

PROSTATE CANCER CANADA - NEWMARKET

Volume 15, Issue 6,

February 15th, 2011

**A support group that provides understanding,
hope and information to prostate cancer patients and their families**

Usually for our monthly meetings we have a Urologist as an expert in a Radical Prostatectomy and hormone treatment. Or, quite often we bring in an Oncologist or Radiologist to bring us up to speed on the latest in Brachytherapy etc. Last month we deviated a little, we had Barbara Beauchamp from Osteoporosis Canada who showed us that men with Prostate Cancer are more likely, if they are on hormone treatments, to have to deal with Osteoporosis in later life. (What she had to say starts on page two of this newsletter.) For this, our February 17th meeting, we will be presenting another look at what goes on in the health centres we go to for treatment. Leah Jamnicky, an RN at Princess Margaret is one of the ones who look after you right from when you first get diagnosed and through all your follow up treatment sessions. Leah is the real expert who guides us through this maze. Come and hear what she has to say

Meeting Date: February 17th, 2011

**Place: Newmarket Seniors Meeting Place,
474 Davis Drive, Newmarket**

Time: 7:00 pm to 9:00 pm

Speaker: Leah Jamnicky - Princess Margaret Hospital

Subject: Prostate Cancer through an RN's Eyes

Prostate Cancer Canada - Newmarket

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The Newmarket Prostate Cancer Support Group does not recommend products, treatment modalities, medications, or physicians. All information is, however, freely shared.

January notes . . . Barbara Beauchamp - Osteoporosis Canada

Subject: Osteoporosis and Prostate Cancer

Men with Prostate Cancer, if they are on hormone treatment, are also more likely to have to deal with Osteoporosis in later life. For our January 20th meeting we invited Barbara Beauchamp of Osteoporosis Canada to show us how we can keep handle it. Here is what she had to say.



Osteoporosis is one of those funny things - you can't see it. It's one of those harder things to try and explain to people. Tonight I'm delighted to come and talk to you a little bit about what we do at Osteoporosis Canada but, more importantly, what is

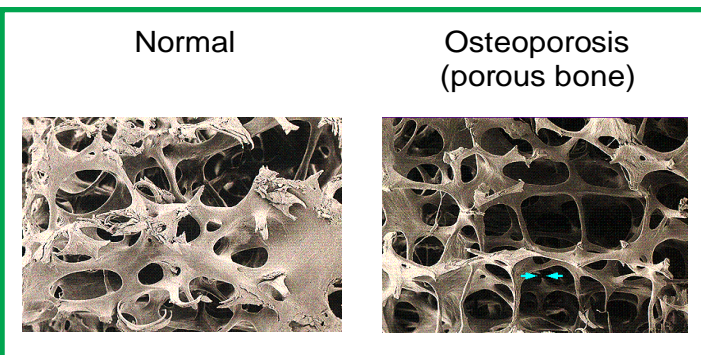
Osteoporosis all about? How does it impact you on a more personal level? Does hormone treatment put you more at risk for Osteoporosis? When we're talking about osteoporosis we're talking about bone density and bone quality. Basically it's a disease that compromises the both the density and the quality of our bone strength. What we're really most concerned about with people with Osteoporosis is they're much more prone to bone fracture and that is ultimately our biggest worry. You can actually live quite well with Osteoporosis until you break your hip. Interestingly enough, men, when they break their hips, actually don't do as well as women. Men have more problems with mortality, morbidity issues and complications after a hip fracture than women do. We're not sure why that is but we do see that. Women are more prone to Osteoporosis and probably more likely to have hip fractures but when it does happen to men, we see more issues. That makes early diagnosis and treatment of Osteoporosis even perhaps more important in men than in women. Because Osteoporosis is one of those funny things to describe, I always like starting off with a picture.

right hand side, you can appreciate that the connections are much thinner and you actually can see a lot more holes and spaces. The bone density and the quality of that bone is decreased, so if we're going to fall on a bone, the one on the left is the one to pick. We refer to Osteoporosis as the silent thief because really there are no symptoms with bone loss. It just quietly happens all by itself. Often people find out they have Osteoporosis when they end up in Emergency with a broken bone. We have a program at Southlake where we have people who are basically waiting for someone to come through with what we would call a fragility fracture, such as a low trauma wrist fracture. We would want to screen them for Osteoporosis. That's what their job is, to screen and identify people who are coming to the fracture clinic, so that we can get them on proper treatment and get them on the right track. That is often how people find out if they have Osteoporosis.

Where does Osteoporosis like to live? There are certain bones it tends to associate more with, more often in the wrist, the spine as well as in the hip area. The hip fracture is the one we really want to avoid. The other thing that's interesting is something called a fracture cascade, which means that if you have Osteoporosis in your younger years, maybe in your 40s or 50s you might break your wrist we can almost predict you're going to break something else within the next ten years if we don't intervene and make sure you're on proper diet, proper exercise program and likely medication. It's really important that we identify these things because, if we leave something in the wrist fracture untreated, most likely they'll wind up one day with a hip fracture. That's the way it progresses. Like Prostate Cancer, it's very important that we get early diagnosis.

How common is it? For women over 50, it's one in every four. For the men it's one in eight. This can happen more often if men are on hormone treatments. It's harder to diagnose because doctors aren't really thinking about Osteoporosis when men come through the office. Indeed, men get it. You might wonder why there is such a difference in the problem. Basically it's because, with women, we start losing estrogen levels when we hit menopause and when estrogen goes down, so too does the bone density. Similarly with men, the testosterone levels go down, same thing occurs. So there is the same relationship for the hormone shift in men.

Another way we see Osteoporosis presented is that people actually get shorter. Because what happens is, when it gets into the spinal column, it basically takes what is normally a nice wedge shaped structure and makes it more like a pie shape. If you get enough of those going on in your back, all of a sudden you're going to be stooped forward and have



If you look at the normal bone on the left hand side, this is as if we took a microscope into your bone tissue, it's like a honeycomb matrix, which is normally very thick and very strong. Compare that with the Osteoporosis bone on the

what we call the "dowagers hump", which is a classic sign of Osteoporosis. Overall, your height is going to decrease because you're getting compression fractures that are making the spine shorter. If you have an inch and a quarter loss in height from one doctor's visit to the next, it's a good idea to find out what's going on there. It might be due to Osteoporosis. Fractures in the spine are actually silent in 60% of the cases, so you could have a relative or someone that is in long term care, who's not really complaining of back pain but they can have something going on in their back.

What is the impact of hip fractures? There are approximately 25,000 hip fractures in Canada every year. One in four people with hip fracture actually die within that year, only one of those people will return to independent living and two of those people will require assisted living. Hip fracture is a serious thing and you want to avoid it at all costs. Approximately 25% of hip fractures are occurring in men.

Q. Why is a hip fracture so serious?

A. Because it's a very long road to recovery and often people who are post hip surgery are ending up flat on their back, not able to move very well, often they get pneumonia and other complications post surgery and that's generally what happens.

Fewer men are getting hip fractures but, when they get them, they are having more problems with mortality.

Our bones are constantly changing. A bone is living tissue, just like your hair and your skin. We're constantly losing old bone tissue and new bone is coming in to replace it. I always like to say it's never too late to make your bones better and the other thing is it doesn't take a lot to make our bones better. A small bit of exercise will go a long way to increasing bone density and keeping our bones pretty strong. What's also interesting is, if we peek at our bone mass, 16 years of age is when women have their maximum bone density, men take a little bit longer - up to 20. But once we reach those ages, the bone density bank is closed. The first 20 years of our life we're packing it away, increase that bone density as much as you possibly can and then, no more deposits are made. While there is turnover in the bone, the maximum density is going to peak at 20 and then over the course of our lifetime, it's going to go downhill. So it's really important for young people to make sure they are getting the calcium and the vitamin D to make sure their bone density and their bone health is going to continue to be good as well. Men generally have bigger bone size, so you start with a bigger bone mass and bigger bone size and, unlike women where we have sudden sharp decline in our hormone levels, usually andropause for men is a much more gentle slope. Physical activity is important for keeping everybody's bones healthy. Men tend to have a lower incidence of falls.

There are four basic factors that affect bone health. Genetics is one, if you have an immediate family member - mother, father, brother, sister - who has Osteoporosis, automatically your risk for having Osteoporosis goes up. Hormones, again, once we start depleting, whether it's estrogen

or testosterone levels. that is going to affect our bone density levels in a very direct relationship. Nutrition is very key for our bone health as well as physical activity. Those are the four key areas that we like to focus on. If you have a family member, you know that you are more at risk yourself for having Osteoporosis and if you also have a family history of osteo fractures. eg: your mother fell and broke her hip, those sort of things, you're going to be more at risk as well. So, the hormones again, testosterone and estrogen are all important for maintaining bone health. Whenever we have a situation or a point in life when those levels are going down, that directly affects the bone density. There are hormonal shifts as we age. In terms of nutrition, over all, like everything, we want to have people having a balanced diet.

The two things that we like to focus on for bone health and it's not because they are the only things that affect bone health but they are the core ones and that is calcium and vitamin D. We are currently recommending 1200 mg of calcium every day for people over 50. There are possibilities of kidney stones and heart problems if you take more than that amount. We consider 1200 mg a safe amount and very adequate level and that should be what is in your food and in your supplement. So, you always start by looking at what you are eating. If you are having two to three servings of dairy a day, plus in other foods like broccoli, nuts, almonds, oranges, all these things have calcium in them. You get about 300 mg of calcium just in the variety of things in your food and, if you are getting two to three servings of dairy every day, you'll be getting your calcium. Always start by looking at your diet and then decide if you have to add the calcium supplement.

Q. What about soy milk instead of dairy?

A. If you drink soy milk and you feel good drinking soy milk and enjoy it, then drink it. If you like cows milk and you have no problems tolerating it, then that's a good choice for you as well. They are both good sources of calcium.

Q. What about cheese, are there different levels of calcium in different cheeses?

A. No. The levels of fat differ but calcium levels are the same.

Q. How does magnesium fit in with the calcium.

A. Magnesium, we do need for our bones. We tend to get enough of it in our food. The reason people sometimes take it with the calcium is it's like a laxative, it counterbalances the constipating effects of the calcium.

Q. What does elemental mean?

A. Elemental calcium is just the basic form of the calcium, the calcium, all by itself.

We can only absorb 500 mg of elemental calcium at any one time. So, when you go home tonight, if you are on a calcium supplement, have a look at what you're taking, because if you are taking anything more than 500 mg. at any one time, you are kind of wasting your money. You can only absorb the 500 mg. at once and you should also be spreading the calcium out throughout the day. When you are taking a

calcium supplement, take it when you are not having a calcium rich meal because, if you're already having milk or yogurt or cheese, you are already getting a lot of calcium from that source. Take your calcium supplement when you're not having foods with calcium.

Q. What's the difference between Calcium Carbonate and Calcium Citrate?

A. Well Calcium Carbonate and Calcium Citrate is how it's packaged. They have to put the calcium with something to bind it to put it in a pill form. The elemental part of the calcium is just the plain calcium all by itself, in isolation, and that's how much you're actually getting out of that pill as calcium.

The best sources of vitamin D are sunshine; we do get it a little bit in food, we find it in things like fish oils, cod liver oil, which maybe you had in your younger years, we have it in margarine, it's in egg yolks but it's not really in a lot of things. Unlike calcium, we don't find vitamin D, widely spread in our food, so, in Canada, this is a problem for us, especially in the winter months. It's not only that we're not outside and exposed to sunshine, it's actually the angle of the sun's rays in the winter time are not appropriate for us to absorb it properly. The other thing that's interesting is, as we get older, we do not absorb vitamin D as easily any more, either. So there are two components of this: one, we live in Canada where it's not a tropical climate 12 months a year and two, as we get older we need more of it. We are now telling people over 50 that anywhere from 800 to 2,000 international units of vitamin D is what we want to achieve every day. That is really hard to get in just food. For example, an eight ounce glass of any kind of milk has only got 100 international units. The other thing to remember is that, when we put on sunscreen, that blocks the absorption of vitamin D as well. Health Canada recently did a statistical study right across Canada and found that 2/3 of us are vitamin D deficient. I think it's safe to say that most Canadians should be taking a supplement, certainly in the winter months when we're not getting exposure to any sunshine.

Q. Some of the supplements say vitamin D3.

A. That's just the active form of vitamin D. When you go to buy it, they've just changed the labels to show vitamin D3. It's the same thing you've been taking as plain vitamin D.

Q. Can you take that all at once or should you spread it over the day?

A. Usually you take it once. It's not like calcium, it is a fat soluble vitamin, so it's going to stay in your system a little bit longer and settle and get absorbed into the fat soluble tissues but I suggest you take it every day at a time when you will remember it.

Weight bearing activities are really the key for bone health and what's very interesting is we've heard a lot about bone health through the astronaut missions in space. When they go up into space where there's no gravity, they come back down to earth and guess what? They've got osteoporosis because they've been floating around doing their thing for

six months on their mission and they've had no gravity force against their bone structure to counter balance that. So we know the key for keeping our bones healthy is making the muscles work, the muscles attach to the bones and then bones have to work against the force of the muscle and then, obviously, gravity as well. Anything when we're on our feet, whether it's climbing stairs, walking, dancing. It doesn't take much. The good thing is even when I go into long care homes and talk to some fairly frail elderly people, even getting them to walk to their meals everyday will help them. Whatever you're capable of doing, do a lot of it. If you can walk, you walk and even if you're not a great walker or you don't like to walk, break it up into five or ten minutes segments and do that several times a day, depending on what you can manage. The more we can do weight bearing activity, the better it is for our bones. Any kind of resistant exercise, if you want to go to the gym and use weights, that's great but you don't need to go to the gym, just get a couple of cans of soup and use those - anything that causes resistance to the muscle and makes the bones work a little harder is going to be effective. The benefits of all these things is: your calcium and vitamin D are going to build the bones; physical activity is going to help us with both co-ordination and balance, so we're going to be less likely to fall and to fracture. If we're physically active our muscle strength, endurance and flexibility will all be improved and overall posture is improved too. We all know these things, right? Just know that our bones need it as much as our muscles do.

What about medications? For men who have been diagnosed with osteoporosis and require medication, drugs called bisphosphonates are the primary treatment. These drugs reduce the rate of bone loss and help prevent fractures. The important thing with phosphate medications is that you should be sitting upright, taking it usually first thing in the morning with nothing else, lots of water, because one of the side effects of this bisphosphonate oral medication is it can cause esophageal irritation and issues. So people have to be sitting up and taking it properly. If people have problems tolerating the oral medication, there is an intravenous medication taken once a year. You have to go to a clinic and there is one here, close by. Parathyroid hormone medication is used to keep the bone making cells cranking out new bones and that is sometimes used for very severe osteoporosis cases. At the end of the day, there are lots of choices, lots of good medications. It's important to find the one that's best for you, that you get the best results with, with the least amount of side effects. For men in particular, Alendronate or Risedronate are the usual bisphosphonates that we recommend. Testosterone therapy does improve the BMD results and may be beneficial for men who have low levels of male hormones. (If you are on hormone treatment for prostate cancer, this might not be the recommended treatment) I'd also like to let you know that we have a couple of wonderful resources for information. If you have other questions, you can call our 1-800 line (1-800-463-6842) Monday to Friday, 10 am - 4 pm and we have volun-

teers there who will be happy to answer your question. If you are internet/web site savvy, we do have a fantastic website. We update it regularly so, if tomorrow there is something in the news about prostate cancer and osteoporosis, something

really outrageous, we would have a position statement on that article within 24 to 48 hours on our website. (www.osteoporosis.ca) We also have a Canadian Osteoporosis Patient Network website. (www.osteoporosis.ca/copn)

Testosterone and how it affects you

Testosterone is the primary male hormone, and plays an important role in establishing and maintaining the typical male characteristics, such as body hair growth, muscle mass, sexual desire, and erectile function, and contributes to a host of other normal physiologic processes in the body.

The list of potential effects of testosterone loss is long: hot flashes, decreased sexual desire, loss of bone density and increased fracture risk (osteoporosis), erectile dysfunction, fatigue, increased risk of diabetes and heart attacks/strokes, weight gain, decreased muscle mass, anemia, and memory loss. Cholesterol, especially the LDL cholesterol, tends to rise, and muscle tends to get replaced by fat. Most men who are on hormone therapy experience at least some of these effects, but the degree to which any man will be affected by any one drug regimen is impossible to predict.

Before beginning hormone therapy, every man should discuss the effects of testosterone loss with his doctors, so he can alter his lifestyle to accommodate or head off the changes. Exercise is probably the best thing a man can do to prevent many of these side effects.

Intermittent Therapy

Over the years, researchers have explored different ways to minimize the side effects of testosterone loss while maximizing the therapeutic effect of hormone therapy. The most commonly explored strategy is known as intermittent therapy.

This strategy takes advantage of the fact that it takes a while for testosterone to begin circulating again after LHRH agonists are removed.

With intermittent hormone therapy, the LHRH agonist is used for six to twelve months, during which time a low PSA level is maintained. The drug is stopped until the PSA rises to a predetermined level, at which point the drug is restarted. The “drug holidays” in between cycles allow men to return to nearly normal levels of testosterone, potentially enabling sexual function and other important quality of life measures to return before the next cycle begins again.

At this time, however, the true benefits of this approach remain unclear, and large clinical trials are currently underway to evaluate its use in men with advanced prostate cancer. If the approach proves to be as effective as continuous therapy in suppressing tumor growth, intermittent therapy will likely become popular because of potential for an improved side effect profile.

From Dr. Gabe Mirkin's Fitness and Health E-Zine
December 19, 2010

Exercising on an Empty Stomach Can Both Prevent and Treat Diabetes

One of three North Americans will become diabetic because they eat a high-calorie, high-fat diet that blocks insulin receptors and prevents cells from responding to insulin (insulin resistance) This can cause high insulin levels that constrict coronary arteries and cause heart attacks.

Failure to respond to insulin leads to high blood sugar levels and can cause sugar to stick to cell membranes which can permanently damage the affected cell and cause blindness, deafness, heart attacks, strokes, amputations and all the terrible side effects of diabetes.

After just a few days on a high-calorie, high-fat diet, cells fail to respond adequately to insulin, blood sugar levels rise, fat deposits in your body, even in muscles, and you gain weight. This causes your muscles to start to lose their ability to store glycogen, the major source of efficient fuel for exercise, and you tire much earlier during exercise.

If you exercise vigorously BEFORE breakfast, you can reduce and even prevent these side effects. Exercising after prevents fat from being deposited in muscles and helps muscles to make more stored sugar (glycogen), the primary efficient fuel for exercise.

A study from Leuven, Belgium shows for the first time that “fasted training is more potent than fed training to facilitate adaptations in muscles, and to improve whole-body glucose tolerance and insulin sensitivity” (Journal of Physiology, November 2010). So you are able to exercise longer and harder. If you do not exercise during this period, you gain none of these benefits. If you exercise after eating, these benefits are reduced markedly (Physiology, April 2005).

When you exercise after fasting, you burn primarily your own body fat for energy. The fat is removed from fat cells and muscle cells. Muscle enzymes burn fat more efficiently and clear further fat from your muscles and fat cells to make your cells more sensitive to insulin. This reverses the cascade described in the first paragraphs.

Fats and Oils in our Diets

Fats are the most concentrated sources of calories, so high-fat foods are good sources of energy. You need some fat (the essential fatty acids), but for most people, it's hard not to eat too much fat. Fatty foods are everywhere, because manufacturers know that fat makes food taste good.

There are two major categories called saturated and unsaturated fats. When you take in more calories than your body needs, saturated fats raise cholesterol and increase risk for heart attacks.

Unsaturated fats are healthful as long as they are left in their natural state and not converted to partially hydrogenated fats. The "good" fats are liquid at room temperature. They are found in all plants and in seafood. Unsaturated fats are further classified into omega-3, omega-6 and more, depending on their chemical structure. Omega-3 polyunsaturated fats are particularly healthful because they help to prevent clotting and swelling that increase your risk for heart attacks and cancers.

The essential fatty acids (omega-3's and omega-6's) are fats that your body cannot assemble from other fats, so you must get them in your food. Omega 6's are abundant in vegetable oils, and most people get plenty. But Omega-3's, found in seeds, whole grains and seafood, may be lacking unless you make a special effort to eat these foods. The Omega-3's are the least stable of the fats (they turn rancid quickly when exposed to air, light or heat), so they are not found in most processed foods. The healthful monounsaturated fats are found in olive oil, peanuts, canola oil and other plant sources.

Unless you burn huge amounts of calories, limit or avoid fats that are solid at room temperature – the saturated fats found in butter, meats and high-fat dairy products. We believe that everyone should try to avoid partially hydrogenated vegetable oils, found in margarine, cookies, crackers and hundreds of other processed foods. Several studies link these chemically altered vegetable oils with increased rates of heart attacks and cancers.

The best fats are those you eat in parts of plants – whole

grains, beans, nuts and other seeds. When you eat corn, olives, wheat berries, soybeans, sunflower seeds or peanuts instead of their extracted oils, you get all the fiber, vitamins, minerals and phytochemicals nature packages with the fat, not just the calories.

People who need to lose weight should try to avoid all added fats (butter, margarine, oils, and processed foods made with any of these ingredients). They also need to be cautious with nuts and snack seeds, which are packed with nutrients but are so tasty that it's hard to stop with a reasonable portion size (1-2 tablespoons.)

How to Avoid Partially Hydrogenated Oils

The only way to cut back or eliminate partially hydrogenated oils (the primary source of trans fats) from your diet is to read the label of virtually every processed food you buy. Scan through the list of ingredients and if it contains the words "partially hydrogenated", put it back on the shelf.

It's much harder when you eat out, because you have no way to tell what's going on in the kitchen. Fast food restaurants and chains use a lot of pre-prepared (usually frozen) foods that they re-heat for you. These are often loaded with partially hydrogenated fats. You're safer at restaurants that prepare your food from scratch. Asian restaurants are good bets: they may not be low-fat, but they use liquid oils, not margarine or shortening. Most French or continental restaurants use huge amounts of butter, a concentrated source of saturated fats. This is better than trans fats, but not great if you are trying to lose weight or control cholesterol. Italian, Greek, Spanish and other Mediterranean restaurants tend to use olive oil, a more healthful choice.

Plants store energy in the form of carbohydrates (sugars and starches — the products of photosynthesis). When you eat carbohydrates, they are quickly broken down into the sugar molecules you burn for energy. You can only store about 12 hours worth of sugar in your liver and your bloodstream; any excess is stored as fat, which can be broken back down into sugar for later use.

Add these dates to your Calendar

February 17, 2011	Leah Jamnicky	- from Princess Margaret Hospital - an RN's eyes
March 17, 2011	Dr. Anthony Joshua	- Princess Margaret Hospital
April 21, 2011,	Dr. Padraig Warde	- from Princess Margaret Hospital - topic to come
May 19, 2011	Tanya Giaquinto	- from Sunnybrook Hospital - Diet and Cancer . . .
June 16, 2011	Dr. Robert Bristow	- from Princess Margaret Hospital - topic to come