Prostate Cancer Canada Network – NEWMARKET

Volume 19, Issue 10, **June 15, 2015**

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

UPCOMING MEETING…

Subject: Open Discussions

We are hoping that spouses will also attend so we can have a spouse table for discussion as Prostate Cancer is also a "couples" disease.

Meeting Date: **June 18, 2015**
Place: **Newmarket Seniors Meeting Place**
474 Davis Drive, Newmarket (Side Entrance)

OTHER EVENTS OF INTEREST…

- **Italian Heritage Day at Toronto FC (TFC), June 20, in support of Prostate Cancer Canada**
  A special block of tickets has been secured for PCCN groups, volunteers, families and friends connected to us. Tickets are selling for a mere $30 and $5.00 from each ticket will go to PCC in support of prostate cancer research. Please check out the PCC Facebook post below for a great opportunity to win tickets!
  https://www.facebook.com/prostatecancercanada
- **June is Men's Health/Cancer Awareness Month**
  Fitness Clubs of Canada announced their official launch of their new Cancer Survivorship Program.
  http://www.fitnessclubsofcanada.com/cancer-survivorship-program.php
  For more information, please contact: Shira Litwack, Cancer Exercise Specialist & Master Trainer
  shira.litwack@thecancerspecialist.com
  (905) 727-1100 14751 Yonge Street, Aurora, ON

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A member of the Prostate Cancer Canada Network

Assisted by
Canadian Cancer Society, Holland River Unit
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Cancer Information Service: 1-888-939-3333

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Exercise Studies for Men with Prostate Cancer —

The Physiotherapy Approach

by Mike McMaster / Copy Editor
May 21, 2015

Photography by Daniel Ho

Nelly Faghani, Registered Physiotherapist

Nellie Faghani spoke to us at the May Meeting. This is what she had to say.

My presentation today is on exercise studies for men with prostate cancer, the physiotherapy approach because it is not just exercise that we do. 3.3 million Canadians experience urinary incontinence and that's one in nine men experience urinary incontinence and prostate surgery is most common cause of incontinence in men. According to the Canadian Continence Association, one in three women experience urinary incontinence. Much of what I talk about is very relevant to women as well. The most common causes of the incontinence are stress incontinence, this is when we get a loss of urine when there is an increase in intra-abdominal pressure, so this could be getting out of a chair, getting in and out of the car. The incontinence after surgery accounts for about 5 to 48%. And overactive bladder symptoms are anywhere between 2 and 77%. This is when you are going to the bathroom more than the normal number of times, so that is 5 to 8, which is about what is normal. So you're frequently urinating. You always have that constant urge to go to the bathroom, you have leakage and you're getting up at night to go to the bathroom.

The Pelvic Floor Muscles

The pelvic floor muscles are muscles that most of us don't really think about until we have to. They silently do their job without us giving them much thought. We don't do any specific exercises. I mean it is common—we will exercise, we will walk, we know we are exercising, getting stronger in our legs and bum, we might do bicep curls to strengthen our biceps. But the pelvic floor muscles, people kind of ignore. This is a group of muscles that start from the pubic bone and they go all the way back to the coccyx, front to back, side to side, around the openings of the urethra and the anus. There is actually three layers of muscles, so it's not just one layer. And there are Type 1 and Type 2 muscle fibers, which just means there are ones that act on strength and some that act for endurance. When the muscles are working properly, we remain continent. Having proper muscle strength also helps with erectile function and also helps with stability because the pelvic floor muscles are part of the core muscles.

The impact of incontinence really affects people's self-esteem. There is a huge impact on emotions. A lot of people become depressed and isolated and really stop a lot of social activities and exercise. And it is such a spiral effect because if you become less active, you become more

Nelly Faghani, Registered Physiotherapist, is a key developer at Pelvic Health Solutions, an educational company, that teaches postgraduate courses to registered physiotherapists who are interested in treating pelvic floor dysfunctions.

Nelly started to treat pelvic dysfunction in 1998 and continues to be actively involved in clinical practise, education, training and mentoring. She has helped develop Continence Programs that have been implemented in various nursing homes. Nelly is currently working on research with Princess Margaret Hospital about various exercises used with post-prostatectomy incontinence (PPI).

In addition, she has spoken at various symposiums and conferences including The Urology Update, Canadian Ambulatory Care Conference, Ontario Physiotherapy Association Interaction Conference, Southlake Hospital OBGYN Clinical day and most recently at the SOGC conference in Toronto.

Nelly is a graduate of University of Toronto and with her brother Ali, she currently owns and operates five physiotherapy clinics in the GTA.

deconditioned, whether it's gaining weight or losing muscle mass, you're going to end up having more leakage. Also, one of the causes of institutionalization later on in life is leakage. And there is a heavy economic burden, mostly on patients which is what is most important—there is a huge cost to pads. I see with having the privilege of working with so many patients, that it really does make a huge impact on quality of life and there are tons of research to show that and I'm sure that many of you could attest to that as well—improving continence.

The Benefits of Pelvic Floor Exercises

Pelvic floor muscle strength can change your continence. Early intervention can really improve outcomes. Erectile dysfunction is another consequence of prostate surgery. Pelvic floor muscle training for erectile dysfunction (in a control group study) had a significant difference in erectile function. Of those that used biofeedback to be taught how to do the exercise, 47% had recovered erectile dysfunction, where in the control group, only 12% had recovered erectile dysfunction.

Pelvic Floor Muscle Training (PFMT) = Kegel Exercises

What are pelvic floor muscle exercises? Many of you may have heard of this referred to as the Kegels, right. Dr. Kegel, a gynecologist, who in the 1940s named these exercises after himself. He was giving these exercises to women that had babies that experienced incontinence because their pelvic floor muscles were weak. When we talk about pelvic floor muscle training, they are Kegel exercises. The research shows that simple verbal and written instruction is not sufficient. You really have to do an internal evaluation to be able to give the patient the feedback that they are doing the exercises properly. What I see in my practice is many men come in and they think that they are doing the exercise properly but they are not. They are compensating, they'll be like "see I'm doing the exercises properly", but when I actually feel the muscle group, I don't feel the contraction properly.

Specialized Physiotherapy Training & Patient Evaluation

We do need specially trained physiotherapists to be able to give you this feedback. The physiotherapists, that are mostly in the community, don't have specific training. Since we have put together this educational company in Toronto, there is probably over 300, compared to five years ago that there was only about four of us.

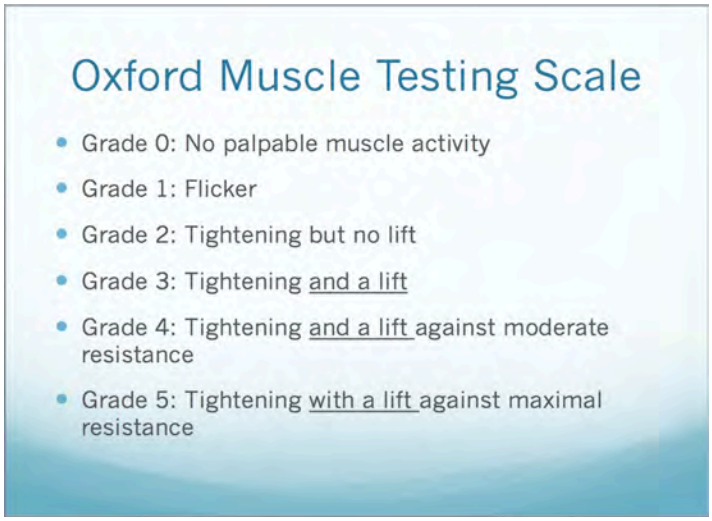
What happens when you come to a physiotherapist with this training? Well, a very thorough subjective evaluation is done. We look at everything like your past medical history, other surgeries, what treatments you've had, what medications that you're on. Often times, we get you to fill out different outcome measure forms that we re-administer at regular intervals to make sure that you are getting better. But also very thorough objective assessment is done.

I'm looking at my patient while they're sitting in the waiting room; what their posture is like, how they get up from a chair, how they move – all these things are factors for continence. I look at everything like the strength of your quads and your glutes. I look at respiratory function because there is a lot of evidence that shows that there is a clear connection between the respiratory diaphragm and the pelvic diaphragm. We look at connective tissue, neuronal involvement and of course, what I'm going to be talking about mostly, is the local contributors, the pelvic floor muscles.

The Oxford Muscle Testing Scale

Digitally rectal evaluation is done to assess the strength of your pelvic floor muscles. Often times, when I'm doing this contraction, which is non-invasive, very easy, I will feel actually downwards push which is not what I want. What I want is not only a closing around my finger but a pulling in and up, so it is like a three-dimensional movement. It's not just enough to close but we need to pull in and up. We actually grade the muscle strength. We want to see how long you can hold this contraction, so again when we reassess you, we can see that you are getting stronger. Want to know how many of these you could repeat and are you using compensations, are you bringing on other muscles because we really want to direct isolation of these muscles or you are holding your breath.

The Oxford muscle testing scale is a scale that we use to grade the strength. It's a scale between 0 to 5; so if I don't feel any contraction, that is a zero, if I feel a closing and a lift – that's a grade 3. So that's the biggest distinction. Most patients that come to me or between a 0 and a 2, so either I



don't feel much, only a little flicker or just a closing and I don't feel that lift motion. But that is something that the physiotherapist could help you with. And the grade 5 is that Olympic pelvic floor that I don't often feel in my office.

PFMT Goals

The goals of Pelvic Floor Muscle Training for urinary incontinence are really to increase the strength, increase the endurance and increase the coordination with other muscles. What we're trying to do is hypertrophy or thicken the muscle and we want to get inhibition reflex of the detrusor muscle which means that when the pelvic floor muscles contract, they actually relax the bladder, so the bladder and the pelvic floor muscles work opposite. We don't have active control over the bladder but the bladder is actually a muscle which you may have not known. We have the ability to increase its capacity and if we don't use it properly, like if you stop drinking fluids because you are worried about leakage, your bladder will actually shrink because it hasn't been stretched or exercised. It's the pelvic floor muscles, the diaphragm, the deep abdominal muscles which are referred to as the transverse abdominals, and the deep muscles of the diaphragm. So this abdominal canister has to have the right pressure system. If you have too much tension, not strength but tension in your abdominals and that could be from poor posture, that could be from trigger points in your abdominals. What we need to make sure is we have the right balance and coordination of all of these muscles of the core.

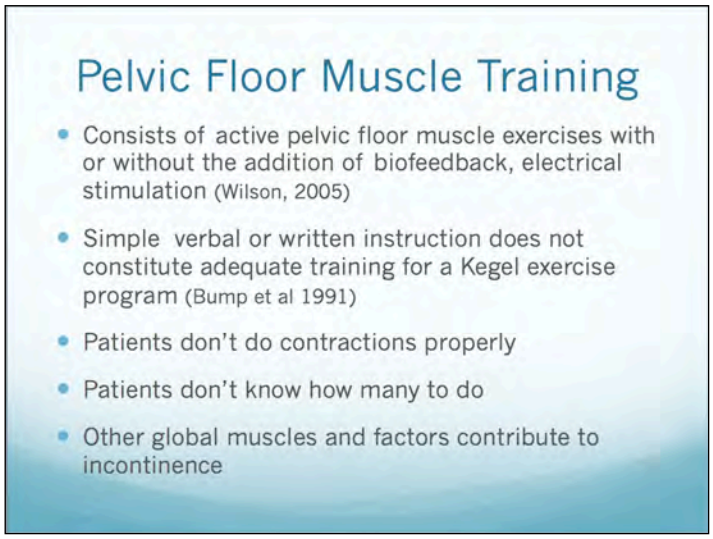
We used to think that the two biggest contributors to back pain are being overweight and inactivity, right? The research now shows the two biggest contributors to back pain are respiratory dysfunction and pelvic floor dysfunction. All of these are very linked, actually more studies with women, there is a study that is done with women that have back pain and 78% of those women that had back pain, also had pelvic floor dysfunction. There is a huge connection.

Kegels + Pilates = Pfilates

There is a clear connection between respiratory function, pelvic floor function and Sacroiliac (SI) joint function. That is back pain. So the pelvic floor muscles are not working well, spinal support is compromised which you end up using too much of your external oblique muscles in the side which alters pelvic floor function which can contribute to urinary incontinence. I want to touch upon hypopressives a little bit. Pfilates is really Pelvic Floor Pilates. Pelvic floor are the Kegels and Pilates is a type of exercise that works on strength, core stability, flexibility, muscle control, posture and breathing. Pfilates is a combination of these two.

Hypopressive exercises really emphasize engaging the deep abdominal muscles with conscious coordination of the diaphragm. Even though there is not a direct contraction of the pelvic floor, what doing this does, it results in muscle tone and contraction reflexively of the pelvic floor. Deep breathing is followed by brief breath holding causing relaxation of the diaphragm which decreases that intra-abdominal pressure and you get that reflex contraction of the pelvic floor muscles. Hypopressives have been shown to have increased the size of the levator ani, a group of muscles in the pelvic floor.

These steps in doing hypopressives, there is usually a very slow deep breath taken in and then complete exhalation. What you do is you exhale completely. And once all the breath is out, you close your glottis and then you start to gradually contract your abdominal wall which ends up – you get a superior placement of your diaphragm.



Q: For the deep abdominal muscles, can we increase that ourselves with trying to stop urinary flow halfway through?

NF: I wouldn't recommend ever stopping the flow of urine. As a test to see if you are recruiting the right muscles

maybe, but you could also work with the physiotherapist to confirm that you are doing that properly. Sometimes when patients can't recruit their pelvic floor, I do sometimes try and get them to contract their transverse abdominals to get a pelvic floor contraction but never to do on the toilet.

Q: Do the typical Pilates classes incorporate Pfilates?

NF: No. You have to find specific Pfilates instructors that have that training or physiotherapists that specifically have that training.

Q: I understand your clinics do not encourage biofeedback...

NF: It's not that we don't – when I first started working as a physiotherapist, I thought the only way of training the pelvic floor muscles was through the use of biofeedback. Biofeedback is either visual or auditory feedback in order to confirm that you are doing the exercises properly. The research shows that biofeedback is excellent as a motivational tool but not so much for helping you get stronger. For me to pull out my biofeedback machine and make my patients invest in a rectal center is really not worth it because I am able to give them that feedback just by my finger.

Q: Is that squeeze of the pelvic floor which I would do having to get up in the night and I feel like leakage is coming, that squeezing, is that negatively impacting on the bladder?

NF: No, not at all. The only time that it is bad is if you do it on the toilet because then that inhibits the bladder, that shuts it down.

Q: How do you know that you are doing Kegels properly, how long to hold it?

NF: You really need to have an internal evaluation to make sure that you are doing that properly. Even when we're talking about women, the Society of Obstetricians and Gynecologists of Canada in 2008 in their guidelines on the management of urinary incontinence, said that you must have an internal evaluation done to ensure that you are doing your Kegels properly. You need to make sure that you are getting that closing and not lift. The only way of knowing to do that is to have an internal evaluation.

Kegels – Not for everyone.

You might also be surprised to hear that Kegels are not meant for everybody. There are cases that we don't want patients to do Kegel exercises. Kegels are for patients that have what we call hypotonic muscles or muscles that are weak and lengthen. This is common what we see with patients that have continence or erectile dysfunction. But sometimes we have muscles that are hypertonic. These are muscles that are very short and tight, you know how you can get knots within say muscles within your traps and it

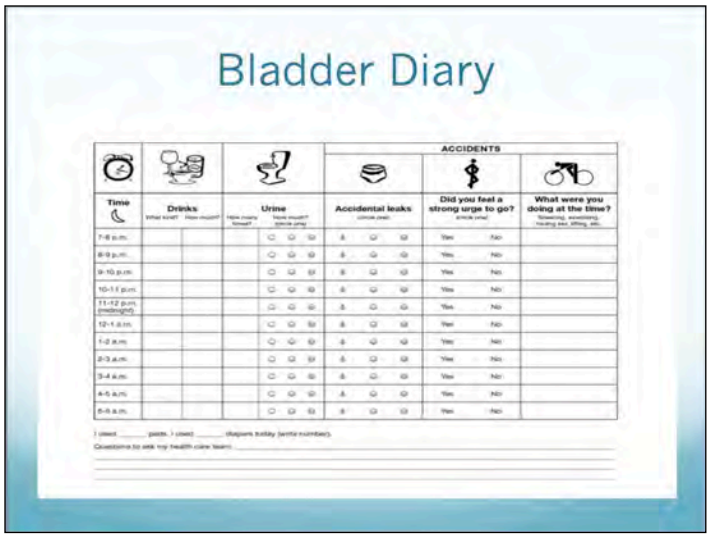
can refer headaches. So you feel like little knots, that's hypertonicity in that muscle. And we sometimes find hypertonic muscles with patients that have pelvic pain or that have had a history of constipation and straining because they have been straining to have a bowel movement and they have caused little microfiber tears within the muscles and these muscles later on shorten and tighten which cause trigger points. And the only way of determining that is through digital rectal evaluation with someone that has the appropriate training.

Trigger points are hyper-irritable spots within the skeletal muscle. Often times when you touch them, they are painful and they can refer a longer very typical pattern. Now how that applies to urinary frequency and urgency is that if, for example, you have really poor posture, it can actually shorten and tighten the pelvic floor muscles. So that causes tension in that area and causes trigger points in the muscle.

There was one gentleman that I treated, this was a few years ago and his radical prostatectomy was about 20 years prior to that. And when he came into my office, he had been doing Kegels and he was very frustrated and he had found me online and he thought he would give it one more chance. When I actually assessed his pelvic floor muscles, he had trigger points in his pelvic floor muscles. I actually asked him to stop doing all Kegels. He was also doing a lot of other things that were really bad like butt situps and a lot of breath holding exercises. All I did was to stop him from doing the Kegel exercises, talked to him about actually lengthening his muscles, and he had a 70% reduction in his leakage within a week. So that was without even doing much more than that. So we really need to have an internal evaluation to see what the state of the muscles are.

Treatment & Education – The Bladder Diary

When you come into a physiotherapist's office, one of the things that's done is we look at, not just the pelvic floor muscles, we look at a lot of other things—we do a ton of education, we look at your bladder function, we often get



you to fill out a bladder diary, etc. If you haven't filled out a bladder diary, it's actually a very valuable tool to understand your habits, what fluids you are drinking that can affect your incontinence. It helps monitor improvement and progress of different programs. Often times we will ask patients to keep this diary for a time period of 2 to 3 days so we can see their voiding patterns and again, their liquid consumption. So what you would do is record voiding volumes and I used to get patients to measure the volume in a hat, I don't anymore. I get them to do just count how many seconds it takes them to empty their bladder. And again, you're recording all the different fluids that you have, the type and amount. We want to look at what you drink, when you urinated, if you had any leakage, did you have urgency and if any of these things were associated with an activity.

Q: Regarding voiding, some people say your bladder is going to be empty but it is not. This is my problem and some say sit down and urinate or others say stand up, which is good?

NF: So really the only way of knowing if you have completely emptied your bladder is if you have an ultrasound done over your bladder to see what your post void residual is. So there is always about 50 mil left within your bladder after you have urinated. So my suggestion is often to sit down, to be able to go to the bathroom because you are able to better relax the pelvic floor muscles because in order to void, the muscles have to completely relax and being in a standing up, upright posture – you may not be able to do that.

Brain Games

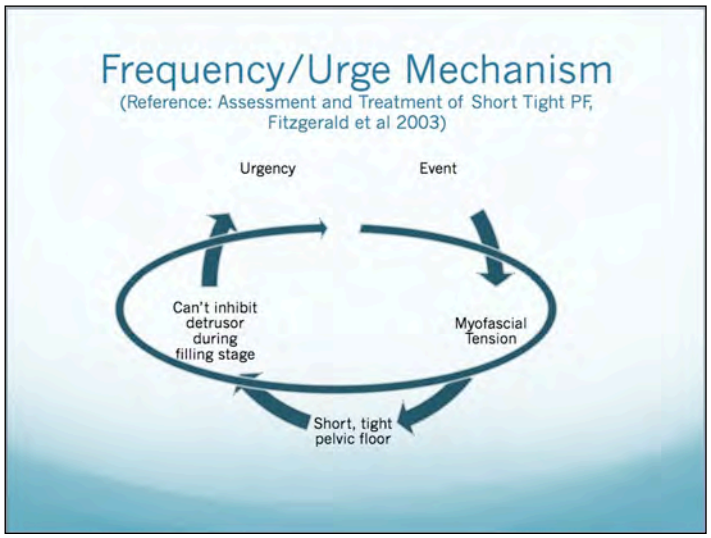
The central nervous system plays a significant role in urgency and frequency. The brain plays a huge role and we use this to our advantage actually when you have frequency and urgency, meaning that if you are able to distract yourself effectively and really take your brain to a different place, which is again, very strong evidence in the research to show that this is something that we can train ourselves to do. It can really help decrease that frequency and urgency.

There is a phenomenon called "Key in the Door", where so many people have leakage as soon as they put their key in the door. Because really, our nervous system knows that that's next, so we teach strategies, behavioral modification to be able to help with those symptoms. So those strategies are making sure that you stay calm because if you're doing this, it's done. Never rush.

Sometimes actually not going to the bathroom and telling yourself you're not going to go to the bathroom or you are sitting down and doing some deep breathing, sometimes contracting your pelvic floor so that the bladder does relax before you calmly walk to the bathroom will help you get there. And this can be something you do in the middle of the night as well, making sure that you are not rushing, making sure that you do some Kegels as you get there, do some deep breathing and pretend you are not going to the bathroom.

As simple as that sounds, we can actually trick our nervous system into not being three steps ahead of us. Sometimes some sensory distractions like you are digging your nail into your finger or counting backwards by 2.5, which math is not a strength for me, that would distract me for sure.

We want to identify the triggers like caffeine and alcohol,



citrus fruit juices – these things would irritate the bladder. And if you're getting up at night to go to the bathroom, making sure that you stop fluids 2 to 3 hours before going to bed. We must make sure that you have good bowel movements, avoiding constipation. Definitely losing weight would make a difference

Q: If I have to go to the bathroom to go urinate and I hold on to that, by the time I get to urinate, I find that I have to void bowels at the same time.

Photography by Daniel Ho

NF: Well absolutely because when you look at anatomically where everything is positioned, the bladder is at the front and right behind it is the rectum. If the rectum is full of stool, it grows and it pushes on the bladder, that can give you urgency. And if again, you are straining to have a bowel movement, you are damaging these muscles. It's like mini childbirth, like you are pushing and bearing down. It's very harmful to the pelvic floor muscles. Smoking, stopping smoking is also a behavioral modification that could be helping decreasing some of your symptoms. And if you're on medication, speak to your pharmacist to see are there any of the medications that you are taking, irritating to your bladder.

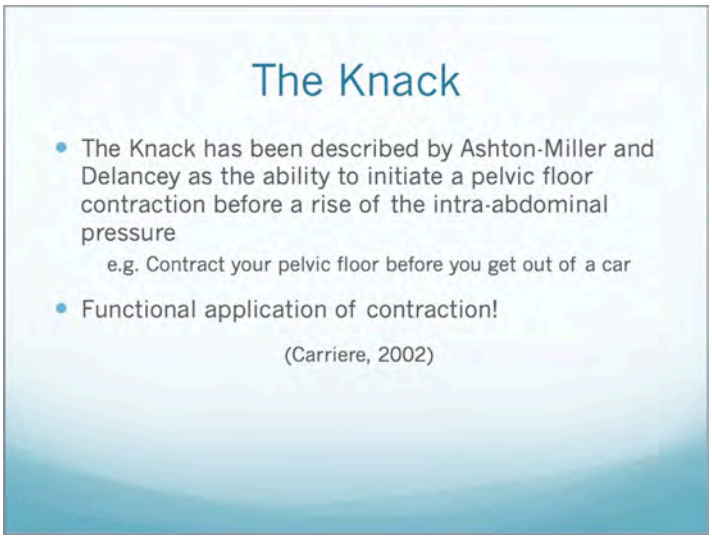
If you are constipated, you want to make sure that you're having 30 to 40 g of soluble and insoluble fiber a day, making sure that you have enough fluid so that – you don't want to add fiber that constipate you more if you don't drink enough. There is some massage you could do around your stomach which is an ILU Massage (I Love U Massage) that would also help. And most importantly, don't ignore the urge to go to the bathroom because if you ignore the urge to go to the bathroom, the stool just sits there and gets dehydrated and you are destined to be constipated. What your stool should look like is toothpaste. It's normal to have three bowel movements a day, it's normal to have a bowel movement every three days. What's most important is that you are not straining to have a bowel movement and that's what's most important.

There are things you can do to help you have a bowel movement like putting a step-stool in the bathroom, getting your knees above your hips. That changes the anal-rectal angle, so the angle that the feces come through. If you put your feet up on a stool, that angle straightens up so it doesn't have to go around this big bend. Sometimes twisting over your right shoulder will help, because it's sort of like if you think about wringing out a towel and the way that the intestines go and come down into the rectum, when you twist towards your right shoulder, it will help pass the stool or even blowing into a closed fist, brings on the deep abdominal muscles which will help push the stool out. Never, never want to strain. We do a ton of education on posture. We will do a lot of education with respect to your alignment and how that can affect the pelvic floor.

Recommendations

Never perform the Kegels on the toilet, as we mentioned. Don't hold your breath, you want to make sure you are breathing – actually breathing out. Pretend like there is a marble at the opening of your anus and you're trying to close around the opening and pull it in and up. Pull it in and up towards your belly button.

The recommendations I'm making are very general and based on principles of strengthening. Generally speaking, what we get patients to do are three sets of 10 contractions for a 10 second hold. Having said that, if you were to see a physiotherapist and be assessed, that would be personalized based on the findings and your strength. If you are getting your leakage when you get out of a chair, you want to make sure that you do a pelvic floor contraction and exhale



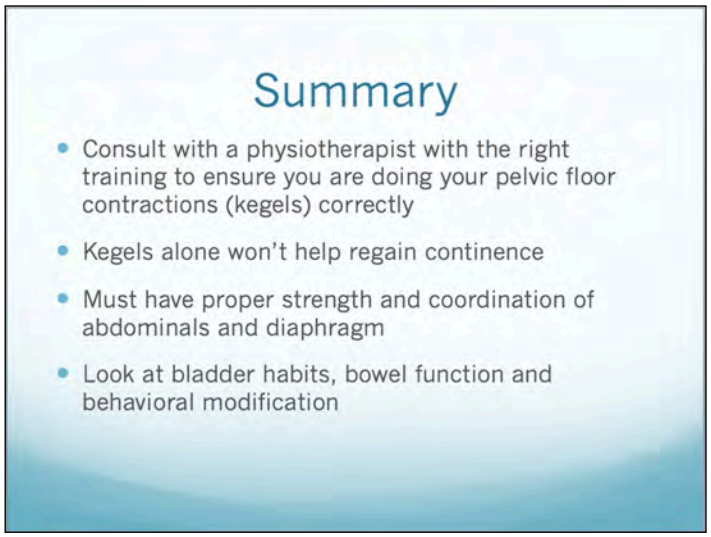
as you are getting up from sitting, so that you are closing the external sphincter to prevent leakage. And you always want to make sure when you do Kegels, that you have sufficient rest times in between your contractions so the muscles come back down to a baseline of zero.

Q: Is it good to go through breathing cycles when you do a contraction?

NF: My recommendations are usually to coordinate your breathing with your contractions, so taking a deep breath in, relaxing your pelvic floor as you breathe out, doing a maximum contraction without using compensations for your whole length of expiration and then relaxing again. So I coordinated with each breath.

The Knack is really the functional application of doing a Kegel exercise. So doing a contraction before you get out of a chair, doing a contraction before you cough or sneeze is called the knack and it has been shown in the research to help with incontinence.

As a physiotherapist, we might do different manual techniques to help normalize tone, to help facilitate the



pelvic floor muscles. And Kegels by themselves are never going to be enough. You always need to make sure that you have proper balance of your whole core system. We need to look at the whole body, not just the pelvic floor.

Thank you very much for taking the time to listen to my talk.

~~~ Notes from The Chair ~~~

We are trying to get an urologist to attend our September meeting for an open mic question and answer session. We hope this may appeal to those already undergoing treatment and any newly diagnosed patients that may wish to attend for the first time.

Our October presenter will discuss estate planning, the importance of a Will and Power of Attorney along with any new regulations in this regard.

We are desperately in need of more volunteers to help sustain the Support Group. You do not need to possess any specific skill sets, just be willing to help out. If you have experience in writing, public relations, marketing, social media, web development, or have audio and visual skills, do let us know. We also try to vary the hosting duties to give the meetings a different flavour and keep them more interesting to the group. If you are concerned that you may end up in this position and are not comfortable with speaking in front of a group, don't worry, you will not be asked to host unless you are comfortable with the task.

Ulli Baumhard has indicated he plans to step down at the end of the year (June will be his last meeting). His input and purchasing supplies for the refreshment table will be missed. Here is an opportunity for someone to step into Ulli's role.

Ulli, we will miss you. You may have to leave coffee making instructions. We would like to thank Ulli for his contribution to the group. You have been an inspiration and have provided valued input and feedback to the Executives. We wish you the best going forward and hope you will drop in to see us from time to time.

If you have any ideas or suggestions for up coming meetings, please forward them to:
info@newmarketprostatecancer.com

I hope everyone has a great summer and we look forward to seeing you again in September.

Walt Klywak
Chairman