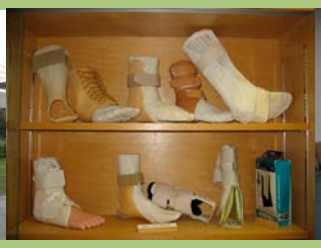
ACE Clinical Link Newsletter


Vancouver Coastal Health
Promoting wellness. Ensuring care.

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A Newsletter for health professionals working with people with arthritis **July 2013**

Editor's Message

This issue of the ACE Clinical Link Newsletter incorporates two new changes. Rather than simply listing study citations, as I normally do, I have written short summaries of each cited reference. I also continue to find ***The Rheumatologist*** an excellent source of relevant and thought-provoking articles, but to make this information more relevant to what is happening in British Columbia, whenever possible I have included BC-relevant information or resources. I would love to hear what you think of these changes or if you have other ideas for improving the newsletter.

Paul Adam, Rheumatology Liaison & Outreach Services Coordinator Paul.Adam@vch.ca

A Warm Welcome to our Newest ACE Members

The most recent Assessment & Management of Rheumatic Diseases workshop wrapped up in Vancouver on April. Following their completion of the workshop, I would like to warmly welcome the following individuals to the ACE program:

Nursing
Melanie Laktin, Private Rheumatology Practice, Kamloops, BC
Sandie Ram, Kelowna, BC
Helen Eng, VIHA, Nanaimo, BC
Navin Sheriff, Nanaimo Health Unit, Nanaimo, BC
Joel Shaw, Penticton Infusion Clinic, Penticton, BC
Sandra Wardley, Penticton, BC
Lian McKenzie, OASIS, Richmond , BC
Vanessa Barbosa, Arthritis Research Centre of Canada, Richmond, BC
Anita Chakravorty, Vancouver, BC
Ginny Scantland, Mary Pack Arthritis Program, Vancouver, BC
Rosemary Ng, GF Strong Rehab Centre, Vancouver, BC

Physical Therapy
Marilaine Delisle, Tri-Cities Home Health, Coquitlam, BC
Isobel Freeman, Golden & District Regional Hospital, Golden, BC
Jacqueline Bonn, Community Rehab, Kamloops, BC
Alisa Brownlee, Surgical Optimization Clinic, Kelowna, BC

Denise Uhrynuk, Kootenay Lake Hospital, Nelson, BC
Christine Bialkowski, Kootenay Lake Hospital, Nelson, BC
Fairlie Fraser, Lions Gate Hospital, North Vancouver, BC
Gillian Grant, Prince Rupert Regional Hospital, Prince Rupert, BC
Doris Folkens, Queen Victoria Hospital, Revelstoke, BC
Ji-Seon Kim, VCH Falls Prevention Program, Richmond, BC
Tracy Ross, Vancouver, BC
Karen Tsui, Mary Pack Arthritis Program, Vancouver, BC
Airan Felzien, Mary Pack Arthritis Program, Victoria, BC

Occupational Therapy
Marlene Yaqub, Dawson Creek & District Hospital, Dawson Creek, BC
Kathryn Harrington, Home & Community Care, Dawson Creek, BC
Christie Slanina, Kitimat General Hospital & Health Centre, Kitimat, BC
Crystal Woods, Mary Pack Arthritis Program, Penticton, BC
Silan Wong, Prince Rupert Regional Hospital, Prince Rupert, BC
Maureen Opeka, Holy Family Hospital, Vancouver, BC
Aileen Cervantes, VCH, Vancouver, BC
Laureen McClintock, Whitehorse General Hospital, Whitehorse, YK

I know that some of our new members participated in the MPAP Education Day on June 17th. I hope that many of you will also participate in our thrice yearly ACE Clinical Exchange, as well as make use of the patient handouts, treatment approaches, and other resources that are housed on The Arthritis Society website at: http://www.arthritis.ca/Provinces/BC/Resource-Guide/Healthcare-Professionals

MSK Examination Videos

Lori Cyr, our occupational therapy practice leader, came across a set of MSK examination videos that are posted on the McMaster University, Dept. of Medicine website. This 7-video series includes: hip examination, elbow examination, ankle and foot examination, hand and wrist examination, knee examination, shoulder examination and back examination. The instructor in these videos is Dr. Rajendra Carmona, assistant professor in the Division of Rheumatology at McMaster University, as well as being a staff rheumatologist at St. Joseph's Healthcare in Hamilton. These can be found at: http://fhs.mcmaster.ca/medicine/rheumatology/examine-hip.htm#

A second set of MSK examination videos are available on the JointHealth website. This 5-video series includes: hip exam, elbow exam, shoulder exam, knee exam, and a quick joint exam. The joint examinations in these videos are conducted by Dr. John Esdaile, Scientific Director at the Arthritis Research Centre of Canada. These videos can be found at http://jointhealth.org/programs-jhworkshopseries.cfm?id=5

Clinical Question on Hexcelite Supplier Answered

Katie Quirk, an occupational therapist at Burnaby Hospital, emailed this question to us earlier this year:

Question - *"I have run into some trouble recently trying to order more Hexcelite. I would like to start ordering it in the sheet form, but have been unable to find a place that carries it like that. Any suggestions would be appreciated."*
Answer - We've had the same problem and have now found another source for Hexcelite. We now order it

from ERP Tel: 1-800-361-3537, Fax: 1-800-789-8035, Website www.erp.ca
Product #: ERP0798P
Product: X-Lite Splints 45x50cm (10 sheets per pack)
Price: $245.00
The sheets are large so the OT aide cuts the sheets into 3 pieces, i.e., 18x20 inch sheets

What is the Proper Role for Prednisone in Medically Managing Inflammatory Arthritis?

The April 2013 issue of *The Rheumatologist* had an interesting set of three articles exploring the pros and cons of prednisone use. First up, Dr. John Kirwan, Professor of Rheumatic Diseases at the University of Bristol, advocated the use of prednisone as part of a standardized treatment protocol for the medical management of newly diagnosed patients with rheumatoid arthritis. He stated that studies have shown that "glucocorticoids are the strongest disease-modifying agent and can substantially hold back the destructive process of RA." He then pointed to recent systematic reviews that have shown that there have not been serious consequences in the short- or medium-term when glucocorticoids are used in relatively small dosages. Thus, he concluded that glucocorticoids should be part of the combination therapy used to treat newly diagnosed patients with RA.

In the second article, Dr. Theodore Pincus, Clinical Professor of Medicine in the Department of Rheumatology at the New York University School of Medicine, described data from both published studies and the 308 patients with RA treated with prednisone in his own clinic between 1980 and 2004. He noted that since 1995 there have been 11 double-blind RA clinical trials that have provided strong evidence for the efficacy and safety in doses of ≤10 m/day, although doses of 7.5 - 10 mg were associated with such adverse events as bone loss and higher mortality rates. In his own clinic patients, he has found that improvements in clinical status over 12 months for MDHAQ function, pain and RAPID3 scores were similar whether patients were taking prednisone in doses of 5mg/day or ≥5 mg/day. The primary adverse events in patients receiving <5 mg/day were bruising and skin thinning. He also stated that all of his patients on prednisone therapy were offered the opportunity to discontinue their prednisone, and while many did make one or more efforts to do so, most patients decided for long-term prednisone use in doses of 1 - 4 mg/day. The article summarized 5 reasons why prednisone should be used in dosages of 5 mg/day or less and 3 reasons why it should not be used in dosages >5 mg/day. One of his reasons for using ≤5 mg/day are that doses are physiologic rather than pharmacologic and do not lead to suppression of the hypothalamic-pituitary-adrenal (HPA) axis, and therefore discontinuation of prednisone does not lead to to adrenal insufficiency or possible adrenocortical crisis. He concluded that long-term low-dose prednisone, at doses of <5 mg/day, seemed feasible and effective, and that this may include initial doses of 3 mg/day and indefinite continuation.

The last of this series was by Dr. Anthony Russell, Professor of Medicine at the University of Alberta. He made the case that prednisone use is unsafe at any dosage by pointing to evidence that seemed to show that while there are slightly less patients who develop erosions when treated with methotrexate and prednisone (78%), as compared to those only treated with methotrexate (67%), there were no observed difference in median Sharp scores between the two groups at the end of two years. Thus he concluded that benefits are negligible. Conversely, he pointed to research that has shown that osteoporotic fractures can develop within three months of the initiation of prednisone, that hospitalization rates for pneumonia increase with steroid use, and that in patients receiving anti-TNF agents, concomitant steroid use may be a more important risk factor for infections than the biologic drug itself. He also noted increased rates of Herpes zoster infection and tuberculosis in those using steroids, as well as an association in steroid use in RA patients with lower gastrointestinal events and death. He

concluded that these examples of long-term toxicity are not worth the negligble benefits. I'd recommend reading all 3 articles on the website at: http://www.the-rheumatologist.org/details/print/4566911/April_2013.html

Online Orthopaedic Scores

Another resource I was led to by one of my colleagues at Mary Pack is the Orthopaedic Scores that are available on the www.orthoscores.com website. This website is a free information and calculation service that has been designed for use by orthopaedic surgeons, physicians, physical therapists, osteopaths, chiropractors, and patients. The website allows you to print blank copies of each questionnaire, or to complete the questionnaire online and then print the questionnaire with completed answers and a final calculated score. For example, when I tested out the site by completing an online copy of the Oxford Hip Score, I was able to print off a copy of the scale that showed my answers to each question, a final calculated Oxford Hip Score, and information on what that score meant as far as actions I might want to take in relation to non-surgical or surgical management of my hip 'problem'. The website has the following clinician or patient questionnaires by joint or region:

Region	Clinician completed	Patient completed
Hip	Harris Hip Score	- Oxford Hip Score* - HOOS (Hip disability and Osteoarthritis Outcome) - WOMAC Score
Knee (OA)	Knee Society Score (KSS)	- Oxford Knee Score* - KOOS (Knee Injury & Osteoarthritis Outcome) - WOMAC Score - IKDC
Knee (Anterior Cruciate Ligament)	- Modified Cincinatti Rating system - Tegner Lysholm Knee Scoring Scale	- KOOS (Knee Injury & Osteoarthritis Outcome) - Modified Cincinnati Rating system - Tegner Lysholm Knee Scoring Scale
Foot/Ankle	- American Foot & Ankle Score	- Foot & Ankle Disability Index
Shoulder	- Constant Shoulder Score - UCLA Shoulder rating scale	- Oxford Shoulder Score - ASES - DASH (Disabilities of arm, shoulder & hand) Score - Quick - DASH Score
Shoulder (instability)	- Rowe Score for Instability	- Oxford Instability Score - WOSI (Western Ontario Shoulder Instability Index)

Region	Clinician completed	Patient completed
Elbow	- MAYO Elbow Score	- Oxford Elbow Score - DASH (Disabilities of arm, shoulder & hand) Score - Quick - DASH Score
Wrist	- MAYO Wrist Score	- DASH (Disabilities of arm, shoulder & hand) Score - Quick - DASH Score
Hand		- DASH (Disabilities of arm, shoulder & hand) Score - Quick - DASH Score - Michigan Hand Outcomes Questionnaire
Lumbar Spine		- Oswestry Low Back Pain Score - Modified Oswestry Low Back Pain Score - Back Pain Index
Cervical Spine		- Vernon & Mior Cervical Spine Score
Psychological		- DRAM (Distress and Risk Assessment Method)

* The Oxford Hip and Knee Score, licensed scales developed by researchers at Oxford University, have a new scoring system with the score for each question ranging from 0 to 4, with 4 being the best outcome. This method, when summed, produces overall scores running from 0 to 48 with 48 being the best outcome. For a more indepth explanation: http://www.isis-innovation.com/outcomes/news/IsisOutcomesatISPOR2013.html

Walking is Just as Healthy as Running

A study by Drs. Williams and Thompson from the Lawrence Berkeley National Laboratory in California that looked at the exercise and health of 33,060 runners and 15,045 walkers has shown that the health benefits of moderate-intensity running is comparable to vigorous-intensity running, as long as the energy expended by each activity is similar. That is, walkers must cover the same distance as runners in order for each group to enjoy the same health benefits. Specific health benefits assessed in the study and associated findings were as follows:

Health Benefit	Running	Walking
First-time Hypertension	4.2% reduced risk	7.2% reduced risk
First-time High Cholesterol	4.3% reduced risk	7.0% reduced risk
First-time Diabetes	12.1% reduced risk	12.3% reduced risk
First-time Heart Disease	4.5% reduced risk	9.3% reduced risk

2013 MPAP Education Day Rocked!

As the coordinator of our Education Day Planning Committee, it may seem biased for me to state that we had an excellent education day on June 17th, but I am basing this on the numbers. Firstly, we had great attendance with 24 ACE members and 76 MPAP staff participating onsite, as well as more than 11 remote site locations. And while we still had a few minor audio and visual problems, especially when Dr. Harris was trying to sign on from Michigan and during his presentation, at least we were able to see and hear him. And while the videoconferencing folks tell me that there still can be glitches when trying to transmit presentations from speakers who are thousands of miles away, the relative success of Dr. Harris' presentation means that we will continue to have at least one presenter who is not local. The value of these videoconference presentations is that it gives us access to experts and topics that we would not otherwise experience, if the expertise is not available locally.

All 5 presentations generally received great ratings from participants, though many found Dr. Harris' talk to be more technical and less focused on arthritis than hoped. Since the presentation, I received an email from Shea Hocaloski indicating that the **Sexual Health Rehabilitation Service** does take referrals for patients from anywhere in British Columbia. Email me at paul.adam@vch.ca if you'd like a copy of the referral form or email Shea directly at shea.hocaloski@vch.ca - service for clients who are unable to travel to this service is provided by telephone or videoconferencing. And she sent a link to the OASIS booklet, "Returning to Sexual Activity Following Joint Replacement Surgery", found at http://vch.eduhealth.ca/PDFs/GA/GA.130.S491.pdf Morag Crocker, an occupational therapist from the OASIS program, stated that they have found that their clients have been more comfortable in using this information in their PreOp classes now that it is in a booklet form and the information on positioning is more discreetly tucked away.

If you did not get a chance to attend this year's Education Day, I should have the presentations by Dr. Younger on **Update on Foot and Ankle Surgery**, Dr. Harris on **Brain Coorelates of Chronic Pain**, and Dr. Turner on **Mindfulness-based Stress Reduction for Pain Management** uploaded to the TAS National website in the next two or three weeks. I will send out an email with directions on how to access these when they're ready for viewing. And although the VCH videoconferencing staff also taped the afternoon sessions, for some reason the audio did not get recorded and so it's only the morning sessions that we'll have uploaded.

Depression in Rheumatoid Arthritis

Another excellent article published in the November 2012 issue of *The Rheumatologist* was by Dr. Perry Nicassio and Ms. Myra Irani on the topic of depression in RA. They state that while rates of depression in the general population are thought to range from 5% to 10%, some studies have shown that the prevalence of depression in RA has been found to be almost three times higher than in the general population. They go on to state that depression is often missed during the rheumatology office visit, partially because some symptoms of depression like poor sleep and fatigue are also common symptoms of patients with uncontrolled RA. Another reason that depression may go undiagnosed is because rheumatologists may not have the time, resources, or training to address mood disturbances. Nicassio and Irani describe the different variations of depression, which is primarily related to the amount of time that symptoms have lasted and symptom severity. In discussing factors related to the onset of depression, they state that such psychological factors as illness beliefs and coping behaviours should be considered as risk factors, not as actual determinants of depression. The take home message they make is that the current understanding of the relationship between RA disease activity and depression implies that treating disease activity may be insufficient for ameliorating depression. If left untreated, depression can have both primary and secondary consequences. Nicassio and Irani point to studies that have shown that depres-

sion in RA has been associated with increased mortality and risk for comorbidities, such as myocardial infarction. Secondary consequences relate to the fact that depression can aggravate RA symptoms like pain, fatigue and disturbed sleep.

Management of depression starts with a diagnosis. The authors note the Patient Health Questionnaire (PHQ-9) as one instrument that has high specificity and sensitivity for detecting depressive disorder. Pfizer makes the PHQ-9 available in 80 languages at http://www.phqscreeners.com/overview.aspx?Screener=01_PHQ-9 Treatment for depression may vary depending on its severity and can range from basic education about depression and treatment for those with mild depression to treatment by psychiatrists, social workers and psychologists.

As an addendum, I'd like to outline a few BC-specific resources:
- Social workers at the Mary Pack Arthritis Centre in Vancouver can provide counselling in-person or at a distance to people with arthritis anywhere in BC. Please contact Greg Taylor @ 604.875.4111 ext. 68812
- The Centre for Applied Research in Mental Health & Addiction (CARMA) has three free, online workbooks: Antidepressant Skills Workbook, Antidepressant Skills at Work, and Dealing with Depression: Antidepressant Skills for Teens available at http://www.comh.ca/antidepressant-skills/adult/ - click on 'other publications' tab
- Bounce Back is a BC-based self-management program that requires a GP referral and includes such resources as an instructional DVD, workbook, and community coaches. The service is available in English, Mandarin and Cantonese. For more information go to http://www.cmha.bc.ca/how-we-can-help/adults/bounceback
- The provincial crisis line can be reached by calling 1-800-SUICIDE (1-800-784-2433)

Supporting Client Self-Management

Building the 5 A's Into Group Education

One of the sessions at the 2012 MPAP Education Day was Dr. McGowan's presentation on The 5 A's Approach to Fostering Client Self-Management. In the year that has elapsed since that time, several of the educators at the Mary Pack Arthritis Program have been involved in a process to find or create tools to support clinicians wanting to incorporate the 5 A's into their group education classes. Tools marked with an asterick can be obtained by contacting paul.adam@vch.ca

5 A's	Tools/Actions
Assess Client's Beliefs, Behaviour and Knowledge	• Become familiar with class participants and their learning needs
Advise: Provide specific information about health risks and benefits of change	• Use Ask-Tell-Ask slides in presentation*
Agree: Collaboratively set goals based on client interest and confidence in their ability to change the behaviour	• My Action Plan*
Assist: Identify personal barriers, strategies, problem-solving techniques, and social/environmental supports	• Health diary to support self-management* • Review problem-solving handout*
Arrange: Specify plan for follow-up	• Community self-management program information such as Active Choices, Bounceback*

Brief Action Planning
As stated on the Centre for Comprehensive Motivational Interventions website, Brief Action Planning (BAP) is a structured approach to conversing with someone considering lifestyle- or health-related changes. The website has useful resoures including a BAP guide, BAP flowchart, and a video demonstration. BAP is normally taught in small group workshops or via a web-based module. More information is available on Brief Action Planning or Motivational Interviewing at: http://www.centrecmi.ca/Centre_for_CMI/Home.html

Best Practice Recommendations for TKR Rehabilitation

An article in the March 2013 issue of *The Rheumatologist* summarized a session held at last year's ACR/ARHP Scientific Meeting that described how one-third of patients who undergo TKR do not experience an improvement in physical function post-surgery. Factors thought to predict a sub-optimal functional outcome are older age, female gender, a BMI >40, poorer quadriceps strength, and poorer preoperative emotional health or physical function. In addition to patient factors, it is also thought that functional outcome may be related to the timing and duration of post-operative rehabilitation. Data has shown that post-op rehabilitation typically lasts 9 - 18 days, but that men and women typically report improvement in physical function at 12 weeks and that these improvements plateau at 4 months. This raises the question as to whether there should be a more standardized approach to rehabilitation in the period from 3 weeks to 4 months. The paper also reported on a systematic review by Dr. Marie Westby, which showed that the quality of evidence is not sufficiently high or consistent enough to suggest that any one rehabilitation approach is any more superior than another. The article also reported on Dr. Westby's consensus approach using an online Delphi survey to develop a more standardized approach to post-surgical care. The best-practice recommendations for TKR rehabilitation that arose from this consensus study were as follows:
1. Postacute rehabilitation should be structured
2. Staged and progressive rehabilitation that includes different exercises in early and late phases of recovery should be used
3. Health professionals should be trained to deliver rehabilitation
4. Standardized, evidence-based training for health care professionals is needed
5. Direct supervision of patients is necessary
6. Timing is important; rehabilitation should start within one week of discharge from acute care
7. There is a need for routine outcome assessment using standardized approaches
8. Short- and long-term follow-up should occur

This article can be found at http://www.the-rheumatologist.org/details/print/4441601/March_2013.html

Two exciting initiatives will occur soon in the world of joint arthroplasty rehabilitation. The revised and updated **Provincial Exercise Booklet for Total Hip Arthroplasty** will soon be in circulation. The collaborative work of a dedicated team of physiotherapists from across the province features new exercises and progressions based on the latest available clinical evidence. Additionally, a research study utilizing content from the newly revised hip exercise booklet will soon be recruiting participation from physiotherapists practicing in British Columbia. The study will seek to evaluate whether a web-based education tool is effective at improving physiotherapist's knowledge and self-efficacy regarding total hip joint arthroplasty rehabilitation. Feel free to contact Susan Ting (Susan.Ting@vch.ca) or Greg Nonnan (Greg.Noonan@vch.ca) for further details regarding either initiative.

What Makes People Susceptible to Rheumatoid Arthritis

Another interesting article, also in the March issue of *The Rheumatologist*, described the role played by different genes, epigenetics and environmental stressors in explaining RA susceptibility. While the presence of certain

genes can play a role in the development of RA, epigenetics, the environment and innate immunity are thought to play a more dominant role. Using smoking as an example, it is known that a person who is a nonsmoker and who does not carry the *HLA-DR* risk gene has a low susceptibility to RA. Nonsmokers who have two copies of this gene have a 4 - 6 fold increase of susceptibility. People who have two copies of the gene and who also smoke have a 40-fold increase in susceptibility. Another factor known to increase RA susceptibility is poor dental hygiene. Two potential outcomes of this increased understanding of the pathogenesis of RA are the development of more effective treatments and/or the ability for rheumatologists to detect and treat RA prior to the onset of visible symptoms. This latter potential outcome is based, amongst other things, on research that has shown that evidence of RA in mice can be detected before signs of inflammation present. This article can be found at http://www.the-rheumatologist.org/details/print/4441601/March_2013.html

CAOT: Supporting Safe Driving of Elderly Adults

CAOT has launched a website to support safe driving for older adults in Canada. The site has resource material for both older adults and their families, as well as health care professionals. This includes a series of brochures entitled, "**Keeping on the go: Driving safely as you age**." These brochures, addressing such topics as planning for driving retirement and safe driving strategies, are available in English, French, Italian, Punjabi and Chinese (simplified and traditional). The health care professional side of the site has information on warning signs, assessment, intervention strategies, and the printable resources described above. Both the patient and professionals resources are available at: http://www.olderdriversafety.ca/

E-health Update: Trends and Future Directions

I have discussed the use of social media in healthcare and healthcare apps in past ACE Clinical Link newsletters and this article presents short snippets that take the discussion further and in new directions.

The December 2012 issue of *The Rheumatologist* has an article entitled, "**Online Medical Information Adds New Dimension to Patients' Discussions with Doctors**" - rather than being research focused, this article is based on interviews with several rheumatologists and looks at the pros and cons of patients' use of Internet medical information, as well as the common issues that can arise. These issues are relevant to any health care professional - http://www.the-rheumatologist.org/details/print/3941321/December_2012.html

HealthLink BC has launched the **BC Health Service Locator App** that allows users to find walk-in clinics, hospitals, emergency rooms, immunization locations, after-hours pharmacies, and laboratory services. The app can also be used to contact 8-1-1 to access non-emergency health information or to view the latest health alerts. The app can be used on an iPhone, iPod or iPad. Further information is available on the HealthLink BC website at http://www.healthlinkbc.ca/app/

The Hospital for Special Surgery (HSS) in New York has been an innovator in the development of new ways of providing treatment and education. An article in the December 2012 issue of *The Rheumatologist* entitled, "**Facebook Chats Link Healthcare Providers with Patients**", discusses the experiences of the HSS healthcare team as they launched a series of Facebook chats with a lupus patient population. Key messages from this article are that Facebook chats can be effective at reaching a large number of people, are relatively easy to organize and can be conducted by a team of health care professionals. What appeared integral to the success of this project is that the presenters received a preparatory, short introduction on the do's and dont's of Facebook chats; prior to the session one of the presenters was chosen as the moderator and it was pre-determined the question topics that each presenter would answer; and presenters had the help of the Lupus Foundation to advertise the

event - http://www.the-rheumatologist.org/details/print/3941321/December_2012.html A related article from the February 2013 issue of *The Rheumatologist* also described how the Nemours/Alfred I. duPont Hospital for children had used Facebook for the past 5 years to educate patients and family members on a variety of topics.

The UBC e-Health Strategy Office has launched a series of website pages entitled, "**Home Telehealth for Chronic Disease Management**" that present the results of Dr. Sandra Jarvis-Salinger's 5-year review and synthesis of the literature on home telehealth for chronic disease management. While focused on asthma, COPD, cardiovascular disease, diabetes, renal disease and stroke, the findings from this study have potential relevance to many other conditions. The findings are divided, by medical condition, into the following categories: introduction, key messages, home telehealth intervention design and implementation, patient outcomes, provider outcomes, system outcomes, works cited, and master tables. This is invaluable information for any service considering adding a home telehealth component - http://hometelehealth.med.ubc.ca/

The September 2012 issue of *The Rheumatologist* had an article entitled, "**Texting May Have a Role in Managing Rheumatology Patients**" that reviewed a United Kingdom study that looked at the current use of electronic communication by an older population and whether email and text messaging may have role in managing rheumatic conditions. The findings showed that use of the Internet and at least weekly sending and receiving of text messages ranged from a high of 90% for rheumatology patients up to age 55 to less than 50% for patients over 65 years of age. The study reported that these usage rates are comparable to the general population and that the participants reported little to no functional problems in their use of these technologies. The study also asked participants if they would be willing to receive appointment reminders, to which 56% of participants with an email address and 48% of participants with a mobile phone agreed. The article then described a Cochrane Database Systematic Review that found that there was evidence of moderate quality to suggest that mobile phone text-message appointment reminders are more effective than no reminders and are just as effective as telephone reminders. There is also low-quality evidence that text messages are better than reminders that are sent in the mail- http://www.the-rheumatologist.org/details/print/2543761/September_2012.html

The March 2013 issue of *The Rheumatologist* featured an article entitled, "**Electronic Portals Appeal to Patients**" that described survey results indicating that three-quarters of patients would use a secure electronic portal to access their medical information, if available. Unfortunately, study details relating to study methodology and participants were lacking. That said, the findings were consistent with interviews and focus groups I have conducted with BC rheumatology patients who identified a variety of benefits in being able to access a secure, online personal health record. While such tools are more common in the United States, TELUS is now providing free access to their Health Space website. Health Space allows registered individuals to record their health information, communicate with their health care providers, track symptoms, and set and monitor fitness goals. Several bluetooth-enabled devices can be synched to an individual's Health Space information including blood glucose monitors, pedometers, blood pressure monitors, and finger pulse oximeters. This website is certified by Canada Health Infoway after having met rigorous security and privacy standards. For more information go to www.telushealth.com/health-solutions/personal-health-records-(phr)/telus-health-space

Read by QxMD is an app for the iPad or iPhone that allows a user to create a personalized digital medical journal. The app is designed so that the user can browse topics or search for articles, and then pull up full articles based on the access that you have through your university or institution, or that is available through open access publishers. The app is intelligent and as it learns your reading preferences it suggests articles it thinks you'll enjoy reading. The app also allows the user to organize and review their personal collection of articles,

and to share these with colleagues by email, Twitter or Facebook. For those who have a UBC library account, the app is preset to allow seamless automatic one-tap access to full text PDFs that you would normally search through the UBC databases and ejournals. More information at http://www.qxmd.com/apps/read-by-qxmd-app

Finally, two last articles in the January 2011 and February 2012 issues of *The Rheumatologist* described various pros and cons related to the use of social media by health care providers. Concerns with social media use include the potential erosion of patient-provider boundaries, privacy and confidentiality issues, and the amount of time it can take to participate in social media, whereas the benefits can include relationship-building between patients and providers and the opportunity to reach a large number of patients for the purpose of providing education. Common social media tools include Facebook, Twitter, blogs and websites. The article also recommended the establishment of a social media policy to guide practitioner actions in this area. Vancouver Coastal Health has a social media policy statement on their Intranet site that was last revised in August 2012 that includes guidance on things to consider when planning a social media initiative, personal use of social media sites, privacy and confidentiality issues, professionalism and respectful communications. I would think that all health authorities now have similar social media policies.

If you have an interest in eHealth, sign up for the British Columbia Alliance on Telehealth Policy and Research (BCATPR) newsletter and attend their annual late spring workshop. BCATPR is a joint partnership between academic institutions and the provincial health authorities with the goal of providing relevant evidence and capacity building so as to foster the integration of sustainable telehealth solutions into routine health care practices in BC. More information can be found at http://www.bcatpr.ca/

Early Diagnosis of OA

Numerous research projects in Canada and elsewhere have been underway to identify biomarkers that can be used to diagnose early osteoarthritis. These studies, using blood and urine samples, have attempted to discover biochemical changes that could be used to accurately identify early osteoarthritis prior to the onset of radiological changes. Now many years later, the McCaig Institute for Bone and Joint Health in Alberta has announced that they have identified both a blood test and a test for synovial fluid that is effective at identifying early markers of osteoarthritis. This is the first test of its kind in the world and when widely available should allow for earlier OA disease management.

Ostoporosis: New Treatment Strategies & New Educational Resources

The January 2013 issue of *The Rheumatologist* has an article entitled, "**New Treatments, Strategies Emerge for Osteoporosis**" that discussed the evidence as to how long bisphosphonates can be safely taken. There is some evidence that atypical femur fractures increase with increasing use of bisphosphonates, while other research has shown that for each atypical fracture caused, at least 30 vertebral and 5 hip fractures are prevented. There are questions as to when bisphosphonates should be discontinued with some recommending discontinuation at 5 years. Other evidence has shown that lumbar spine bone mineral density continued to increase after the 5-year mark for patients taking alendronate as compared to those who switched to a placebo. This has led to suggestions that patients should be grouped into mild, moderate, and high-risk categories with the higher risk groups getting a longer duration of treatment. Promising results have been shown in two novel treatments. Odanacatib is a cathespin-K inhibitor and other treatments block sclerostin, which plays a key role in the cessation of bone formation. The article also described the move from measuring relative risk (T-scores) to absolute risk (FRAX and other scores). Online calculators noted include: Garvan Risk Calculator (www.garvan.org.au),

Canadian Association of Radiologist and Osteoporosis Canada (www.osteoporosis.ca) and Qfracture (www.qfracture.org). Article: http://www.the-rheumatologist.org/details/print/4441601/January_2013.html

On a related note, the Osteoporosis Canada website has two fairly new sets of resources. For patients, Osteoporosis Canada now does interactive webcasts that allow people across Canada to join virtual forums by health care professionals on a variety of topics. Upcoming topics include Nutrition and Osteoporosis (September 2013), Medications and Treatment (October 2013), and Men and Osteoporosis (November 2013). All sessions are archived and available for viewing 10 business days following the live webinar. Some of the archived sessions include "Tips for avoiding osteoporotic fracture while living your everyday life", "Healthy bones - medication and diet" (in Cantonese), and "Osteoporotic myth busters: What you thought you knew and what you need to know". In addition to Cantonese, there is also a session in French. These can be found at: http://www.osteoporosis.ca/osteoporosis-and-you/copn/virtual-forum/

For health care professionals, there is an education series that's called, "**Beyond the Break**". These sessions are presented in conjunction with Women's College Hospital in Toronto on the Ontario Telemedicine Network and are also available in an archived format through links on the Osteoporosis Canada site. Current modules on "Overview of osteoporosis", "Fracture risk assessment", "Osteoporosis and nutrition", "Medications and treatment", and "Osteoporosis and physical activity" are in two, 1-hour sessions with the first session devoted to laying a theoretical understanding and the second session that has more of a clinical application focus. These can be found at: http://www.osteoporosis.ca/health-care-professionals/beyond-the-break/

Tasks and Questions to Address in Your Visits with Clients with OA

A study by **Finney A, Porcheret M, Grime J et al.**, from the June issue of *Arthritis Care & Research*, is summarized in the Arthritis-related Citations section below. In brief, the study used a Delphi Consensus Approach to identify the key tasks or questions a health care professional (HCP) should address during an OA client consultation. The tasks or questions below received >80% agreement for inclusion from all 104 consensus panelists, a group that included people with OA, general practitioners, practice nurses, and other allied health professionals. These tasks or questions have been delineated into 4 stages:

Initiating the consultation

1. HCP inquires about the patient's views and understanding of OA.
2. HCP asks the patient how things are going with their OA.

Gathering information

3. HCP asks the patient what they are doing to help manage their OA and whether or not it has been effective.
4. HCP asks the patient what their expectations are and whether there is one particular issue or problem.
5. HCP asks the patient about the type and amount of pain they have.
6. HCP asks whether the patient is taking regular analgesia.
7. HCP asks about mobility, such as walking up and down stairs, etc.

Explanation and planning

8. HCP reinforces the message that the patient is central to the management of OA.
9. HCP asks the patient what is not going so well.
10. HCP continues to reinforce the message given previously by the GP and the practice nurse.

Closing the consultation

11. HCP asks the patient if they have any unanswered questions.
12. HCP makes it clear to the patient when and how to re-consult.

Athritis-related Citations

Beswick AD, Wylde V, Gooberman-Hill R, Blom A & Dieppe P. What proportion of patients report long-term pain after total hip or knee replacement for osteoarthritis? A systematic review of prospective studies in unselected patients. BMJ Open 2012;2:e000435.doi:10.1136/bmjopen-2011-000435. The authors used MEDLINE and EMBASE databases to identify and then review published studies in representative populations with total hip or knee replacement for the treatment of osteoarthritis. Fourteen articles describing 17 cohorts (6 with hip and 11 with knee replacement) outlined data on pain intensity. The proportion of people with an unfavourable long-term pain outcome ranged from about 7% to 23% after hip and 10% to 34% after knee replacement. The authors concluded that a significant proportion of people have painful joints following TJR surgery and that there is an urgent need to increase awareness and to address determinants of good and bad outcome.

Fitzgerald GK, White DK & Piva SR. Associations for change in physical and psychological factors and treatment response following exercise in knee osteoarthritis: An exploratory study. Arthritis Care & Research November 2012; 64(11): 1673-1680. In this study, 152 people with knee OA completed an exercise program that consisted of lower extremity strengthening, stretching, range of motion, balance and agility, and aerobic exercise. Changes from baseline to the 2-month followup were calculated for a variety of physical and psychological factors including self-reported knee instability, quadriceps strength, knee and ankle ROM, lower extremity muscle flexibility, fear of physical activity, anxiety, and depressive symptoms. Treatment response was defined as a minimum 20% improvement from baseline in both a numerical knee pain rating scale and the Western Ontario and McMaster Universities Osteoarthritis Index physical function scale. This study showed that change in self-reported knee instability and fear of physical activity were the only factors significantly associated with treatment response after adjustment for covariates.

Jawaheer D, Messing S, Reed G et al. Significance of sex in achieving sustained remission in the consortium of rheumatology researchers of North America cohort of rheumatoid arthritis patients. Arthritis Care & Research December 2012; 64(12): 1811-1818. The objective of this study was to determine if men are more likely to achieve remission than women. RA patients enrolled in the Consortium of Rheumatology Researchers of North America (CORRANA) cohort between October 2001 and January 2010 were selected for this analysis. A total of 10,299 RA patients were available for this study. In both early and established disease, women had more severe disease at baseline and were more likely to be treated with DMARD or Anti-TNF therapies, as compared to men. Men were more likely to achieve sustained remission compared to women in early RA, but not in established RA.

Wright EA, Katz JN, Baron JA et al. Risk factors for revision of primary total hip replacement: Results from a national case-control study. Arthritis Care & Research December 2012; 64(12): 1879-1885. This study examined risk factors for revision of primary THR in a US-population-based sample. Medicare claims were used to identify individuals from 29 US States who underwent revision surgery. Each individual was matched to a control THR recipient who was alive and unrevised when that case participant had their revision THR. Study results showed patients undergoing a primary THR were more likely to have a revision over a 12-year followup period if the patient was younger, taller or heavier, or if the patient had received a cemented femoral component.

Riddle DL & Stratford PW. Body weight changes and corresponding changes in pain and function in persons with symptomatic knee osteoarthritis: A cohort study. Arthritis Care & Research January 2013; 65(1): 15-22. The objective of this study was to determine if a dose-response relationship exists between changes in body weight in individuals with symptomatic knee OA and self-reported pain and function. The study showed that

there was a significant dose-response relationship between changes in body weight and corresponding changes in pain and function. The threshold for statistically significant changes in pain and function appeared to be a ≥10% weight gain or weight reduction.

Crowson CS, Matteson EL, Davis III JM & Gabriel SE. Contribution of obesity to the rise in incidence of rheumatoid arthritis. Arthritis Care & Research January 2013; 65(1): 71-77. This study sought to determine whether the "obesity epidemic" could explain the recent rise in the incidence of RA by comparing 813 patients with RA with 813 population-based controls. The study showed that a history of obesity was significantly associated with the development of RA.

Ajeganova S, Andersson ML & Hafstrom I. Association of obesity with worse disease severity in rheumatoid arthritis as well as with comorbidities: A long-term followup from disease onset. Arthritis Care & Research January 2013; 65(1): 78-87. This study looked at the association of obesity with disease activity and severity, as as its relationship to comorbidities in RA. The study showed that BMI and obesity were independently associated with higher disease activity, higher HAQ scores, more pain and worse general health. As well, BMI and obesity conferred higher odds for being diagnosed with hypertension, diabetes mellitus, and chronic pulmonary disease, whereas BMI and waist circumference were independently associated with angina pectoris / acute myocardial infarction / coronary revascularization.

Calvo-Munoz I, Gomez-Conesa A & Sanchez-Meca J. Physical therapy treatments for low back pain in children and adolescents: a meta-analysis. BMC Musculoskeletal Disorders 2013, 14:55 doi: 10.1186/ 1471-2474-14-55. Published: 2 February 2013. Available at http://www.biomedcentral.com/1471-2474-14-55. To determine the effectiveness of physical therapy treatments for low back pain (LBP) in children and adolescents, the authors looked at studies in English, Spanish, French, Italian and Portuguese carried out by March 2011. Eight articles met the selection criteria, which resulted in 11 treatment groups and 5 control groups for a total sample of 334 subjects. The authors concluded that therapeutic physical conditioning and manual therapy is the most effective treatment combination, although the low number of studies and control groups in combination with the methodological limitations of this meta-analysis prevented the authors from drawing definitive conclusions with regards to the efficacy of physical therapy treatments in LBP.

Loureiro A, Mills PM & Barrett RS. Muscle weakness in hip osteoarthritis: A systematic review. Arthritis Care & Research March 2013; 65(3): 340-352. This systematic review looked at findings from 13 cross-sectional studies that evaluated lower extremity muscle strength, size, quality, and/or inhibition in individuals with hip OA. The study found consistent evidence for muscle weakness and muscle atrophy in the affected leg in persons with unilateral hip OA relative to the contralateral leg and healthy control legs. This suggests the need to address atrophic muscle weakness in the clinical management of hip OA.

Widdifield J, Bernatsky S, Paterson JM et al. Serious infections in a population-based cohort of 86,039 seniors with rheumatiod arthritis. Arthritis Care & Research March 2013; 65(3): 353-361. This study assessed risk and risk factors for serious infections in seniors with RA. The results showed that this seniors cohort had an infection rate of 46.4 events/1,000 person-years. Factors associated with infection included higher comorbidity, rural residence, markers of disease severity, and history of previous infection. As well, anti-TNF agents and DMARDs were associated with a several-fold increase in infections. The drug category with the greatest effect estimate was glucocorticoids, which exhibited a clear dose response with an odds ratio ranging from 4.0 at low doses (≤ 5mg/day) to 7.8 at high doses (≥ 10 mg/day).

Riddle DL, Singh JA, Harmsen WS et al. Clinically important body weight gain following knee arthroplasty: A five-year comparative cohort study. Arthritis Care & Research May 2013; 65(5): 669-677. This study used a large US-based knee arthroplasty registry and a population-based control sample from the same geographic region to identify whether knee arthroplasty increases the risk of clinically important weight gain of ≥5% of baseline body weight over a 5-year postoperative period. The study found that 30.0% of the knee arthroplasty sample gained ≥5% of baseline body weight over a 5-year postoperative period, as compared to 19.7% of the control sample. Additional arthroplasty procedures during followup further increased the risk for weight gain relative to the control sample. Individuals at the greatest risk for clinically important weight gain were those who were younger and those who had lost the greatest amount of weight prior to their surgery. Clinically important weight gain is defined as a weight gain of ≥5% of baseline body weight, as previous research has shown that this level of weight gain has clinically meaningful effects on cardiovascular and diabetes mellitus-related risk, as well as pain and function.

Gossec L, Salejan F, Nataf H et al. Challenges of cardiovascular risk assessment in the routine rheumatology outpatient setting: An observational study of 110 rheumatoid arthritis patients. Arthritis Care & Research May 2013; 65(5): 712-717. This study sought to assess the feasibility and usefulness of a standardized cardiovascular (CV) risk assessment in RA performed by rheumatologists during outpatient clinics. Twenty-two rheumatologists each identified 5 consecutive unselected patients with confirmed RA. Data collection included the following standardized assessment of CV risk factors: blood pressure, interpretation of glycemia and of lipid levels, and calculation of the Framingham CV risk score. With regards to feasibility, the results showed that missing data were most common for glycemia (27% of patients) and cholesterolemia (14% of patients). The mean ± SD duration of the CV risk assessment was 15 ± 5 minutes. The CV risk assessment was identified as being useful in 33 patients (30%), as evidence was found for dyslipidemia (15% of patients) or high blood pressure (9% of patients). The authors conclude that the assessment of CV risk factors is feasible, but labour intensive.

Stanmore EK, Oldham J, Skelton DA et al. Fall incidence and outcomes of falls in a prospective study of adults with rheumatoid arthritis. Arthritis Care & Research May 2013; 65(5): 737-744. The objective of this study was to determine the incidence and consequences of falls in adults with RA. A total of 559 community-dwelling adults with RA between the ages of 18 and 88 (mean age 62 years) participated in this year-long study that consisted of an initial detailed clinical assessment, monthly falls calendars, followup telephone calls and a followup visit. Outcome meaurses included fall occurrence, reasons for fall, type and severity of injuries, fractures, fall location, lie-times, use of health services, and functional ability. The results showed that 36.4% of the participants reported at least one fall for a combined total of 598 falls. Age and sex were not associated with falls. More than one-third of the falls were reportedly caused by hips, knees, or ankle joints "giving way." More than half of the falls resulted in moderate injuries, such as head injuries (n=27) and fractures (n=26). The authors concluded that adults with RA are at high risk for falls and injuries associated with these falls, and that interventions to prevent falls is of utmost importance.

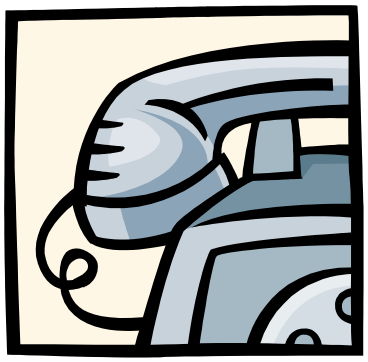
Kimura Y, Weiss JE, Haroldson KL et al. Pulmonary hypertension and other potentially fatal pulmonary complications in systemic juvenile idiopathic arthritis. Arthritis Care & Research May 2013; 65(5): 745-752. The aim of this study was to characterize and compare systemic JIA patients with pulmonary complications to a larger cohort of systemic JIA patients. The study focused on 25 JIA patients with confirmed diagnoses of pulmonary arterial hypertension (PAH), interstitial lung disease (ILD), and/or alveolar proteinosis (AP). It was found that JIA patients with these pulmonary complications were more likely to be female, have more systemic features, and have been exposed to an IL-1 inhibitor, tocilizumab, corticosteroids, IVIG, cyclosporine, and cy-

clophosphamide. Twenty patients (80%) were diagnosed with macrophage activation syndrome (MAS) during their disease course and 15 patients (60%) had MAS at pulmonary diagnosis. Sixteen patients had PAH, 5 had AP, and 7 had ILD. Seventeen patients (68%) died at a mean of 10.2 months from the diagnosis of pulmonary complications. The authors concluded that PAH, AP, and ILD are underrecognized complications of systemic JIA that are frequently fatal.

Tierney M, Fraser A, Purtill H & Kennedy N. Study to determine the criterion validity of the SenseWear armband as a measure of physical activity in people with rheumatoid arthritis. Arthritis Care & Research June 2013; 65(6): 888-895. Given the importance of physical activity in relation to the increased mortality of RA patients from cardiovascular disease, the study sought to determine the validity of the SenseWear armband (SWA) as a measure of physical activity during activities of daily living (ADL). The 14 participants in this study were asked to undertake a series of ADL tasks of varying intensities. The SWA was compared to the criterion measure of the Oxycon Mobile indirect calorimetry system (energy expenditure in kJ) and of manual video observation (step count). The results showed that the SWA had substantial agreement (ICC 0.717, $P < 0.001$) and a strong relationship (PCC = 0.852) compared with the criterion measure when estimating energy expenditure during ADL. However, where ADL intensities were high, it was found that the SWA overestimated energy expenditure. The ability of the SWA to estimate step counts during ADL activities was poor (ICC 0.304, $P = 0.038$). The authors concluded that the SWA is a valid tool for estimating energy expenditure during ADL activities in an RA population, other than for high intensity activities.

Finney A, Porcheret M, Grime J et al. Defining the content of an opportunistic osteoarthritis consultation with primary health care professionals: A delphi consensus study. Arthritis Care & Research June 2013; 65(6): 962-968. A 2-round Delphi postal consensus approach was used to define the core content for a consultation between a health care professional and a patient with OA in primary care. As a preliminary step, an expert panel of 20 patients and health care professionals brainstormed 35 possible consultation tasks. These 35 tasks and an OA case study were then mailed to 104 Delphi consensus panelists comprising individuals with OA, general practitioners, practice nurses, and other allied health professionals. The panelists were then asked to rate each of the 35 tasks as to their usefulness for inclusion in an OA consultation if "time was no object." During the second round the same panel members were mailed the collective ratings of the 35 tasks, as well as how that panel member had previously rated each task. The panel members were then asked to rate the tasks a second time in relation to the same case study, but with the instruction to identify the tasks for inclusion in an OA consultation if the time available was limited. Results from this process identified 12 tasks that received >80% agreement for inclusion from all panel members. Three tasks received 100% agreement for inclusion including inquiring about the condition, the type and amount of pain the patient has, and whether analgesia is being taken. The authors concluded that these three core questions should be asked by any health care professional in an opportunistic consultation.

Clinical Consultation available through your ACE membership



As an ACE member, you have access to physical therapists, occupational therapists and nurses with many years of rheumatology experience. If you have a clinical question, or a complex or challenging client and would like to consult with one of our experienced clinicians, please contact one of the people listed below. We will return your call or e-mail as quickly as possible.

You can also contact senior clinicians in our regional centres (Cranbrook, Penticton & Victoria). They are a valuable local resource.

An ACE member who used this service in the past states: “Great resource. Please continue!”

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