Vitamin D May Halt Lung Function Decline In Asthma And COPD

ScienceDaily (May 21, 2009) - Vitamin D may slow the progressive decline in the ability to breathe that can occur in people with asthma as a result of human airway smooth muscle (HASM) proliferation, according to researchers at the University of Pennsylvania.

The group found that calcitriol, a form of vitamin D synthesized within the body, reduced growth-factor-induced HASM proliferation in cells isolated from both persons with asthma and from persons without the disease. The proliferation is a part of process called airway remodeling, which occurs in many people with asthma, and leads to reduced lung function over time.

The researchers believe that by slowing airway remodeling, they can prevent or forestall the irreversible decline in breathing that leaves many asthmatics even more vulnerable when they suffer an asthma attack.

"Calcitriol has recently earned prominence for its anti-inflammatory effects," said Gautam Damera, Ph.D., who will present the research at the American Thoracic Society's 105th International Conference in San Diego on May 20. "But our study is the first to reveal the potent role of calcitriol in inhibiting ASM proliferation."

The experiments were conducted with cells from 12 subjects, and the researchers compared calcitriol with dexamethasone, a corticosteroid prescribed widely for the treatment of asthma. Although, dexamethasone is also a powerful anti-inflammatory agent, the researchers found that it had little effect on HASM growth.

Dr. Damera and his colleagues found calcitriol inhibits HASM in a dose-dependent manner, with a maximum inhibitory effect of 60 percent ± 3 percent at 100nM.

As part of the University of Pennsylvania's Airway Biology Initiative, the researchers are planning a randomized control trial of calcitriol in patients with severe asthma and expect to have data from the trial in about a year's time.

With its anti-inflammatory qualities and its ability to inhibit smooth muscle proliferation, Dr. Damera said, calcitriol may become an important new therapy, used alone or in combination with already prescribed steroids, for treating steroid-resistant asthma.

Dr. Damera and his colleagues have also conducted experiments to determine the mechanism by which calcitriol retards HASM proliferation. They believe the vitamin works by inhibiting activation of distinct set of proteins responsible for cell-cycle progression.

The investigators have also conducted experiments to determine whether calcitriol, which is currently used to treat psoriasis, could be an effective therapy for COPD. Although preliminary, their data shows that calcitriol appears to reduce pro-inflammatory cytokine secretions in COPD. As with asthma, the researchers believe, calcitriol may also have the added benefit of slowing, if not stopping, the progression of airway remodeling. Others believe calcitriol may also have the potential to inhibit development and growth of several types of cancer.

In October of 2006, I went into the hospital with AFR and was diagnosed with very severe Emphysema. They sent me home and told my daughter “if” I was to live through this, the hospital would be a revolving door for the next 6 months and maybe a year (at the most), if I was lucky and lived that long.

My GP sent me to rehab in Feb. of 2007, which helped me in regaining my strength. I went to my pulmonary doctor in June of 2007 and he said he couldn’t do anything more for me. He said that I should be checked out for an LVRS or a transplant. I said at that time no to a transplant. He said that I should be checked out for the exercise tolerance over at the U of W along with a perfusion scan and another PFT, CT scan and ABG. The perfusion scan, tells them basically where to cut.

For the exercise test they put you on a bike with their oxygen and you peddle away as each 30 seconds, in some others 60 seconds they make it a little harder. I rode for 15 minutes and quit because I noticed my heart rate at 160. That scared me so I told the lady I couldn’t go anymore. She asked why I quit and I said my legs got tired and my heart was too fast. That is also when they do the stress test on the heart, if I had not had one done before, getting 2 for one lol. A woman has to do 25 watts and a man I think 40, and I did 45 so was considered high exercise tolerance.

Next day meeting with the surgeon, and the co-ordinator. The surgeon said I would be a good candidate but I also was in class 2, Upper Lobe disease, but high exercise capacity, whereas the best is Upper Lobe, low exercise capacity. When all was done I told him I had to go home and think about it. So next day I drove back to Spokane and give it some thought for a couple of weeks. I didn’t really feel I was too badly off in comparison to some I had seen so I’m thinking why? I think anything like this is a big decision and should not be made on a whim. You have to look at your life, not just now, but what it can or can’t be when all is done. This was about the middle of November. I decided to go ahead and have the surgery. I called them and they set it up for Dec. 13th.

I checked into the hospital at 6:30 a.m. on Dec 13th, 07. They got right to me and asked me to change into their lovely gown and asked all their normal questions. The anesthesia team came in to put in the epidural. Others came in to take blood etc. I was taken down to surgery area about 8:00 a.m. They told my daughter and son that the surgery would be about 1 1/2 hours and the doctor would be down to talk with them as soon as he was done. About 9:20 the doctor was down talking to my daughter & son and told them everything went well. He said it was one of the easiest ones he had done. I didn’t show any signs of air leaks and had already woken up and was being taken to recovery. After recovery for an hour or so they would transfer me to ICU for a few hours then to my room. ICU was so full that I had to spend the day in recovery until later in the evening and then they transferred me into ICU.

After having a few pints of blood (that I know of) they ordered more blood and told me then that I had a bleed and would have to go back into surgery. My family was unaware that I was bleeding and even I didn’t know until I was in ICU. Finally they got a hold of my family and told them that the chance of me making it was not good, as bleeds are very hard to find. It was a bit scared yet pretty calm and really still tired. I felt I could breathe easier as soon as I woke up although I did get a little short of breath (SOB) it was different, it was just easier to breath.

Okay so a second surgery was needed. The doctor who did the second surgery came in to tell me what was happening; I had people all around me. There was the resident doctor there who I seen when I went in for my pre surgery talk and he also was my doctor taking care of things while I was in the hospital. He said there are a lot of prayers being said for you, or something to that affect, then he said you will be fine you will come right through this and will come right back to this room in no time. I can tell you that I truly feel God spoke through that man to let me know that everything was ok.
Chances of a bleed are not great, but happens sometimes. It is one of the possibilities in any surgery and they can be very hard to find. So to me even though he was on the surgical team, God used him to let me know not to fear, and a calm came over me that I cannot explain, it was like his voice and words were of God and there was to be no doubt that I would be ok. I thank God for answering those prayers, so when I say God brought me through it I MEAN God did actually guide everything that was done and I believe He led each of the doctors to do as they did As they opened me up and the bleed was right there, they didn’t have to search for it or anything, God exposed it. Thank you Jesus for my life, this day, this breath, the earth and all therein, I give you praise. I know some may not appreciate this portion as you each of us have our own believe system, but I will not leave this portion out as I do give the credit to God., It is always nice to have him on your side.

They took me back for surgery again about 4:30 or 5:00 a.m. on Friday morning and they quickly found the bleed. I went back to ICU after the second surgery for a few hours and then off to my own room. Friday afternoon they got me out of bed and had me sit in a chair for an hour, then a couple of hours later they had me walking. The surgery was not so bad once I was awake and back in room. I was weaker than normal after having that second surgery I’m sure, but I got along just fine.

The surgery that I had is called a sternotomy. They cut through the breastbone, which is good as they don’t have to go through all those big muscles in your chest. To me it would make sense the pain, wouldn’t be quite as severe. You have pain don’t get me wrong but they give you meds to control it, you just have to use it and was a little hard headed in that department I didn’t want to push the button and they cannot do it, but I was stupid. It is best to keep the pain under control. I am funny about medicine I just don’t like it, although I knew in my mind it was a temporary med I didn’t want anything to do with it. They did finally talk me into pushing the button, just not as often as they would like. Every time someone came in they gave me the button and said push it. The pain is not a really bad pain it actually to me was a burn when I inhaled or tried to take a deep breath, and my back would hurt from laying on it I think. What pain I had was well worth the results. Every day I had chest x-rays to see how the lungs were moving up to where they belong and watch the chest tubes and just how thing were over all. I thought maybe I would light up in the dark by the time I got home, but nobody said anything so I guess I didn’t!!

I had 4 chest tubes in, 2 on each side. Air leaks are the most common thing and I didn’t get one until just before going home so had to leave in 1 tube and return to Seattle 1 week later to have it removed. I think the tubes cause more pain than any of it and when they pull them the pain is not too bad. I would liken this pain to gas pains. Your pain on recovery is gone in most 2 to 3 weeks, and continually lessens in that time, so for the 1st week being the worst.

I went home on the morning of Dec. 18th 07, to my son’s with all doctors saying I looked great and was doing way to well to be in the hospital. I went home to Spokane on the morning of the 19th. My son drove me home and it really was not a bad trip at all. I got in and out of his truck just fine. My legs apparently were still there!

I returned to rehab at 9 weeks. When I finished rehab I walked 1987 ft in a 6 minute walk test, double from when I started. It has been just 4 months and I am doing things I never thought I would ever do again, yes even things we don’t like to do like some of the cleaning etc. I don’t know if I have gained any lung function, but am thankful to God for whatever it is I have. I know I do things I could not do before. I don’t use oxygen except to sleep and exercise, which in itself is a blessing.

This surgery has given me my life back, it has allowed me to do things I thought I would never do again. I walk daily, do all my own housework, camp, do the jet ski’s fun, I still have problems walking inclines, but can do it. Slow gets the prize. I did get off 02 except for when I exercise or sleep, to me that is a blessing in and of itself. Am I healed, NO, I am still living with diseased lungs, but I have some normalcy back in my life and I will take it for as long as God allows it. I didn’t gain the lung function many do, and I suppose that had something to do with the second surgery, however my quality of life has changed so dramatically I would go through it all again, even knowing I had to have the second surgery.

I would say to anyone who qualifies for it, go for it!!!! It literally gives you a life back! I would do it again in a heartbeat.
People with lung problems should not approach campfires, fireplaces and fireworks because open fires can worsen their condition, Hanover-based Lung Foundation advises. It notes that wood burning produced smoke - the components of which not only increased the risk of lung cancer, but were also conducive to inflammations in patients with asthma and COPD, which could exacerbate the disorders.

Healthy people too should be careful around open fires, warned Professor Harald Morr, chairman of the Foundations board and director of the Waldorf Elgershausen Pneumological Clinic in the Garman town of Greifenstein. He said that open fires also produce carbon monoxide, an odourless, toxic gas that blocks the blood pigment hemoglobin, which is responsible for carrying oxygen from the lungs to the organs. The gas causes fatigue, headaches, dizziness, a dazed feeling, a racing pulse and impaired vision. A few lungfuls of it can be fatal.

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With treatment, self-care, and exercise people with COPD can learn ways to breath better and live well. With the help of concerned caregivers they can enjoy an even greater quality of life.

**Staying Connected**

Managing chronic lung disease takes daily effort. Expect to have ups and downs as you support each other. Remember neither one of you is alone. Communicate openly with each other and with family and friends. Staying connected can help everyone involved maintain a positive outlook.

**Providing Emotional Support**

There may be times when your partner has trouble coping with his or her condition. Keep these common challenges in mind when offering support:

- Abilities may change over time. A person with chronic lung disease may have changes in energy that affect ability to work, perform daily tasks, or even have sex. These issues are sensitive and complex. Make time to discuss them or seek support if needed.

- Stress can be a problem. You may each have concerns about how to manage healthcare decisions or plan for the future. Reassure each other and work together to address any concerns.

- Emotions may shift. People with chronic disease often feel guilty about relying on others for help. Sometimes they are frustrated at the loss of independence. Acknowledge these feelings as normal. Your partner will likely feel better as symptoms improve. However, if he or she seems unhappy most of the time this may be a sign of depression. Treatment can help.

**Common Signs of Depression**

Depression is a serious mood disorder that can affect patients and caregivers. The good news is that it can be treated. Contact your doctor if either of you shows signs of depression. These can include:

- Feeling down most of the time
- Losing pleasure in things that used to bring enjoyment.
- Feeling restless or irritable
- Feeling guilty or helpless
- Having trouble sleeping
- Having an increase or decrease in appetite or weight
- Having trouble focusing, remembering and making decisions
- Having thoughts of death or suicide

**Communicating with each other**

Try the following when the two of you talk:

- Choose a time when you are both calm and can discuss things fully
- Be honest. Tell each other if you are upset or disagree with a behaviour. It may be hard to hear what someone has to say, but you each have a right to speak.
- Allow each other to finish speaking. Listen attentively and don’t interrupt.
- Be aware of body language and facial expressions. For instance, making eye contact can show interest in what is being said

**Communicating with others**

Here are tips for talking with family and friends:

- Decide ahead of time how much you both want to share. You may feel that certain matters should remain private.
- Understand that family and friends may have a hard time expressing their feelings. Expect them to have different reactions. Some will have questions. Others may withdraw. Let them know it is okay if they don’t know what to say
- Update family and friends about how you are both coping. Spend time with them and let them know how to help.
## Just For Fun!

It’s MUCH easier with carry on, DON’T you think?

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## Healthy Eating

### Crusty Fish With Tangy Sauce

**Tangy Sauce**

- Canned Apricots, drained: 14 oz.
- Dijon mustard: 2 tsp.
- Brown sugar, packed: 2 tbsp.
- Lime juice, fresh or bottled: 2 tbsp.
- Salt: 1/8 tsp.
- Dried crushed chillies: 1/8 tsp.
- Finely chopped almonds: 2 tbsp.
- Fine coconut: 1 tbsp.
- Pepper, sprinkle
- Egg white [large] room temp.: 1
- Cod, snapper, roughy, or halibutr fillets: 4x5ozs.

**Tangy Sauce:** Measure 6 sauce ingredients into a blender or food processor. Process until pureed. Pour into small saucepan. Bring to boil. Reduce heat and simmer, uncovered, for 3 to 4 minutes. Keep warm. Makes 1 cup sauce.

Combine almonds, coconut, salt and pepper in small bowl. In separate bowl beat egg white until stiff. Fold almond mixture into egg white.

Pat surface of each fish fillet with paper towel to make it as dry as possible. Divide egg white mixture evenly on surface of each fillet. Lay fillets on lightly greased baking dish. Bake on bottom rack [400 F] oven for 5 minutes. Move to centre rack. Broil for 3 minutes or until fish flakes easily and topping is golden and crisp.

Drizzle warm sauce over fillets. Serves 4.

1 serving with 1/4 cup sauce: 210 calories; 28 g Protein; 4.3 g Total Fat [1.2 g Sat., 60.2 mg Cholesterol]; 393 mg Sodium; 2 g Dietary Fiber
**COPD Friendly Cleaning Tips**

**Stove Top Cleaning .....**

Most stove tops can be washed down with hot water and regular dish detergent. However, for those hard to remove spills, both on the range surface and the chrome and stainless steel parts, use a little baking soda and water. Simply apply a smooth paste to the area, leave for 5 to 10 minutes and then wipe off with a soft cloth. Rinse with white vinegar and water solution.

**Counter Cleaner .....**

Fill a spray bottle with equal parts water, white vinegar and add a teaspoon of salt. Shake well to dissolve the salt. You can also substitute lemon juice for the vinegar. A paste of baking soda and water [or lemon juice] works well too. Rub, leave for 15 minutes, then rinse off.

**Hot Tips for Oven Spills .....**

When oven spills occur, sprinkle with a mixture of one part cinnamon and 6 parts table salt. When the oven is cool, wipe up the mixture. Not only will it absorb the spill but it’ll help remove the burnt food odour. To dislodge baked on spills, apply a paste of baking soda [or borax] and water. Sometimes a little elbow grease is necessary.

**Toilet Ring Tricks .....**

Remove stubborn toilet rings with a paste of lemon juice and borax. Allow to set before scrubbing. A good maintenance cleaner for your toilet bowl is ordinary baking soda. It also helps with those toilet odours. Another environmentally-friendly toilet cleaner is the seldom-used denture tablet. Depending on how bad the stain is, simply drop 2 or 3 tablets in the bowl water. Let stand for 2 to 3 hours and brush well and flush.

**Carpet Freshener .....**

An easy way to brighten and spruce up that dull carpet, is to sprinkle a thin layer of borax over it. Let it sit overnight, then vacuum it well. Another version is to add twice the amount of corn meal or cornstarch to the borax and treat the carpet the same as above.

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**Reader’s Corner suggestions from “Bear”**

First is entitled COPD for Dummies. Yes it is a dummy book but crammed with over 300 pages of useful information about COPD. Available in some libraries and at most book stores or online sellers. Published by Wiley Publishing Inc ISBN # 978-0-470-24757-0

Written by a doctor Kevin Felner by journalist Meg Schneider a good guide just the same as most dummy books on computer stuff.

Second is Living a Healthy Life with Chronic Conditions. It focuses on self management of Heart Disease, Arthritis, Diabetes, Asthma, Bronchitis, Emphysema and other problems. This book is also available in libraries, most books stores and online sellers too. Published by Bull Publishing in Boulder Colorado specify the Canadian Edition if you are Canadian. The ISBN # is 0-923521-53-4 again over 300 pages of information and if you are like me you have more health issues than just your lungs. This book covers all the bases.

A joint effort by several doctors and nurses.

*Editor’s Note: “Bear” Barry Brooks is a Board Member of COPD Canada Patient Network and “ Patient Advocate Extraordinaire”, always looking for ways to help COPDers. Thanks Bear!*

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Dear Readers,
We are still hoping for suggestions from you for up-coming issues. Not too many so far!! We also encourage you to submit a “My Story” article. It is always of interest to others where we have “come from” and to share experiences which may help and encourage those who live with COPD. If you have other subjects you would like to see covered, please let me know.

Have a great Summer everyone!!

This is YOUR newsletter.
email all suggestions or comments to: gwen@copdcanada.ca

Sincerely,

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Don’t you just feel this way sometimes????

Me Too