NEWSLETTER OF THE NEWFOUNDLAND AND LABRADOR BRANCH CSHP

BRANCH OUT

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MYTH BUSTERS: TRUTH OR RUMOR

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BASED ON INFORMATION PRESENTED BY CATHY SOCHASKY, BSC PHARM, FRSHP AT THE CSHP SUMMER EDUCATIONAL SESSIONS AUGUST 7-10, 2010 IN HALIFAX, NS

This article will look at two recent topics that require some myth busting to determine if they are truth or rumor.

Myth #1: Proton Pump Inhibitors (PPIs) cause bone fractures.

PPIs are some of the most widely prescribed medications and are the drug class of choice for conditions such as NSAID related complications and GERD treatment. They have been/are perceived as generally safe products but the FDA released an alert May 25, 2010 concerning long-term use stating "possible increased risk of fractures of the hip, wrist, and spine with the use of proton pump inhibitors".

The statement released by the FDA was based on 8 epidemiological studies. Of these, 7 studies showed increased risk of fractures, 1 showed no risk of fractures, 2 showed increased risk with higher number of doses and 2 showed increased risk with longer duration. The limitations of these studies include: 1) were retrospective and unrecognized differences between cases and controls may have skewed results, 2) may have had selection bias from using a database based on hospital discharge diagnosis, 3) the hospital database only captured prescription drugs and didn't measure compliance, use of OTC or other drugs or lifestyle behaviors that could increase risk of fracture or effect results, 4) all fractures may not have been identified due to lack of physician interaction (including vertebral fractures).
The strengths of these studies were: 1) well designed and analyzed, 2) considered effects of dose and duration, 3) reduced bias by using appropriate statistical methods. *(continued on page 3)*

Inside this issue:

AWARDS COMMITTEE AND TRAVEL GRANT UPDATE

Winner of the Apotex/CSHP-NL Branch Travel Grant to PPC
Congratulations to Dorothy Ainsworth from Central Health. She was the winner of the Apotex/CSHP-NL Branch Travel Grant to PPC in January 2011.

PPC 2011 Train the Trainer Research Workshop

Dr. Jason Kielly from Memorial University's School of Pharmacy has just attended the train the trainer research workshop held during PPC in January 2011. Look forward to the upcoming NL branch research workshop from Dr. Kielly; date and location to be announced.

Upcoming Awards

Alfred G. Dawe Distinguished Service Award and **Excellence in Clinical Practice Award**

Keep a look out for requests for nominations for the Alfred G. Dawe Distinguished Service Award and the Excellence in Clinical Practice Award that will be going out shortly. We have some wonderful clinicians who are doing amazing work – Consider recognizing their accomplishments by nominating a deserving colleague!

CSHP Clinical Excellence Award
The CSHP Clinical Excellence Award is supported by Sandoz Canada and is given annually to a CSHP student member who demonstrates clinical excellence during his/ her final structured practice experience.

MYTH BUSTERS: TRUTH OR RUMOR (CON'T)

Another 6 year multicenter prospective study also looked at PPI use and fractures (Calcif Tissue Int 2009 – Roux et al). 1211 postmenopausal women used omeprazole and were analyzed for vertebral fracture risk. There was a baseline omeprazole use of 5%. The results were adjusted for age and controlled for confounding risk factors using multivariate analysis, e.g. Low BMD and prevalent fractures. This study found that omeprazole appeared to be an independent predictor of vertebral fractures. Of course, like many other studies, there were limitations: 1) only included post-menopausal women, 2) the prevalence was low for omeprazole use and the fracture rate was low, 3) the duration and dose of omeprazole and previous use were not accounted for, 4) the relationship between PPI use and hip fracture were not looked at.

So why would using a PPI increase you chance of fractures? The magnitude of this effect is not certain but it is based on PPI's acid inhibition. The increased pH decreases calcium absorption and bone mineral metabolism. Is this malabsorption severe enough to affect bone remodeling? Further studies are needed to determine the specific effect that the increased pH has on BMD or skeletal weakening over time and to show a consistent correlation between acid inhibition, calcium absorption and effects on BMD.

Should these finding change our practice? What should we recommend? Again, further investigation is needed but it should be in the back of our minds, especially in the elderly and those patients who are at increased risk for fractures. Continue to use a PPI where indicated, e.g. prevention of NSAID complications, ulcer or GERD treatment, and where the patient remains symptomatic despite use of less potent drugs (H2 antagonists). Where possible, limit PPI use to short term (14 days for H. Pylori or 4 weeks for duodenal ulcer). For those who require long-term PPI use, daily Calcium and Vitamin D therapy may be considered. Calcium citrate may be a better option than calcium carbonate. Bone protection in the form of a bisphosphonate or BMD monitoring for chronic PPI users (where not required) is not recommended at this time. More research is needed. At this point, Health Canada is not planning on issuing a similar warning as the FDA. They are monitoring the issue and will re-evaluate the risk as new information evolves. It should also be noted that PPIs are only available as prescription in Canada, unlike the United States.

Myth #2: The combination of Glucosamine plus Chondroitin is more effective than using either one alone for the treatment of Osteoarthritis (OA).

OA is the most common form of arthritis and the number of cases is expected to double in the next 20 years. Therapy is limited for this condition and only helps with symptom relief. Regular NSAID use is also related to an increased risk of gastric problems. Lets look at glucosamine and chondroitin individually.

Glucosamine is the most studied between the two at doses of 500mg TID. It is available in two forms, HCl and Sulfate, and there has been controversy over which salt is most affective. There have been more than 20 randomized controlled trials of greater than 2500 patients. Long-term trials done in 2001 and 2002 demonstrated decreased progression of joint changes in knee OA and controlled symptoms (up to 3 years). Other trials have had conflicting results and inconsistent efficacy. A 2005 Cochrane review concluded that the high quality evidence (8/20 studies) failed to show improvement in pain or function. *(continued on page 5)*

MEMBERSHIP COMMITTEE

2010 CSHP MEMBERSHIP BOOK DRIVE

The Membership Committee, CSHP NL Branch, is pleased to announce that we offered all members who renewed their membership on or before July 31st, 2010 a complimentary copy of either of the following:

Sanford Guide to Antimicrobial Therapy (Pocket Edition)
Sanford Guide to Antimicrobial Therapy (PDA Install CD)
Sanford Guide to HIV/AIDS Therapy (Pocket Edition)

All membership forms must be received at the CSHP National office on or before July 31st to qualify for early bird membership benefits. To obtain information on any of these products, including PDA software requirements, please visit www.sanfordguide.com

In addition to the early bird book drive, ALL members who renew or join CSHP at any time throughout the year will also receive a complimentary 1-year subscription to RxFiles online. RxFiles is a leader in providing health care professionals with easy-to-use and up-to-date drug comparison charts. For information on what RxFiles online can offer you, please visit their website at www.rxfiles.ca

The new membership year runs from July 1st, 2011 to June 30th, 2012. As with other membership years, CSHP is offering a 15-month (April to June) extended membership for the price of 12 months; there is no time like the present to renew your membership and support your local CSHP branch. The 2011/12 membership form can be downloaded from www.cshp.ca/membership.

CSHP values every member of the society and look forward to your continued support in the upcoming year. We would like to thank AstraZeneca and Sandoz for funding this year's membership book drive. If you have any questions or comments, please forward them onto Membership Committee, CSHP NL Branch: Tiffany Fahey at tiffanyannfahey@hotmail.com

CSHP NL Branch would like to hear from you. You will soon be receiving a survey regarding membership benefits. We want to maximize your experience as a CSHP member and we appreciate your feedback.

MYTH BUSTERS: TRUTH OR RUMOR

(CON'T)

It has been suggested that NSAIDs may have synergistic effects on inflammation and allow decreased NSAID dose when given with glucosamine.

Adverse effects are uncommon with glucosamine with the main complaint being GI symptoms. There have been concern over whether people with a seafood allergy should take it but Glucosamine is taken from the shell, which does not have the antigen protein that would cause an allergic reaction. There is also no clinical evidence to suggest it has antiplatelet activity or decreases the effectiveness of diabetes medications, although for patients who have diabetes it can still be recommended to check their blood glucose while taking glucosamine.

In 2007 there was a meta-analysis done on chondroitin but there were a limited number of trials and they showed inconsistent effectiveness. Pooling all studies, there appeared to be a significant decrease in OA pain and joint space. The largest, high quality trials did not show a decrease in OA pain.

Like glucosamine, side effects of chondroitin are uncommon. It has a similar structure as heparin so may alter anticoagulant activity. It has been noted that it may cause spread or recurrence of prostate cancer but there has been no evidence with supplements. Transmission of BSE or Mad Cow Disease has also been suggested but chondroitin is derived from bovine trachea tissue, which does not contain the disease.

The Glucosamine/Chondroitin Intervention trial (GAIT) was NIH funded and had 1600 OA of the knee patients. It was a 6 month, 5 arm randomized trial containing glucosamine + condroitin, glucosamine alone, chontroitin alone, celecoxib or placebo. The products were specially formulated for the trial. The primary outcome was 20% improvement in pain for mild and moderately severe knee OA. The results showed that both products individually or in combination were no better than placebo for mild pain but the combination appeared to be better than placebo for moderate to severe pain. Limitations in this study included: 1) high placebo response rate (60%), 2) high attrition rate, 3) relatively mild degree of OA pain, 4) less sophisticated data analysis methods used, 5) used glucosamine HCl (vs. sulfate).

A GAIT follow-up study was completed in 2008 (Arthritis Rheum 2008). It was a prospective, double blind, placebo controlled trial using 572 patients. The primary outcome was OA progression and there were 12 and 24 month measurements. Glucosamine 500mg TID and chondroitin 400mg TID were used. This study found no statistically significant or clinical structure changes. Joint space width loss was similar with combination therapy and placebo but the loss was greater than with each product used alone. This suggests that there may be altered absorption with combination use. The limitation of the follow-up included, 1) small sample size, 2) short duration, 3) need for an improved method of measurement.

What should we recommend to our patients who are interested in trying one or both of these products to treat their OA? Glucosamine sulfate is the most studied at 500mg TID. One could consider this for a patient with knee OA who is not responsive to acetaminophen and/or can't tolerate NSAIDs for at least 3 months. To date, the good quality studies have not shown any benefit for chondroitin use alone. Further studies are needed. Glucosamine plus chondroitin (400 mg TID) requires further studies as well, and may be less effective that glucosamine alone. The combination may be considered for those who do not respond to glucosamine alone or in those who have had moderate to severe knee OA for at least 3 months.

Sarah would like to thank CSHP-NL Branch and Mylan for the opportunity to attend the CSHP Summer Educational Sessions (SES) in Halifax, NS. She learned a lot from the educational sessions and had a great time visiting Halifax.

UPCOMING EVENTS

- CSHP NL Professional Development Day
  Fall 2011
  Details Coming Soon!

- CSHP Summer Educational Session (SES)
  Sheraton Wall Centre
  Vancouver, British Columbia
  August 6-9, 2011

- PANL 2011 Annual Pharmacists Conference
  Corner Brook
  September 16-18, 2011

- CSHP NL Branch Annual General Meeting
  During the PANL 2011 Conference
  Corner Brook

THANK-YOU TO OUR SPONSORS!

- Sandoz
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Don't forget to renew your CSHP membership!

The 2011/12 membership form can be downloaded from www.cshp.ca/membership

NL BRANCH EXECUTIVE 2010-2011

Ashley Layden – President
Jason Kielly – President-Elect
Tiffany Fahey – National Delegate
Justin Peddle – Treasurer
Sarah Fennell – Secretary
Lisa Bishop – Senior Advisor
Debbie Kelly – Advocacy Representative
Alyssa Hewitt—Student Representative

SUMMER EDUCATIONAL SESSIONS 2014
ST. JOHNS, NL

INTRODUCING YOUR HOST COMMITTEE

Each summer, in partnership with a provincial branch, CSHP hosts the Annual General Meeting and Summer Educational Sessions (SES). In 2014, we are excited to announce that SES will be held at the Delta Hotel in St. John's, NL. Your host committee consists of:

Tiffany Fahey (co-chair)
Justin Peddle (co-chair)
Amy Conway
Sarah Fennell
Jason Kielly
Ashley Layden
Sarah Strong
Megan Wall
Elizabeth Woodford

Are you interested in helping with our newsletter?

The position of newsletter editor is vacant!! If you would like to take over this position, please contact a member of the Branch Executive.

CSHP 2015 Update

Below is a recent poster released by CSHP national providing an update on the progress across Canada in achieving 2015 objectives.

CSHP 2015

Targeting Excellence in Pharmacy Practice

BASELINE DATA: The Highs and The Lows

CSHP 2015 is a practice excellence initiative for pharmacists in hospitals and related healthcare settings. Its overall aim is to enhance the effective, scientific and safe use of medications, contributing to the health of Canadians. This will be accomplished by the achievement of six goals and 36 underlying measureable objectives.

CSHP 2015 Goals

1. Increase the extent to which pharmacists help individual hospital inpatients achieve the best use of medications.
2. Increase the extent to which pharmacists help individual non-hospitalized patients achieve the best use of medications.
3. Increase the extent to which hospital and related healthcare setting pharmacists actively apply evidence-based methods to the improvement of medication therapy.
4. Increase the extent to which pharmacy departments in hospitals and related healthcare settings have a significant role in improving the safety of medication use.
5. Increase the extent to which hospitals and related healthcare settings apply technology effectively to improve the safety of medication use.
6. Increase the extent to which pharmacy departments in hospitals and related healthcare settings engage in public health initiatives on behalf of their communities.

The level of achievement of the 36 CSHP 2015 objectives was assessed in the Hospital Pharmacy in Canada 2007/2008 Survey. The results, excerpts of which are presented here, provide baseline data which will be invaluable to CSHP and its Branches, individual pharmacists and institutions, for monitoring progress.

This poster presents selected examples of the baseline date, collected from 166 hospital respondents, from all provinces.

The Highs

The survey results illustrated that achievement of the following three CSHP 2015 objectives were closest to, or exceeded target:

Objective 5.5

In 75% of hospitals and related healthcare settings, pharmacists will use medication-relevant portions of patients' electronic health records (EHR) for managing patients' medication therapy.

Note: 47 of the 166 respondents had EHR and therefore could respond to this particular question.

Baseline result: 81% of responding hospitals meet this target.

Objective 3.2

In 100% of hospitals and related healthcare settings, pharmacists will be actively involved in the development and implementation of evidence-based drug therapy protocols and/or order sets.

Baseline result: 91% of responding hospitals meet this target.

Objective 4.7

75% of pharmacies in hospitals utilize a unit-dose system for drug distribution for 90% or more of their total beds.

Baseline result: 62% of responding hospitals meet this target.

Percentage of hospitals reaching target by region

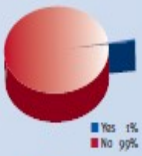
The Lows

The survey results illustrated that achievement towards target was lowest for the following three CSHP 2015 objectives:

Objective 5.2

75% of hospitals will use machine-readable coding to verify all medications before administration to a patient.

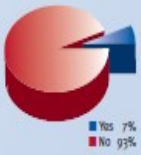
Baseline result: : 1% of responding hospitals meet this target.



Objective 5.3

For routine medication prescribing for inpatients, 75% of hospitals will use computerized prescriber order entry systems that include clinical decision support.

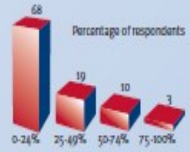
Baseline result: 7% of responding hospitals meet this target.



Objective 1.4

75% of hospital inpatients discharged with complex and high-risk medication regimens will receive medication counseling managed by a pharmacist.

Baseline result: 3% of responding hospitals meet this target.



Percentage of patients counselled on discharge

A full listing of CSHP 2015 goals and objectives is available at the CSHP 2015 webpage, www.cshp.ca/programs/cshp2015. For the complete Hospital Pharmacy in Canada 2007/2008 report, please visit www.lillyhospitalsurvey.ca.

Acknowledgements

Jessica Fitzgerald, poster creator, CSHP Pharmacy Intern, summer 2009
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Neil Mackinnon, CSHP President-Elect and Vision Liaison
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Barbara Wells, former CSHP 2015 Project Coordinator, 2005-2010

Canadian Society of Hospital Pharmacists
Société canadienne des pharmaciens d'hôpitaux

www.cshp.ca/programs/cshp2015
www.lillyhospitalsurvey.ca/hpc2/content/2008_report/cshp_2015.pdf

MEMBER PROFILE—ELIZABETH WOODFORD

What is your name?

Elizabeth Woodford

Where do you work?

Drug Information Centre, Memorial University School of Pharmacy

Tell us about your family – wife, children, pets etc?

I live in St. John's with my fiancé Russell White, and our cat, Houdini. Russell is a community pharmacist with Zellers.

Where did you go to pharmacy school & when did you graduate?

I graduated from the Memorial University School of Pharmacy in 2007.

Why did you decide to become a pharmacist?

I became a pharmacist because I had strong interests in the health sciences, and a strong desire to take part in patient care. I initially decided to go into pharmacy school because of a desire to become a community pharmacist. I always had a great respect for the role of the pharmacist, as a trusted front-line accessible member of the healthcare team.

What changes have you seen in pharmacy since you started your career?

Shortly after I graduated from pharmacy school, I accepted a position with Eastern Health. At that time, pharmacists often spent their afternoons filling or checking patient medication carts. Now they have a tech-check-tech system in place which frees up the pharmacist to take part in clinical, patient-focused activities. Clinical pharmacy services within the hospital here have expanded to include more pharmacists in interdisciplinary teams.

What does your daily practice involve?

My daily practice includes addressing drug information requests from health-care professionals in community, hospital, and academia settings. I provide an evidence-based service which allows professionals to offer better care to their patients. Another aspect of my job at the Drug Information Centre here at the school includes delivering lectures and labs to the students regarding drug information resources.

When I'm not in the Drug Information Centre, I assist in skills labs here at the school. I get to assist in such a variety of activities. Sometimes I get to play the role of a standardized patient, physician, or nurse to interact with the students in an OSCE setting. Other times I'm supervising or guiding discussions regarding patient cases pertinent to the lab. It's exciting to have a job that's always changing, I never get bored!

What are your interests outside of pharmacy?

I love hiking in the spring and summer months and snowshoeing in the winter. Russell and I enjoy cooking and baking together and going to the movies. Other than that, I enjoy spending time with family and friends.

We would love to learn more about each other and all the good things we're doing. Please take a few moments to complete the following profile about yourself and submit it to any member of the executive or by mail to CSHP Newfoundland and Labrador Branch, c/o PANL, 85 Thorburn Road, St. John's, NL, A1B 3M2. An electronic copy is available by emailing ashlayden@hotmail.com.

We'd like to publish these profiles in the upcoming editions of the Branch Out. Keep a look out for these profiles to learn a bit more about what your colleagues are doing.

Question	Response
What is your name (include maiden name)?	
Where do you work?	
Tell us about your family – wife, children, pets etc?	
Where did you go to pharmacy school & when did you graduate?	
Why did you decide to become a pharmacist?	
Why did you choose hospital pharmacy and what do you like most about being a pharmacist?	
What changes have you seen in pharmacy since you started your career?	
What tips do you have in helping others develop their role as a pharmacist?	
Do you have a clinical practice site, and if so, what is your role?	
What does your daily practice involve?	
What are your interests outside of pharmacy?	

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c/o PANL
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St. John's, NL

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www.cshp-nl.com

PEOPLE

Congratulations to Rebecca Tobin on the birth of her baby girl, Maggie Elizabeth!
Congratulations to Lisa Bishop on the birth of her baby girl, Sarah Jane!
Congratulations to Jody Pomeroy on getting married this passed October!
Congratulations to Elizabeth Woodford on her engagement to Russell White!

Don't forget to send in any updates on members like awards, births, etc!

Send to: ashlayden@hotmail.com

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