 572 men in the Health Professionals Follow-up Study prior to a diagnosis of PCAs. All the men underwent surgery to remove their prostate gland. The researchers examined the post-surgical tissue samples and found that men who reported the fastest walking pace (3.5 to 4.5 mph) prior to diagnosis of PCAs had more normally shaped blood vessels in their tumors compared to men with the slowest walking pace (1.5 to 2.5 mph). This may be quite important, say the researchers, because more normally shaped vessels in prostate tumors may inhibit cancer spread in the body and might also improve men’s response to anti-cancer therapies.

“It’s easy for people to see the obvious benefits exercise has on the outside of the body, but harder to imagine that it may have positive internal effects on the prostate itself,” says Dr. Lorelei Mucci, a PCF Young Investigator and an author on the study. “This study documents the benefits exercise can confer to a prostate tumor, which may make that tumor less of a threat to the man’s life,” she says.

Interestingly, and somewhat surprisingly, the researchers found that while brisk walking was associated with a positive effect on the shape of a tumor’s vasculature, more vigorous levels of exercise, such as running or cycling, did not have an effect of tumor vessel shape. “Vigorous exercise, such as running or rapid cycling, is associated with a decreased risk of dying of prostate cancer,” says Mucci, “but from these findings, it seems as though the benefits to men from higher levels of exercise may be coming from a different mechanism of action.”

Other studies show benefits of exercise for men with prostate cancer

Dr. Stacey Kenfield, a Prostate Cancer Foundation Young Investigator and a presenter on the Brisk Walking study, also first-authored a study published in the Journal of Clinical Oncology in 2011 that looked at physical activity and outcomes for men in the Health Professionals Follow-up Study diagnosed with prostate cancer. That study found that:

- Men who walk briskly for 90 minutes or more per week lower their risk of death from any cause by 46% compared to men who walk less quickly and less often.
- Men who exercise vigorously (e.g., biking, tennis, jogging, swimming) three or more hours per week have a 61% lower risk of death from PCAs compared to men who exercise vigorously less than one hour per week.

Both non-vigorous and vigorous activity lowered men’s risk of death from any cause.

And, a study published in the Journal of Physical Activity & Health found that men diagnosed with cancer who burned 12,600 kilojoules (kJ) or more a week doing physical exercise (such as walking or stair climbing) cut their risk of death from any cause by half, compared to men whose weekly exercise burns only added up to 2,100 kilojoules a week. (12,000 kJ converts to 3,011 calories.) Hitting that level of energy burn requires clearance from your doctor and personal commitment: a 170-pound man who walks briskly (pace 3.5 mph) for an hour and a half, seven days a week, would burn 12,887 kilojoules, or 3,080 calories a week.

Another PCF-funded researcher, Dr. June Chan of the University of California, San Francisco, has reported in the past that vigorous exercise changes the expression of 184 genes; specifically, Chan reported at the 2012 American Society of Clinical Oncology annual meeting that several genes thought to thwart cancer progression were up-regulated in men who exercised vigorously three hours a week, or more.

Understanding how exercise benefits men with PCAs is important, says Dr. Jonathan Simons, president and CEO of PCF, because once scientists know what genetic or other biological changes are in play that can extend survival, it might be possible to formulate therapies that mimic, or even enhance, the benefits of physical activity. Additionally, such knowledge may help explain why some men with PCAs who have always exercised robustly, progress in their disease, despite that fact.
“Knowledge is power,” says Dr. Howard Soule, chief science officer of PCF, “and this study on brisk walking and tumor vessel morphology definitely raises the bar for what we know in terms of how exercise may affect men with PCa.”

New finding on Obesity and prostate cancer

Another study presented by Dr. Adam Dicker of Thomas Jefferson University found that men who were either obese or overweight had a higher risk of local tumor invasiveness at the time of their surgery to remove a cancerous prostate.

Specifically the study noted:

- Men with a body mass index (BMI) of greater than 29kg/m² (generally men with BMI’s of 30 or more are considered obese) were more likely to have positive surgical margins at surgery, a trend towards worse seminal vesicle invasion, and extension of their cancer beyond the borders of the prostate gland.
- Men whose tumors were deemed intermediate risk preoperatively, and who had a BMI greater than 29kg/m², were twice as likely to require radiation therapy in addition to surgery to treat their prostate cancer.

Because exercise is well known to lower body weight, especially when combined with a healthy meal plan, this study adds weight (mea culpa on the pun) to the case for all men to discuss a sensible exercise plan with their doctor.

Exercise as a means to improve quality of life

Prior research has shown that exercise can significantly lessen treatment related fatigue for men with PCa, be it early in the course of their disease or late. And now, a new study published in the Journal of Clinical Oncology (JCO) finds that for men undergoing androgen deprivation therapy (ADT) for their PCa, exercise can lessen a host of adverse side effects.

ADT is commonly used to starve prostate tumors of testosterone that can drive tumor growth, and has been shown to slow tumor progression and improve survival times in appropriately selected patients. Yet, this treatment can cause several unpleasant side effects that lower a man’s quality of life.

In an editorial, Dr. J. Kellogg Parsons of the Moores Comprehensive Cancer Center at the University of California, San Diego noted that ADT can cause “dramatic decreases in lean body mass, physical performance, muscle strength, and bone mineral density.” Lower bone mineral density can increase the risk of fractures, and decreased strength can increase the risk of falls, which, in turn, can cause fractures, especially in bone that has become less dense due to ADT.

Other adverse side effects to ADT are: decreases in sex drive and erectile function; increased fatigue and depression and cognitive ability; increased blood fats and unhealthy cholesterol levels and other metabolic dysfunctions that can lead to diabetes or, potentially, heart disease in some men.

In order to determine if exercise may ameliorate, or lessen, such side effects, researchers at Deakin University in Australia reviewed several studies that had looked at the effects of exercise on men undergoing ADT. While there was variance between the studies, the authors found that exercise consistently improved men’s physical performance in terms of muscular strength and endurance as well as their ability to do aerobic exercises, such as brisk walking.

The authors noted that positive changes in muscular and aerobic fitness often resulted in improvements in men’s ability to function in their daily lives. And mimicking other study results, they found that exercise seemed to lessen fatigue. Whereas control groups generally reported increases in fatigue over time, both aerobic and resistance [weights or bands] training seemed to help participants maintain or even reduce fatigue levels. The authors postulated that exercise might offset the tendency of ADT to lower blood levels of oxygen carrying molecules, hemoglobin, that when low often cause fatigue.

The findings were insufficient, say the authors, to provide exercise treatment regimens specific to men receiving ADT, but in an editorial, Kellogg said, “…based on the data in this review, the evidence in favor of exercise is arguably strong enough to consider its routine implementation to diminish musculoskeletal adverse effects in patients with prostate cancer receiving ADT—particularly given the potential for exercise to also improve cardiovascular and overall health.”

Overall says Dr. Simons, each man should sit down with his doctor and discuss what level of exercise program would be best for him. "Doubtless exercise is good for humans and will benefit men with PCa in various ways, when a program is tailored to an individual patient," says Simons, a clinical oncologist. “As a physician, these new research findings give me added confidence in advising my patients that exercise will likely benefit them when prescribed appropriately; as a scientist, I’m excited that each day we are uncovering more and more about exactly why exercise may benefit various groups of men, and how this new information can be incorporated into future or ongoing research studies."
Chantalle Fuchs, an honours psychology student at the University of Regina, is conducting a study that requires the opinion of PCA survivors and their family members. For her thesis, Chantalle has created a document designed to enhance levels of social support between cancer survivors and their family members. Her project is being supervised by Dr. Heather Hadjistavropoulos at the University of Regina.

Chantalle is seeking cancer survivors AND their family members to review the document and fill out a questionnaire. The objective is to determine whether the information is useful and if it accurately reflects survivors’ needs and experiences. Individuals are required to have completed treatment within the last 5 years. The resource and survey can be accessed and completed online at the following link: http://fluidsurveys.com/s/supporting/cancer/survivors/. If anyone requires more information, they can contact Chantalle at fuchs22c@uregina.ca or 306 585 5369.

New Titles in Our Library


Prostate Disorders – Your annual guide to prevention, diagnosis and treatment. 2014. H. Ballentine Carter, MD. The Johns Hopkins Hospital, US

Promoting Wellness Beyond Hormone Therapy Second Edition. 2013. Mark A. Moyad, MD, MPH, Jenkins / Pokempner Director of Preventative & Alternative Medicine, University of Michigan Medical Center – Department of Urology, US.

Prostate Cancer – Clinical Practice Guideline GU-004. Version 4, Effective Date: September 2013. Alberta Health Services, Canada.


PCCN Calgary’s Annual Show ‘n Shine

PCCN Calgary’s Annual Show ‘n Shine will be held at the Grey Eagles Casino on Sunday, June 29, 2014. The Show ‘n Shine is a great opportunity to see some great vehicles, visit with fellow members and increase awareness about prostate cancer.

Phone Ron Gorham at 403 730 6534 to volunteer.

PCCN Calgary will hold its Annual General Meeting at the Kerby Centre at 7:30 PM on Tuesday, May 13. This is an important meeting for our society. Audited financial statements for our 2013 fiscal year will be presented and a motion for their approval presented. A motion to appoint the society’s auditor for 2014 will be presented. Also, nominations will be received and voted upon for Directors to the Board. Any one interested in serving as a Director should contact our Chairman Ron Gorham at 403 730 6534.

Special Presentation—April 29th
7:30 PM, Kerby Centre

On Tuesday, April 29th, PCCN Calgary will host Glenda and Rick Standeven from Chilliwack, BC. Glenda is an author and inspirational speaker. She will present the ‘lighter’ side of coping with bone cancer by sharing her journey of recovery after having a hemipelvectomy and learning to live her life as an amputee, as well as a wife, mother, author and speaker. More recently, her husband Rick underwent treatment for prostate cancer.

Glenda has written several books, one about her experience with being diagnosed & treated, and another about her experience as the partner of a man diagnosed with PCs. Her second book has a huge focus on sexuality.

Glenda has a unique way of combining humour with a dose of reality in her presentations. Her message of optimism always shines through despite numerous adversities.

Come listen and learn from Glenda and Rick as they add a healthy dash of laughter while delivering a thought provoking and inspiring message about cancer survivorship.

Kerby Centre High Tee
Second Annual Charity Golf Tournament

Kerby Centre’s 2nd Annual Charity Golf Tournament will be held June 4, 2014 at the Inglewood Golf & Curling Club, 19 Gosling Way SE, Calgary. For information, contact Helene Nicholson at 403 705 3235 or visit www.kerbycentre.com.