

CRAJ SCR

The Journal of the Canadian Rheumatology Association



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Let's Call the Whole Thing Off!

By Philip A. Baer, MDCM, FRCPC, FACR

*"You like potato and I like potahto,
You like tomato and I like tomahto;
Potato, potahto, tomato, tomahto!
Let's call the whole thing off!"*

- George and Ira Gershwin, "Let's Call the Whole Thing Off"; sung by Fred Astaire and Ginger Rogers, 1937

First long office of 2012: mid-afternoon, a busy day. A 30-something year old patient comes in for a follow-up visit, sits down, and starts the conversation with, "God, you're going to kill me!" How to reply? I parry with, "I haven't killed anyone today yet." I sense what's coming next – someone has not been compliant with her prescribed therapy. A quick search of the file shows no prior problems, no missed appointments, and all the scheduled labs had been done until two months ago. The patient has well-controlled polymyositis, has been weaned off steroids, and is only on azathioprine daily.

I let her spill the beans. She is planning to donate eggs for her sister's infertility treatment. The fertility specialist wanted her to stop the azathioprine in advance, though the doctor was not entirely sure it would be an issue. The patient did not call us or the Motherisk service for advice, and stopped therapy two months before her appointment with me. Result: her myositis flared significantly.

I certainly was not upset. I had to applaud my patient's selflessness in trying to help her sister have a baby. As well, the therapeutic trial of stopping azathioprine (AZA) therapy had proven to everyone that it was definitely effective and still required. Of course, if she had consulted me, I would have told her I routinely use AZA in pregnancy, so I was not the least bit worried about having her continue taking it during the egg donation process.

Adherence to therapy is a hot topic in rheumatology currently, and this patient visit left me pondering the issue. Recent Canadian studies suggest many rheumatoid arthritis (RA) patients don't comply with their methotrexate (MTX) therapy, especially after starting biologics. We all have patients who self-adjust doses of disease-modifying antirheumatic drugs (DMARDs), steroids, nonsteroidal anti-inflammatory drugs (NSAIDs),

and even biologic therapies. Within reason, it may not pose much of a problem, especially if the patient continues to do well on reduced therapy. However, the number of studies showing an enhanced effect from combination MTX and biologic therapy, versus either one alone, do raise some concerns.

I have much more trouble dealing with patients who miss appointments, despite being given written appointment cards and being phoned by my secretary 24 to 48 hours before their scheduled visits. Having the occasional no-show might provide a welcome break in the middle of a busy office, but it is very frustrating for my secretary who diligently reminds patients of their appointments. As well, a last-minute no-show does not allow us to move someone who has been waiting weeks or months for an appointment on our cancellation list. Explaining that we book and see one patient at a time doesn't seem to make an impact; many patients confuse a specialist's office with that of a busy family practitioner, where many of them are used to waiting hours for their appointment. Billing for no-shows rarely results in any satisfaction – in one memorable case, the no-show patient paid, but the cheque bounced, leading to added bank charges for me.

Not completing labwork is another frequent issue. At what point should I decline further refills for MTX or similar agents? Three months with no labs, six months, a year?

Well, the solution may be at hand thanks to technology. The Fair Isaac Corporation (FICO) is well-known in the United States for their FICO credit rating score. You have probably seen a lot of internet banner and pop-up ads offering to improve your credit score. A FICO score ranges between 300 and 850, and this number represents the creditworthiness of a person (*i.e.*, the likelihood that person will pay his or her debts in a timely fashion).

Now, FICO has introduced a Medication Adherence Score (MAS) which can assist health-care providers in flagging patients at risk of ignoring doctors' orders. The score is not based on credit data or health, but instead uses demographic variables such as age, household size, and car ownership as predictors, among others. The FICO MAS predicts non-adherence **before** it happens. It apparently has been validated in multiple chronic medical conditions, including osteoporosis. Patients in the top decile of FICO MAS scores took their medications a striking 129 days more each year than patients in the bottom decile.

Consider the future, based on Julie, a case study on the FICO website: Julie is referred for a rheumatology consultation. In addition to the usual referral note, further demographic information is obtained indicating that Julie is a college-educated, single mother who rents her

home, does not respond to direct mail, but does respond to unsolicited e-mails. This results in a low FICO MAS of 158. When Julie calls for an appointment, the office staff can confidently predict she will not keep her appointment, will not take her medications, and will not comply with her labwork. As such, what is the point of wasting her time and mine?

"Let's call the whole thing off."

Anyone who has tips on improving patient adherence is welcome to submit them for publication in a future issue of the *Journal of the Canadian Rheumatology Association (CRA)*.

Philip A. Baer, MDCM, FRCPC, FACR
Editor-in-chief, CRAJ
Scarborough, Ontario



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Dr. Dafna Gladman: Master of the American College of Rheumatology

You have reached the highest levels of global rheumatology as a clinician and researcher. As a pioneer in the once-male dominated world of academic medicine, did you experience any difficulties related to gender? What is your advice to younger female rheumatologists looking to emulate your success?

I do not believe I have suffered any gender discrimination. When I started training I was the only female fellow among 12 fellows. The others were only too happy to teach me everything they knew. As a staff person, I started at the Women's College

Hospital, which was primarily staffed by women, so no discrimination there. By the time I moved to the Wellesley Hospital and then to the Toronto Western Hospital I was already an established investigator and clinician.

Most academic rheumatologists specialize in one area. You are a leader in both psoriatic arthritis (PsA) and systemic lupus erythematosus (SLE). How have you managed that?

Initially, it was not a big problem since there was very little going on in PsA. I managed to develop a program locally and work in both lupus and PsA. In the past 10 years it has been more of a challenge since there are new treatments for both diseases and there is much more going on. However, it has been a wonderful journey in both areas. I joined Dr. Murray Urowitz in the study of lupus, and he will always be considered the local expert. In PsA I paved the way, and therefore it is "my baby". I am very happy to be able to continue in both areas.



You have had the opportunity to see many changes in rheumatology over the course of your career. What do you believe have been the most profound changes? What were the most unexpected developments in rheumatology?

The most profound changes are undoubtedly the discovery of anti-tumor necrosis factor (TNF) agents. These have been wonderful new therapies for all forms of inflammatory arthritis and therefore have helped a large proportion of our patients. In addition, the recognition that observational cohort studies are important (an area I have

worked in since the mid-seventies), has also been a major change in rheumatology. I am not sure that I could identify an "unexpected development" since the ongoing research has provided for the development of all recent discoveries.

Please tell us a bit about yourself.

I received my MD from the University of Toronto (U of T) in 1971, and completed training in Internal Medicine and Rheumatology as well as training in cellular immunology at the same University, followed by a period of training in human leukocyte antigen (HLA)-typing with Dr. Paul Terasaki at University of California, Los Angeles (UCLA). I was appointed to the staff of the U of T in 1977, initially at the Women's College Hospital. I progressed through the academic ranks achieving Full Professor of Medicine in 1992, by which time I was working at the Toronto Western Hospital, where I was appointed Senior Scientist at the Toronto Western Research Institute (TWRI). Since 1995 I have served as the Deputy Director of the

Centre for Prognosis Studies in the Rheumatic Diseases, the Director of the Psoriatic Arthritis Research Program with the University Health Network, and the co-Director of the University of Toronto Lupus Clinic.

My research program includes both clinical and laboratory research, and is mainly translational. I have researched both SLE and PsA with emphasis on database development, prognosis studies, genetic markers for disease susceptibility and expression, assessment instruments, and quality of life measures. I have also participated in clinical trials in these conditions, usually as part of the study development as well as execution. I have published 475 peer-reviewed papers, 177 chapters and invited publications, and 644 abstracts. Important contributions to PsA include recognizing that the disease was more severe than previously noted; confirming that PsA progressed over time and was associated with increased mortality; identifying predictors of disease progression and mortality; and identifying genetic markers for susceptibility and progression of the disease. I was instrumental in the establishment of the University of Toronto Lupus Database Program, which follows over 1,600 patients with SLE and has resulted in numerous landmark studies in SLE. I have also been involved in the development of several outcome measures in SLE including the Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K), the Systemic Lupus International Collaborating Clinics (SLICC) Damage Index and SLEDAI-2K Responder Index-50 (SRI-50).

My academic activities include appointment as the Training Program Director for the U of T Rheumatology Program from 1992 to 2003. In this role I supervised numerous undergraduate, graduate, and post-graduate students.

I am immediate Past-President of the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA), an international group of rheumatologists and dermatologists whose objectives are to study psoriasis and PsA. I am also a member of the

executive of the Spondyloarthritis Research Consortium Canada (SPARCC). Named the recipient of the Verna Wright Prize for outstanding contribution to the field of PsA research, I received this international award from the Psoriatic Diseases Group in Naples, Italy in 2011. In 2008, I was similarly recognized by the National Psoriasis Foundation of America for outstanding advocacy service on behalf of the psoriasis community. I received the Distinguished Investigator Award from the Canadian Rheumatology Association (CRA) in 2002. A founding member and past-chairperson of the Systemic Lupus International Collaborating Clinics Group, I am a medical advisor to Lupus Ontario and Lupus Foundation of America. In addition, I have served as member and President of the American College of Rheumatology (ACR) North East Council and the Lupus Council, chaired the ACR abstract selection committee for spondyloarthritis, and was a member of the SLE abstract selection committees. Most recently, I was elected a Master of the ACR.

My greatest accomplishments are my children. Tami, who is a teacher, lives in Israel and has given us nine grandchildren, and Aviv, who is an intensivist at York Central Hospital in Toronto, has added two grandchildren to the group. In my spare time I like to read, travel and spend time with the family.

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Dr. Diane Lacaille: Mary Pack – Arthritis Society Chair of Rheumatology at the University of British Columbia

Please tell us about the comprehensive program you have designed to prevent work disability (WD) in employed people with inflammatory arthritis.

Employment is an important challenge for people with arthritis, yet there are few services available to help them deal with employment issues. To address this need, we developed and pilot tested a program called “Employment and Arthritis: Making it Work”. The program follows principles of self-management and provides people with knowledge, skills, and resources to address the problems they face at work because of their arthritis. To facilitate participation and allow wider dissemination, we have just completed the conversion of our face-to-face program to an online format. The program consists of five modules that people complete online, covering topics related to employment. The available interactive activities allow individuals to apply the principles they learned to their own situation; they participate in weekly group sessions, which will also be conducted online, allowing them to share experience and benefit from the peer support of group sessions. Following the online program, they meet with an occupational therapist for an ergonomic assessment of their work and with a vocational counsellor. I am pleased to say that I recently received Canadian Institutes of Health Research (CIHR) funding to evaluate, in a randomized controlled trial, the effectiveness of our program at improving work-productivity and preventing work disability. So, stay tuned!

You have uncovered important gaps in care for rheumatoid arthritis (RA.) In British Columbia, the



majority of RA patients do not receive the care that is recommended for their disease. More than half these patients are not using the medications considered essential for RA (disease-modifying antirheumatic drugs [DMARDs]) and few are followed by rheumatologists. Please comment on this research. Do you believe the patients in your database diagnosed as having RA, but never seen by rheumatologists or treated with DMARDs, actually have RA?

The results of this research are, indeed, very disconcerting. Like

you, I was shocked when I saw the results and wondered if there was some other explanation. Our results have since been reproduced elsewhere in Canada, in Ontario and in Quebec, as well as in the United States, including in samples that were not identified from administrative data.

To confirm our findings, we surveyed some people, initially identified from the administrative database, who confirmed that they were told by their physician that they had RA, and we found the same low rate of DMARD use. Furthermore, these people seemed to have active disease based on self-report measures of pain, physical function, and disease activity. Further confirming our results is the finding that people who were seen by a rheumatologist, and labeled by them as having RA, and who subsequently stop seeing a rheumatologist and received all their care by their family physician, have lower rates of DMARD use (34%) than those who continue seeing a rheumatologist (76%).

This all points to the same phenomenon; I think this indicates that the radical mentality shift that has occurred in the rheumatology community in the approach to treatment of RA hasn't fully reached the family medicine community. This is consistent with what

we found in qualitative studies with patients and physicians to try to understand the reasons for some of the gaps we identified. It is more than an issue of knowledge and making sure guidelines are disseminated, it is also changing a misperception, that RA is a benign disease and that our drugs are harmful.

Please tell us a bit about yourself.

I am originally from Montreal, where I trained at McGill University for medical school and internal medicine training. I have been in Vancouver since 1994, where I did my clinical training in rheumatology and my research training in epidemiology. I am currently an Associate Professor in the Division of Rheumatology at the University of British Columbia (UBC), and a senior scientist at the Arthritis Research Centre (ARC) of Canada, in Vancouver. I am pleased to have recently been awarded the Mary Pack – Arthritis Society Chair in Arthritis Research at UBC. It is quite an honour to hold a chair in the name of this amazing and inspiring woman who was truly a pioneer and fought hard to improve services for people with arthritis. I hope to continue to advance her cause of improving the lives of people living with arthritis through my research. My research focuses on two areas: studying the impact of arthritis on employment and preventing work disability, and evaluating the quality of healthcare services received by people with RA, using a population-based cohort of RA for the province of British Columbia.

Outside of work, life with my husband and three kids keeps me busy. We love to sail and spend our summer vacations on our sailboat; that's our most precious family time! I also love to ski, kayak, and play outdoors, which makes Vancouver a great place to live.

I recently went back to an old favorite of mine, ice hockey – no contact, of course. I also have a passion for traveling and for international development. Since working in Ethiopia for a year and a half in my twenties, I have been volunteering for an organization called Canadian Physicians for Aid and Relief (CPAR), which does international development work to improve health in some of the most impoverished communities of Africa. My involvement with them, despite my busy work and life schedule, has been most rewarding, as I have seen first-hand what impact such support can have. A little bit goes a long way in Africa!

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Dr. Lacaille and her family enjoying their summer vacation aboard their sailboat in the Harmony Islands, off British Columbia's west coast.

Dr. John Esdaile: Arthur J.E. Child Chair in Rheumatology Research

With the prevalence of arthritis on the rise among Canada's aging population, how do you think the roughly 375 rheumatologists scattered across this country can do a better job meeting the growing need for their expertise?

Arthritis is certainly on the rise and the "official" answer has always been that we need more rheumatologists. More rheumatologists will be needed, but this is not sufficient if the goal is taking care of a lot more people with arthritis and doing it better than we do today.

We need a new vision of how arthritis care is provided. This is Canada, so the vision in one province or region of the country may not be the best for another. We need to expand who provides arthritis care. Family medicine training programs fail the person with arthritis and this must change. Physiotherapists, occupational therapists, pharmacists, nurses, fitness instructors, and so on, with appropriate training, must start taking over some arthritis care from physicians (*i.e.*, the physician may not always be the team leader). Finally, we need to determine if a new vision actually works and do the benefits justify the costs.

Another approach is for arthritis consumer, patient, and research groups to become more involved in educating the public, and by default, physicians and other health professionals about arthritis prevention, early symptoms of arthritis, and the need for early intervention. The Arthritis Research Centre (ARC) has developed short videos on research advances. With the leadership of Arthritis Consumer Experts (ACE), the ARC is developing and using Smartphone and web-enabled technologies to deliver arthritis information, resources, and support to the public, patients, primary care physicians, allied health professionals and pharmacists; please see the article on ArthritisID and ArthritisID Pro,



featured on page 9 of the Fall 2011 *Journal of the Canadian Rheumatology Association* [CRAJ]: http://www.stacommunications.com/customcomm/Back-issue_pages/CRAJ/crajPDFs/2011/fall2011/09.pdf.

Ministries of Health and research funding agencies have both underestimated the impact of arthritis; but Ministries of Health are learning. Anti-tumour necrosis factor (TNF) agents are now the most expensive class of drugs in Canada and total joint replacement surgeries are increasing by 50% every five years. No Ministry of

Health can ignore arthritis much longer.

What led you to your role as a researcher? Was it a conscious choice or did you fall into it by accident?

I trained with a group of four young scientists who started the Division of Clinical Immunology and Allergy at McGill University. Of the four, all became Division Heads, two became Chairs of Departments of Medicine, two headed Research Institutes, two became Deans of Faculties of Medicine, and one a Vice-Principal Academic. If research was not an absolute expectation, scholarship certainly was. This was seen as **the** route to making a difference for patients.

What were the origins of the ARC of Canada?

The British Columbia Board of The Arthritis Society (TAS) had once overseen a province-wide treatment program funded by the British Columbia government. When this was transferred to the Vancouver General Hospital, I proposed that a research initiative was another way to improve the lives of people with arthritis. Mary Pack, the founder of TAS and the British Columbia Division, had always seen research as a key component of any arthritis strategy, and the Board agreed enthusiastically. Thus, in 1999, the Board

of TAS, British Columbia and Yukon Division, voted to start the ARC with funds restricted for use only for research in British Columbia. In 2000, the ARC became a legal entity with the approval of the national board of TAS.

The ARC was a free-standing institution with overlapping Boards (the President of TAS and the TAS British Columbia Board Chair were ARC board members until very recently). ARC was to be the research arm of the B.C. Division and maintained good relations with TAS.

What is ARC's mission and how has it grown?

The mission of the ARC is *to improve the lives of people with arthritis through research*. But many of us prefer the tagline *Practical Research for Everyday Living*, given to the ARC by then-Senator Pat Carney and current Senator, Nancy Greene Raine.

The ARC started very small – there was a research Fellow (now the Mary Pack – Arthritis Society Chair in Arthritis Research, Dr. Diane Lacaille), a research assistant, and a part-time secretary. The ARC grew during a renaissance in arthritis research; the Canadian Arthritis Network (CAN) had been funded and the Institute of Musculoskeletal Health and Arthritis (IMHA) had just been formed. In its first four years or so, the ARC was able to attract the support of experienced scientists—Dr. Matt Liang, Dr. Aslam Anis, Dr. Catherine Backman—as well as young scientists, now well-known beyond Canada—Dr. Jacek Kopec, Dr. Diane Lacaille, Dr. Jolanda Cibere, and Dr. Linda Li, to name a few. It was fortunate to have an expert and hardworking board. The ARC has little hierarchy and almost no administrative staff (1.4 secretaries for more than 50 people, as well as one Executive Director and one finance person).

The ARC has always been a fun place to work. It is a place where absolutely every person makes a difference to the lives of people with arthritis.

What about the expansion to Alberta?

The expansion to Alberta grew out of the University of Calgary's desire to build on its orthopedic research success to include arthritis, and specifically clinical rheumatologic, research. The close proximity of the two centres makes collaboration possible on a day-to-day basis. There is huge potential if the strengths of both institutions are brought together.

The CRAJ has heard that ARC will also expand to Quebec. Can you tell us more about that?

Dr. Paul Fortin's move to Laval and that institution's intention of strengthening clinical research was the key driver. A visit from a Laval delegation to Vancouver really made it apparent how linking Paul's new Laval group to the ARC could be a win-win for arthritis research. I don't know of anything quite like this but it certainly is an exciting experiment.

The goal of ARC is to improve training and research to benefit people with arthritis. Canadian arthritis research is ranked very highly and ARC is an important aspect of that success.

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The staff of the Vancouver ARC enjoying their annual retreat.

Pain: A New Dimension of Rheumatic Disease Management

By Mary-Ann Fitzcharles, MD, and Philip A. Baer, MDCM, FRCPC, FACR

Rheumatologists have done much to champion the cause of chronic pain for the global health community, with musculoskeletal conditions cited as one of the most common causes of chronic pain. Fibromyalgia (FM), a condition traditionally managed by rheumatologists, has also played a role in heightening this awareness and done much to elucidate pain mechanisms.¹ In the absence of an imminent cure for rheumatic diseases, pain will continue to be a prevalent symptom impacting on quality of life and demanding attention.

Rheumatic pain is not only nociceptive

Rheumatic pain is no longer classified as purely nociceptive in character, but has important neuropathic contributions. The essence of neuropathic mechanisms begins with a complex interaction of local factors at the periphery, modulation of the pain message by changes in the spinal cord and brain stem, altered function in the brain, and finally, effects mediated via the descending inhibitory system, with neurotransmitters such as serotonin and norepinephrine playing key roles.²

Several lines of evidence strengthen the hypothesis of the interplay of neurogenic factors in rheumatic pain, including central sensitization in knee osteoarthritis (OA), hyperalgesia in locations of referred pain, and activation patterns in the brainstem in response to pain.³⁻⁵ Clinical support for neurogenic mechanisms is further provided by a Canadian focus group study of persons with OA, which reported that neuropathic pain descriptors were used by at least one third of patients.⁶ Functional magnetic resonance imaging (fMRI) has also demonstrated functional and structural changes in the brains of OA patients.⁷⁻⁸

Translation of understanding of pain mechanisms into clinical care

How then will this new concept of pain mechanisms affect rheumatology patient care? Treatment options

for our patients will therefore become more diverse to incorporate non-pharmacologic as well as pharmacologic strategies more commonly used to treat neuropathic pain. A logical step is to explore the use of adjuvant medications, drugs with primary effect on symptoms other than pain, with anticonvulsant and antidepressant medications representing the two major categories. The use of adjuvants is now common in the

In the absence of an imminent cure for rheumatic diseases, pain will continue to be a prevalent symptom impacting on quality of life and demanding attention.

management of FM. Health Canada has approved both pregabalin and duloxetine for the treatment of FM, and duloxetine also for treatment of chronic low back pain. Adjuvants have the added advantage that they may address symptoms other than pain, such as sleep, mood, and even fatigue.

Challenges and controversies in rheumatic pain management

Rheumatologists may rightly be reticent about embracing these new concepts of pain management, thereby adding an extra dimension to patient care for doctors already struggling with long waiting lists and time constraints. We must question whether we are sufficiently knowledgeable to provide balanced recommendations regarding the panoply of non-pharmacologic and pharmacologic interventions in the management of chronic pain. It is possible that we suffer from a knowledge

deficit on these issues, as evidenced by a survey of Ontario rheumatologists.⁹ Antidepressants, sleep-enhancing treatments, anticonvulsants, and even opioid medications are mostly outside our comfort zone of prescribing. More importantly, patients may not be ready to be treated with these agents, taking into account the risk/benefit ratio from multiple perspectives.

A second area of challenge is evaluating the efficacy of an intervention for pain, which remains solely based on subjective patient reports. The statistically significant effect on pain, measured as a 2/10 point or 30% reduction may not truly reflect a clinically meaningful response. Reaching a state of mild pain is better than a reduction in pain which still leaves the patient with moderate pain and ongoing functional impairment. To quote Maxime Dougados, "It's good to feel better but it's better to feel good."¹⁰ Another consideration is that features of the experience of pain and suffering, so important to the patient, may be less commonly addressed in routine clinical care. These may include

*"It's good to feel better but it's better to feel good."*¹⁰

low-grade night pain, which, while not causing conscious awakening may nevertheless be disruptive of sleep architecture, as well as the fear of harm in the setting of pain, and mood associations with chronic pain.

Even with these reservations and challenges, rheumatologists must become more actively involved in the management of rheumatic pain. For example, using pooled indices of disease activity in rheumatoid arthritis (RA), separating inflammatory from non-inflammatory pain is critical to effective and correct treatment.¹¹ The momentum that has developed in the

understanding and management of pain requires us to keep pace in order to remain effective doctors and advocates for our patients.

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References

1. Goldenberg DL, Clauw DJ, Fitzcharles MA, New Concepts in Pain Research and Pain Management of the Rheumatic Diseases. *Semin Arthritis Rheum* 2011; 41(3):319-34.
2. McDougall JJ. Arthritis and pain. Neurogenic origin of joint pain. *Arthritis Res Ther* 2006; 8(6):220.
3. Arendt-Nielsen L, Nie H, Laursen MB, et al. Sensitization in patients with painful knee osteoarthritis. *Pain* 2010; 149(3):573-81
4. Kulkarni B, Bentley DE, Elliott R, et al. Arthritic pain is processed in brain areas concerned with emotions and fear. *Arthritis Rheum* 2007; 56(4):1345-54.
5. Gwilym SE, Keltner JR, Warnaby CE, et al. Psychophysical and functional imaging evidence supporting the presence of central sensitization in a cohort of osteoarthritis patients. *Arthritis Rheum* 2009; 61(9):1226-34.
6. Hochman JR, French MR, Bermingham SL, et al. The nerve of osteoarthritis pain. *Arthritis Care Res (Hoboken)* 2010; 62(7):1019-23.
7. Baliki MN, Geha PY, Jabakhanji R, et al. A preliminary fMRI study of analgesic treatment in chronic back pain and knee osteoarthritis. *Mol Pain* 2008; 4:47.
8. Gwilym SE, Filippini N, Douaud G, et al. Thalamic atrophy associated with painful osteoarthritis of the hip is reversible after arthroplasty: a longitudinal voxel-based morphometric study. *Arthritis Rheum* 2010; 62(10):2930-40.
9. Baer P, Weinberg E. Rheumatologists and Pain Management: In or Out of Our Comfort Zone? *J Rheumatol* 2008; 35(6):1174.
10. Dougados M. It's good to feel better but it's better to feel good. *J Rheumatol* 2005; 32(1):1-2.
11. Ton E, Bakker MF, Verstappen SM, et al. Look beyond the disease activity score of 28 joints (DAS28): tender points influence the DAS28 in patients with rheumatoid arthritis. *J Rheumatol* 2012; 39(1):22-7.

Top Ten Things Rheumatologists Should (And Might Not) Know About Diabetes and Endocrinology

By Alice Y.Y. Cheng, MD, FRCPC

When we begin medical school training, we are all like the stem cell – undifferentiated and multipotential. Over time, we begin to differentiate based on personality traits, interests, or positive and negative experiences. We also learn the stereotypes of the different specialties. Rheumatology and endocrinology share a number of the same stereotypes. Our specialties are often described as “cerebral”, “clean”, “underpaid”; we are also known as “the nicest people in Internal Medicine”. Like all stereotypes, there are some truths and some falsehoods, but it is not surprising that we are often lumped together because we share the same important task—caring for people with chronic disease. Since we will often be sharing the care of the same patients, the following is a list of the top ten things that a rheumatologist should know about diabetes!

1) Rheumatoid arthritis is associated with type 1 diabetes.

Type 1 diabetes (T1DM), like rheumatoid arthritis (RA), is an autoimmune disease and, therefore, it is not surprising that the two diseases may share common autoimmunity factors. Some of these factors have been identified, but at this time, there are no recommendations to routinely screen for T1DM in any population.

2) Rheumatoid arthritis is associated with type 2 diabetes.

This association is less well recognized. The chronic inflammatory state of people with RA is associated with insulin resistance – one of the fundamental pathophysiologic reasons for developing type 2 diabetes (T2DM). Data from British Columbia showed a hazard ratio of 1.5 (95% confidence interval [CI] 1.4-1.5) for

the presence of diabetes among those with RA, compared to non-rheumatic controls.¹ Therefore, think about diabetes when you have a patient with RA!

3) Hemoglobin A1C \geq 6.5% is diagnostic for T2DM

The 2008 Canadian Diabetes Association (CDA) Clinical Practice Guidelines recommend screening for diabetes with a fasting plasma glucose every three years in adults 40 years or older. In the presence of risk factors, however, screening can occur earlier and more

The chronic inflammatory state of people with RA is associated with insulin resistance – one of the fundamental pathophysiologic reasons for developing type 2 diabetes.

frequently. The diagnostic criteria for diabetes (see Table 1) have traditionally included fasting plasma glucose or two-hour plasma glucose level from an oral glucose tolerance test. As of July 2011, the A1C (glycated hemoglobin) has been added as a diagnostic criterion for type 2 diabetes in adults.² The A1C is a more stable measure of chronic glycemic status (approximately three months) and does not require fasting. An A1C of greater than or equal to 6.5% is diagnostic. The A1C is, however, unreliable in the presence of anemia, blood loss, hemoglobinopathy, iron deficiency, renal failure, liver failure and perhaps in certain ethnicities. For

Table 1

Diagnostic Criteria for Diabetes Mellitus

Fasting plasma glucose (FPG) \geq 7.0 mmol/L

Fasting = no caloric intake for at least eight hours

or

Casual plasma glucose (PG) \geq 11.1 mmol/L + symptoms of diabetes

Casual = any time of the day, without regard to the interval since the last meal

Classic symptoms of diabetes = polyuria, polydipsia, and unexplained weight loss

or

2hPG in a 75-g Oral Glucose Tolerance Test (OGTT) \geq 11.1 mmol/L

or

A1C \geq 6.5%

Using a standardized, validated assay, in the absence of conditions that affect the accuracy of the A1C

A repeat confirmatory laboratory test (FPG, casual PG, 2hPG in a 75-g OGTT, or A1C) must be done in all cases on another day in the absence of unequivocal hyperglycemia accompanied by acute metabolic decompensation. It is preferable that the same test be repeated for confirmation. However, in individuals in whom type 1 diabetes is likely (younger or lean or symptomatic hyperglycemia, especially with ketonuria or ketonemia), confirmatory testing should not delay initiation of treatment to avoid rapid deterioration.

more details, please refer to the Position Statement from the CDA.²

4) Check for prediabetes or diabetes before you start corticosteroids.

Corticosteroids can raise blood glucose levels. Screen for glucose problems before starting corticosteroids to help you identify people who are likely to run into hyperglycemia with treatment. The fasting plasma glucose (FPG) can be used as a screening tool (FPG 6.1-6.9 mmol/L indicates prediabetes; FPG \geq 7.0 mmol/L equals diabetes). In those who do not wish to fast, the A1C could be used as a screening tool (in the absence of factors that may distort the A1C).² In the presence of prediabetes or diabetes, refer the patient to either the local diabetes education centre and/or a diabetes specialist prior to, or at least concomitant with, the initiation of corticosteroids.

5) Prednisone causes glucose elevations in a predictable fashion.

Prednisone, taken in the morning, produces a predictable glucose pattern. The glucose levels begin to climb shortly after taking the prednisone, peaking

around supper time, and coming back down thereafter. People often will have normal fasting glucose levels, high lunch levels, really high supper levels and then come back closer to normal by bedtime.

6) Intra-articular steroids will also cause elevations in blood glucose.

Intra-articular steroids will also raise blood glucose levels for three to five days after the injection. If you have a patient with known diabetes receiving an intra-articular steroid injection, ask them to self-monitor blood glucose more often and contact their diabetes team for instructions. For those taking insulin, the team may advise temporary increases in their insulin doses. Depending on which oral antihyperglycemic agents they are using, similar advice may also be given.

7) There are specific glycemic targets for diabetes.

The 2008 CDA Clinical Practice Guidelines recommend that all people with diabetes achieve an A1C of less than or equal to 7.0%, which translates into a fasting/premeal glucose level of 4-7 mmol/L and a two-hour postprandial glucose level of 5-10 mmol/L. In

select individuals, an A1C target of less than 6.5% may be acceptable to further reduce the risk of complications.

8) Vascular protection is critical in management of diabetes.

The primary cause of death among people with diabetes is cardiovascular disease, as it is for people with RA. Therefore, vascular protection is the priority when treating diabetes. This can be achieved through a multifactorial approach. For all people with diabetes, the following should be achieved:

- a) Glycemic control (A1C \leq 7.0%);
- b) Blood pressure control (< 130/80 mmHg);
- c) Lifestyle control (smoking cessation, regular physical activity, healthy body weight).

For those considered “high risk” (*i.e.*, men > 45 years, women > 50 years, or those that are younger but have evidence of end-organ damage [microvascular or macrovascular] or long duration of diabetes [> 15 years] and age [> 30 years]), additional strategies include lipid control (low-density lipoprotein [LDL] < 2.0 mmol/L) and use of cardioprotective medications (angiotensin converting enzyme [ACE] inhibitor or angiotensin receptor antagonist).

9) There are two new classes of antihyperglycemic agents that utilize the incretin pathway.

Incretins (glucagon-like peptide-1 [GLP-1] and gastric inhibitory polypeptide [GIP]) are hormones produced by the gut in response to eating, that signal the pancreas to secrete insulin and suppress glucagon, allowing for control of blood sugar levels postprandially. The actions are glucose-dependent meaning that the effects are reversed as the blood glucose levels normalize. In T2DM, the incretin effect is blunted. Therefore, two classes of antihyperglycemic agents now exist to address this problem: dipeptidyl peptidase-4 (DPP-4) inhibitors and GLP-1 receptor agonists. The DPP-4 inhibitors inhibit the enzyme (DPP-4) that breaks down GLP-1. These are oral medications that do not cause hypoglycemia and are weight-neutral. The GLP-1 receptor agonists are administered by subcutaneous injection. They raise circulating GLP-1 levels to pharmacologic levels, thereby lowering blood glucose

levels with no risk of hypoglycemia and the potential for weight loss.

10) Insulin can be simply thought of as basal, bolus and premixed.

There are 16 different insulins available in Canada, with six having come out within the last 10 years. Therefore, it is challenging for many clinicians to remember all of them and differentiate between them. To make it simpler, all insulins that currently exist (and ones that are to come) can be categorized as one of basal, bolus, or premixed. Basal insulins are longer-acting insulins that serve as background insulin. Bolus insulins are shorter-acting and serve as boluses of insulin to match boluses of food (*i.e.*, meals). Premixed insulins are mixtures of basal and bolus insulins in a fixed ratio. For a simple reference tool for the insulins in Canada, please refer to the Insulin Prescription Tool developed by the Ontario College of Family Physicians (www.ocfp.on.ca/cme/initiatives/insulin-use-and-titration).

Rheumatologists and endocrinologists share the important task of caring for people with chronic diseases that often co-exist. A better understanding of the link between the diseases will certainly improve the care we provide to our patients.

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References

1. Solomon DH, Thorvardur JL, Canning C, Schneeweiss S. Risk of diabetes among patients with rheumatoid arthritis, psoriatic arthritis and psoriasis. *Ann Rheum Dis* 2010;69:2114-2117.
2. Goldenberg RM, Cheng AYY, Punthakee Z, Clement M. Use of glycosylated hemoglobin (A1C) in the diagnosis of type 2 diabetes mellitus in adults. *Can J Diabetes* 2011;35(3):247-249.

Five Thousand Steps: The Great Wall Marathon

By Ariel Masetto, MD

This year, a few intrepid rheumatologists from the Université de Sherbrooke in Quebec are launching, in conjunction with the Joints in Motion program of The Arthritis Society (TAS), a regional campaign: Follow us at the Five Thousand Steps of the Great Wall of China.

Known to be a difficult physical challenge, every year the Great Wall Marathon takes place in China. The course is divided in two sections. In the first, runners climb up and down 9 km over thousands of ancient stone steps of the Great Wall of China. Full marathoners complete this section twice, at the beginning and at the end of the marathon, whereas half marathoners only traverse it once, at the beginning of the race. In the second section, runners cross through the picturesque local villages and rice fields of Beijing. To specifically illustrate the particular challenge of this difficult course, last year's winner completed the Great Wall Marathon in three hours and 18 minutes, one hour and 15 minutes more than the traditional marathon world record!

Besides raising funds for TAS, the group from Sherbrooke wants to encourage arthritis patients to keep on fighting their disease and also to adopt a healthier lifestyle. The campaign will emphasize the importance of adopting healthier eating habits, quitting smoking, and exercising regularly.

Want to know more about the Great Wall Marathon? Please visit www.great-wall-marathon.com/Default.aspx for more information.

Collecte de fonds
pour la
Société d'Arthrite

Service de rhumatologie
CHUS

Dr. Patrick Liang
Dr. Sophie Roux
Dr. Claudie Bergeron
Dr. Ariel Masetto



(Left to right): Dr. Patrick Liang, Dr. Sophie Roux, Claudie Bergeron (resident), and Dr. Ariel Masetto.

Marathon de la
Grande Muraille
de Chine

Mai 2012

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5th Annual Rheumatology Winter Clinical Symposium

By Wayne J. Potashner, MD, FRCPC

Aloha all, I am pleased to be reporting about the 5th Rheumatology Winter Clinical Symposium (RWCS) from Maui, Hawaii from the perspective of my 4th consecutive year attending. The conference is the brainchild of several of the most prominent rheumatologists in the United States and features a review of many topics, including the most recent American College of Rheumatology (ACR) conference in the context of a beautiful and warm setting during the most intense part of the winter.

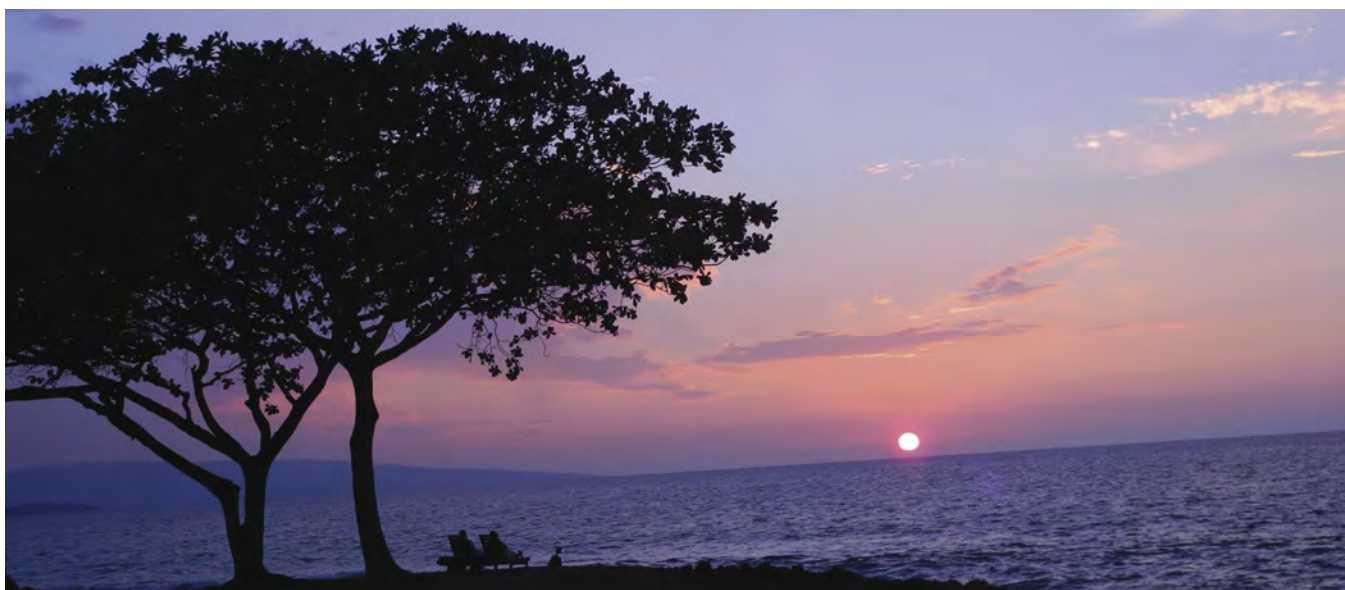
The symposium is relatively small, with about 200 physicians mostly from the United States mainland. The Canadian contingent is usually about 60 or so, with many of your friends and colleagues in attendance. Many of the Canadians have been to multiple RWCS conferences and realize not only the educational value, but also the inherent beauty of the venue.

The conference is headed by Dr. Arthur Kavanaugh, a respected Professor of Rheumatology at the University of California, San Diego (UCSD) and features well known experts in the field including, Dr. Vibeke Strand, Dr. Eric Ruderman, Dr. Jack Cush, Dr. Roy Fleischmann, Dr. Marty Bergman, joined this year by Dr. Ted Pincus, as well as several other presenters.

The format is fairly informal with sessions this year covering the Year in Review of rheumatoid arthritis (RA), psoriatic arthritis (PsA) and spondyloarthritis, systemic lupus erythematosus (SLE), primary Sjögren's Syndrome (SjS), and vasculitis. There were talks on how to approach myositis and multiple reviews on newer oral small molecules that are coming to market in the near future.

One particularly interesting session was a point-counterpoint discussion about the notion of treat-to-target. This particular debate, between Dr. Fleischmann and Dr. Bergman, was both comical and enlightening. The Canadians in the audience, most of whom perform tender and swollen joint counts on their patients regularly, found the arguments surprising. There is a cadre of American rheumatologists who do not physically examine their patients at most, if not all, of their visits, relying solely on patient-derived measures.

Joining us from New York, Dr. Pincus delivered the Kahuna lecture this year and was presented the Kahuna bowl, a prize given to our own Dr. Ed Keystone just last year. This year's lecture was a revelation about the effectiveness of the Routine Assessment of Patient Index Data 3 (RAPID3), a measure of patient function, which I now incorporate in



Sunset at the Marriott Wailea.

my practice along with the Clinical Disease Activity Index (CDAI).

All in all, the conference provides an exceptionally practical review of the topics that are important to clinical practice. It helps to interpret the important and relevant topics that may be difficult to understand when you attend a larger conference such as the ACR. There is always ample time to question the speakers, and opportunities to approach them on a personal level during the breaks to discuss issues. I was able to clarify some points this year with Dr. Kavanaugh over a snack, and he was very approachable and helpful. Many of our Canadian colleagues that attended had the same experience. The setting of the conference is informal and the presenters are relaxed. Their goal is to make this a satisfying experience. Where else do the attendees and the presenters dress in shorts?

Needless to say, the setting of the conference is second to none. The weather is spectacular and there are many outdoors activities to participate in; these include scenic



Dr. Karasik and Dr. Potashner dressed for a night on the town

drives as well as activities such as snorkeling, sailing, scuba, and whale and dolphin watching. The hotel, the Marriott Wailea, is spectacular and the sunsets are breathtaking.

This year, several of us went on an excursion to the island of Lanai. We were treated to a beautiful rugged environment, including a desert setting. Minutes later, we were traveling in our jeep along a dusty off-road trail to a deserted, pristine two-mile long Polihua Beach. It was an experience we will not soon forget.

The trip to the South Pacific is well worth it and everyone should consider attending RWCS 2013 in Maui next February. It is well worth your attention; watch the internet for

announcements. I fully expect to attend my 5th consecutive RWCS. Bon voyage and see you there. Mahalo.

*Wayne J. Potashner, MD, FRCPC
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Dr. Potashner, Dr. Karasik and Dr. Doris enjoying the rugged environs of Lanai.



The pristine Polihua Beach on Lanai, Hawaii.

The ILAR-East Africa Initiative: Supporting Rheumatology Education in Africa



"Life's most persistent and urgent question is, what are you doing for others?"
- Martin Luther King, Jr.

The work of the Initiative led to the establishment of the first rheumatology clinic and registry in East Africa. The involvement of international rheumatologists in teaching medical students, residents, and health professionals has inspired bright internal medicine and pediatric residents from Nairobi to consider pursuing rheumatology training.

Although still young, the Initiative has strengthened during the almost three years of work thanks to rheumatologists from across the globe, who have volunteered to share their enthusiasm, knowledge, and experience either

With the support of the International League of Associations for Rheumatology (ILAR) and the volunteer work of rheumatologists from the international academic community, the ILAR-East Africa Initiative started in 2009. Its **mission** is to accelerate the development and improvement of clinical rheumatology in the East African countries. The **goal** of this Initiative is to unite the international rheumatology community to aid in enhancing clinical rheumatology services in the East African countries. Specifically, the aim is to raise awareness of the impact of adult and pediatric rheumatic diseases among the East African medical and general community, and to train medical professionals, nurses, and allied health workers in the care of patients with rheumatic diseases. Based at the Kenyatta National Hospital, the main teaching hospital of the University of Nairobi, the program will expand to other Kenyan cities and East African countries. Dr Omondi Oyoo, one of the very few rheumatologists in Kenya and currently the head of The African League of Associations for Rheumatology (AFLAR), has been the local champion and facilitator of the project.

This Initiative relies on the partnership between the international rheumatology community and local East African institutions (universities, hospitals, and government), as well as other physicians and community leaders. The focus is on two main areas: patient care and rheumatology education. In addition, members of the Initiative support research projects to ensure that this program responds to the unique needs and reality of East African patients and physicians.

working from their own centers or teaching in Nairobi. From Canada, Dr. Paul Davis has been to Nairobi on a yearly basis as an external examiner, while Dr. Henri Ménard, Dr. Sasha Bernatsky, Dr. Carol Hitchon, Dr. Rosie Scuccimari, Dr. Peter Tugwell, and Dr. Ines Colmegna, together with other rheumatologists from the United States and the United Kingdom, are actively involved in the development of the educational and patient care programs. In addition, practitioners from other disciplines such as nursing, occupational/physiotherapy, and psychology have become involved. Local initiatives have also arisen; the most vivid example in this area is the systemic lupus support group that was started by a local woman, Ms. Sharon Kodhek, a few years ago. The support group now has over 200 members that meet on a monthly basis at the Nairobi Clinic.

The growing interest, input, and involvement of people around the globe and the achievements of the first three years of work have expanded the Initiative's action plan. A webpage has been created (www.arthritisafrika.org), and a foundation has been set up to support the education of professionals and community workers in rheumatology. Opportunities to expand the work to other cities are hopefully on the horizon. There are multiple ways in which you can become part of this effort. For more information, please contact Dr. Ines Colmegna at ines.colmegna@mcgill.ca or Dr. Paul Davis at paul.davis@ualberta.ca.

ILAR-East Africa Volunteers
www.arthritisafrika.org

Scientific Meeting: A Preview

By Joanne Homik, MD, MSc, FRCPC

I hope you will join us at this year's annual Canadian Rheumatology Association (CRA) Annual General Meeting (AGM) in beautiful Victoria, British Columbia at the historic Fairmont Empress Hotel and Victoria Conference Centre.

We will be introducing a full day program for the residents on Wednesday. The AGM will start right after the fellow's program with the National Update at 5p.m., followed by a welcome reception. This year, we are introducing a plenary session which will feature the top-ranked abstracts as oral presentations. The very successful poster tours in Mexico will be included in our three-hour poster session. Our sponsored satellite symposia will be scheduled every morning with breakfast.

We have invited some excellent speakers to participate in this year's AGM, including Dr. Paul-Peter Tak as our Dunlop-Dottridge Lecturer and Dr. Maria Suarez-Almazor as our State-of-the-Art Lecturer. This year, we

will also feature a keynote address by our Distinguished Investigator Awardee, Dr. Walter Maksymowych. Workshop topics include the following: difficult lupus, difficult vasculitis, and how to teach on the fly. The annual CRA debate will analyze the question, "Should ultrasound be used in the rheumatologist's office?"

Please join us in lovely Victoria in March for an excellent CRA meeting.

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Top Ten Things To See and Do in Victoria

Should you have some extra time on your hands after the Canadian Rheumatology Association (CRA) Annual General Meeting (AGM), perhaps consider this Top Ten list of things rheumatologists can do in Victoria!

10) Explore history and culture at the Royal B.C. Museum.

Delve into the history of the region as you wander through three art galleries, featuring displays on the First Peoples, Modern History, and Natural History. Also housing the oldest building in Canada, this museum will transport you back in time.

www.royalbcmuseum.bc.ca/MainSite/default.aspx

9) Eat and drink like a local.

Victoria is world-renowned for its locavore initiatives, emphasizing fresh, local ingredients with Asiatic flavours. From pub grub to Pacific Rim cuisine, wine tours to street food, enjoy the culinary bounty Victoria has to offer.

www.vancouverislandbcbritishcolumbia.com/vancouver-island-bc-restaurants.ihtml



Tourism British Columbia

8) Pay a visit to Fan Tan Alley.

The narrowest street in Canada, at points only 0.9 m wide, this passageway once led to back-alley gambling halls and brothels. Today, Fan Tan Alley and the surrounding blocks are filled with testimonials to the enduring Chinese culture in Victoria; the city also boasts the oldest Chinatown in Canada. Pass through the Gates of Harmonious Interest and delve into this vibrant area. www.bcarchives.gov.bc.ca/exhibits/timemach/galler02/frames/chinatown5.htm

7) Go on a Heritage Walking Tour.

Pace yourself as you follow on the trails of spooky haunting, the glamour of the Gold Rush era, the emergence of Chinatown, or the shady past of Victoria's lawbreakers.

www.victoria.ca/visitors/wlkngr.shtml



Tourism BC/Adam Dorst

6) Take a trip back in time to Craigdarroch Castle.

Once home to coal magnate Robert Dunsmuir and his family, Craigdarroch Castle has since served as a military hospital, a college, a series of offices, and home to the Victoria Conservatory of Music. The sprawling interior contains a fantastic collection of stained glass and etchings. From the fourth-floor and tower windows, enjoy spectacular views of Victoria, the Juan de Fuca Strait, and the snow-capped Olympic Mountains.

www.craigdarrochcastle.com

5) Relax over a cup of tea.

Look no further than the Fairmont Empress Hotel for a traditional English tea service dating back to 1908. Amid a classical tea lobby, raise a cup to this timely ritual.

www.fairmont.com/empress/GuestServices/Restaurants/AfternoonTea.htm



Tourism BC/Tom Ryan



4) Play golf.

The temperate climate of Victoria makes it a perfect spot for year-round golfing. Dust off the clubs and take in a round to be the envy of all those who have never golfed in March! The Vancouver Island Golf Trail is just the place to start.

www.hellobc.com/vancouver-island/things-to-do/outdoor-activities/golf.aspx

3) Quaff a hand-crafted pint.

At Spinnakers Gastro Brewpub, house-brewed ales and lagers feature regional ingredients, diverse brewing styles, and a flavour to suit every palate. Try the tasting menus.

www.spinnakers.com/our-beers

2) Explore the city.

Whether by horse-drawn carriage, water taxi, bicycle, or double-decker bus, tour Victoria by every means imaginable!

www.hellobc.com/victoria.aspx

1) Take pictures for the Photo Contest!

The *Journal of the Canadian Rheumatology Association (CRAJ)* will be featuring its yearly Photo Contest with entries from the AGM in Victoria. Have your camera at the ready to capture all your adventures in this beautiful Western locale! Please submit your entries to: katiao@sta.ca for a chance to win a CRA backpack!

2012 Photo Contest

Have you captured a candid shot of your fellow rheumatologists or snapped something picturesque?

Don't forget the battery or the charger for your camera for the Seventh Annual CRA Photo Contest in Victoria, British Columbia. Submit your best scenic and candid photos electronically by April 10th, 2012, and you'll have a chance to win a CRA backpack!

Please email entries to Katia Ostrowski at katiao@sta.ca

All entries will be published in the online edition of the *CRAJ*, and the winning photos will be published in the summer issue of the *CRAJ*.



Highlights of Victoria, British Columbia



Tourism BC/Tom Ryan

Get Fit in the Capital City

As host to the 1994 Commonwealth Games, Victoria established itself on the global sports map. Since then, Victoria has maintained a Canadian sporting legacy. Victoria is rated the Fittest City in Canada, and Cycling Capital of Canada (both cited to Statistics Canada 2006); 36% of the adult population is active, nearly double the national average. With the mildest climate in the country, Victoria is Canada's destination for year-round outdoor adventure. Victoria has built up the reputation as an extremely walkable city. The city's beauty and natural surroundings inspire people to get active and enjoy the outdoors. Local favourites include Goldstream Provincial Park, East Sooke Regional Park, and the Juan de Fuca Marine Trail. As Canada's cycling capital, Victoria offers cycling routes along Victoria's stunningly beautiful waterfront through the historic neighbourhood of James Bay, Beacon Hill Park, and Mount Douglas Park.

Culinary Victoria

Great cuisine begins with great product and as Southern Vancouver Island is rich in agricultural land and culinary culture, it is no surprise that the area has developed a reputation as "Canada's Provence" for its high quality, niche food products. The farms on the Saanich Peninsula, located 20 minutes from downtown Victoria, have long supplied Victorians with fresh, local produce.

The information on these pages has been obtained from Tourism Victoria; for further information, please visit www.tourismvictoria.com.

Visitors can tour the many farms and spirit purveyors on the Saanich Peninsula, experiencing the region's abundance and "field to table" philosophy. There is a passion for local foods that deliver world-class flavours throughout the city of Victoria. The food shops of Chinatown offer a wide variety of food shops dedicated to Asian cuisines. Exotic fruits, vegetables, noodles galore, curried beef buns and all sorts of sauces are just a few of the items found on Fisgard Street. There are also many food shops and neighbourhood independent grocers that carry local gastronomic treasures, whether supplies for an impromptu picnic or a unique culinary memento. While Victoria has had a reputation for traditional Afternoon Tea, it is also becoming well known for its modern take on tea, be it tea tasting bars, tea cocktails or an Asian-influenced Afternoon Tea. The city also has a strong coffee culture, boasting a large number of independent coffee shops that roast in-house and are home to internationally recognized baristas. For culinary adventures after dark, Victoria's hip and vibrant cocktail culture is a must-do. There are a variety of cocktail lounges revisiting the art of the cocktail and reinventing it with fresh, new takes on classic libations. Exploring a new favourite is the makings for a perfect night out.

Shop 'Til You Drop in Victoria

Shopping in Victoria is fabulous! Whether visitors are just window shopping or on a major shopping spree, in



Tourism BC/JF Bergerson



Victoria they can browse quaint shops, local markets and major shopping malls to find their heart's desire. Victoria offers everything from antiques to the wares of local artisans and First Nations to the designs of the hippest trendsetters. The city's layout encourages strolling and exploring the many side streets at an easy pace. Visitors shouldn't

miss Canada's oldest Chinatown to shop for art, curios, home furnishings and Asian wares, and a walk down Fan Tan Alley, Canada's narrowest street. Peruse the colourful heritage buildings of LoJo (Lower Johnson) for locally designed fashions, naturally-made products and jewelry to name a few. Stroll the Design District featuring over 25 businesses focused on design and home décor and don't forget fashionable North Fort, where Antique Row mingles with new, fresh fashions. With so much to explore, make sure to set aside a few hours and include a lunch stop at one of Victoria's quaint cafes to sustain the shopping mode all afternoon.

The Inner Harbour and Beyond

The Inner Harbour is a bustling centre where visitors can experience Victoria's picturesque landmarks all by taking a leisurely stroll. The British Columbia Parliament Buildings stand impressively to the south end of the Harbour, The Fairmont Empress Hotel boasts her turn-of-the-century beauty and the lower causeway offers entertainment galore as buskers sing and perform! James Bay offers the best of both worlds for history buffs and savvy culinary tourists with the Emily Carr House and Royal B.C. Museum coupled with Sips Artisan Bistro offering artisan meats, cheeses, locally produced poultry, and west coast seafood. Nestled in James Bay is Fisherman's Wharf, where visitors can wander alongside the colourful houseboats and become acquainted with the harbour seals which regularly visit the dock. Branching off to the east of James Bay is Victoria's beloved Beacon Hill Park. Bordering Beacon Hill Park is the quaint, tree-lined Cook Street



Tourism BC/Akran Dorst

Village where visitors will find an enclave of shops, restaurants, and colourful heritage homes. For visitors itching to explore even further, head just ten minutes outside of downtown to funky Fernwood, a popular culinary and arts destination. Just 15 minutes from downtown on the far east of the city, Oak Bay is one of Victoria's oldest and best known neighbourhoods, filled with beautiful character homes, Garry Oak trees, and sandy beaches. Oak Bay Village, a quaint strip of Oak Bay Avenue, is a lovely destination for an afternoon stroll with plenty of time for shopping and eating. The many bookshops, art galleries and boutiques speak to the quiet pleasure of browsing in this community.

Green Around Town

It is easy to have a green vacation in Victoria as the city's mild climate makes for car-free vacations with incredibly easy access to biking, walking and running routes throughout the city. For more information visit Tourism Victoria's Green Blog at <http://green.tourismvictoria.ca/>



Bear Mountain Golf Resort/Rob Perry

Update from Victoria

By Kimberly A. Northcott, MD, FRCPC

Victoria remains idyllic as the City of Gardens, boasting a mild oceanic climate with an average winter temperature of 8°C, an annual flower count scheduled every February, and 50% less rain than Vancouver (sorry Kam Shojania).

There are currently four full-time adult and one pediatric rheumatologist serving a diverse population base of 360,000 within the Capital region. We receive consults from throughout Vancouver Island, the surrounding Gulf Islands, and as far north as my one token patient from Nunavut. Our patients range from the stereotypical “newlywed to nearly dead,” and include the often interesting and complex First Nations people.

As solo practitioners, we consistently collaborate at monthly division meetings. We are excited about the recent arrival of Dr. Satish Rachapalli from London, England joining our team as of September 2011. We formally network with our Nanaimo colleague, Dr. Maqbool Sheriff, twice annually through our Island Rheumatology Meeting, one of which is designated as a memorial lecture dedicated to the late Dr. Peter Cosgrave, previously of Duncan, British Columbia, and hosts a prominent visiting guest speaker.



Dr. Northcott, her family, and some of Victoria's “nearly dead.”



Dr. Northcott with her daughters, Ava (8) and Faye (6).

We provide consultation services for two hospitals, The Royal Jubilee and Victoria General. We have access to an infusion clinic, basic science research and clinical studies, and teaching appointments in the Island Medical Program, a satellite of the University of British Columbia (UBC) medical school and resident training program. We work in collaboration with the allied healthcare team at the Victoria Arthritis Center which houses physiotherapists, occupational therapists, a nurse, and a social worker.

Despite the bustle of clinical practice to accommodate an expanding wait-list, there remains the guarantee of enjoying west coast living with a five minute commute to the office, thus allowing more time to indulge in year-round gardening, boating, bistro dining, boutique shopping, numerous sports, and community arts programs with the Victoria symphony, Canadian Pacific and Victoria ballet companies, and live community theatre productions to name just a few of the city's recreational attributes.

Think twice before buying a return ticket at the Annual General Meeting in 2012 – you may never want to leave!

*Kimberly A. Northcott, MD, FRCPC
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Update from the Southern Interior

By Stuart Seigel, MD, FRCPC

The interior of British Columbia consists of populated valleys separated by imposing mountain ranges. The winding roads between these communities can be challenging, and often treacherous, in the winter. The land is breathtakingly beautiful, and perhaps the reason many of us choose to live and work here.

Dr. Karen Pont is the only rheumatologist in the east Kootenays, practising in Cranbrook, on the western edge of the Canadian Rockies. Further to the west in Trail and Nelson, several Vancouver rheumatologists provide additional clinic time through a traveling program.

In the popular and sunny south Okanagan Valley, Dr. Bob Offer has been in practice in Penticton long enough that he may have forgotten he once mentored me as a medical student. He was a definite influence on my career choice.

Also in Penticton we are fortunate to have Dr. Jackie Stewart, well entrenched after her transition from Toronto. She has also started an osteoporosis clinic. When not training for alternate-year Ironman Triathlons, she enjoys hiking and has recently taken up fly fishing.

In the southern Cariboo, the city of Kamloops has Dr. Jan Navratil, Dr. Barbara Blumenauer and Dr. Nancy Hudson providing rheumatology care for a vast referral area.

Finally, the largest city, Kelowna, has a full complement of

four rheumatologists. Two others joined Dr. Dan McLeod and myself in the last 18 months. Dr. Nima Shojania moved from Richmond to the seemingly “quiet” West Kelowna, enjoying the good life near two wineries and many vineyards. He has continued his northern British Columbia traveling clinic to Dawson Creek. Meanwhile, Dr. Anick Godin started her practice



Dr. Seigel taking some time away from the powder in Rogers Pass to peruse the *CRAJ*.

in Kelowna after completing her fellowship at the Université de Sherbrooke, and now understands the joy of skiing western powder. She is the only rheumatologist in the British Columbia interior trained in musculoskeletal (MSK) ultrasound, and is in the early stages of setting up an osteoporosis program.

Kelowna is the site of the new University of British Columbia (UBC) Okanagan Medical School, and the Kelowna General is now a teaching hospital. All four of us in Kelowna contribute to rheumatology teaching for medical students, as well as family and internal medicine residents. Dan and I participate as attendings on the Medical Teaching Unit (MTU). In addition to his own busy practice, Dan makes regular trips to northern British Columbia for remote rheumatology clinics.

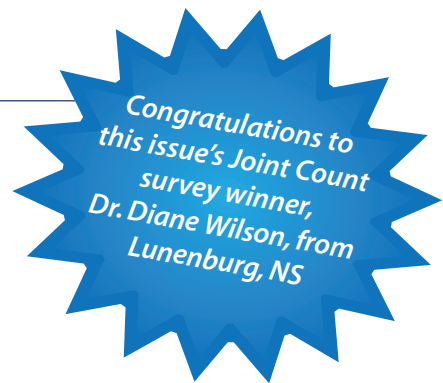
For me, spring marks the dwindling days of the ski season. I might be found skinning up a mountain on back-country skis, heading for a scenic pass, looking for untracked powder. Having experienced one avalanche so far, I am always looking to add more knowledge and experience in mountain safety. Much like Continuing Medical Education (CME)!

There you have it, a snapshot of the Southern Interior British Columbia rheumatologist community.

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Dr. Stewart hiking in Cathedral Lakes.



Let's Get Together and Feel Alright

By Philip A. Baer, MDCM, FRCPC, FACR

The Annual General Meeting of the Canadian Rheumatology Association (CRA) will take place March 28-31 in beautiful Victoria, British Columbia. More than half of respondents (58%) surveyed noted that they would be attending this year's meeting (Table 1). I look forward to seeing you all there! Despite the appeal of sunny weather, only 43% of respondents attended the previous year's meeting in Cancun, Mexico (Table 2).

Of the numerous options available for yearly congresses, the CRA, the American College of Rheumatology (ACR), and the European League Against Rheumatism (EULAR) meetings are amongst the most seminal. When asked how many of these meetings they planned to attend (Table 3), the vast majority said they would be present for one (43%) or two (37%) conferences. A brave 15% of responders aim to attend all three meetings in 2012. Perhaps some will share their experiences in future issues of the *Journal of the Canadian Rheumatology Association (CRA)*.

A variety of rheumatology review courses are on offer throughout the year, yet more than half of respondents (63%) noted that they have not or do not plan to attend any of these sessions in 2012 (Table 4). Perhaps Dr. Potashner's report on the Hawaiian RWCS conference (see "5th Annual Rheumatology Winter Clinical Symposium", page 18-19) will sway some respondents to attend one of these meetings next year!

*Philip A. Baer, MDCM, FRCPC, FACR
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Table 1. Will you be attending the Canadian Rheumatology Association (CRA) meeting in Victoria in March, 2012?

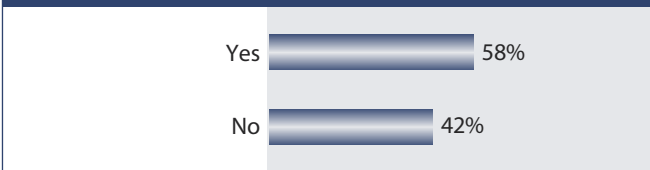


Table 2. Did you attend the CRA meeting in Cancun, Mexico in 2011?



Table 3. Of the CRA, American College of Rheumatology (ACR), and European League Against Rheumatism (EULAR) meetings, how many of these meetings do you plan to attend in 2012?

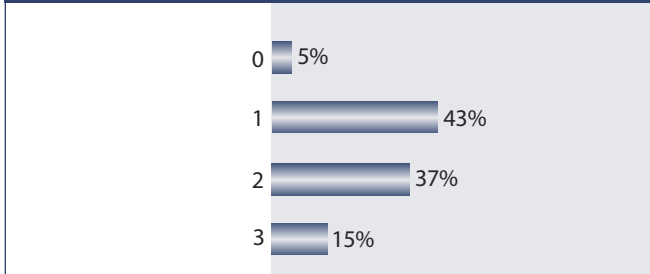


Table 4. Will you attend any rheumatology review courses (e.g., Rheumatology Winter Clinical Symposium [RWCS], ACR Clinical symposium, Harvard courses, New York University [NYU] courses, etc.) in 2012?



The Child With A Limp

By Janet Ellsworth, MD, FRCPC

The patient is a 5-year-old boy who was referred with complaints of pain in the right knee and a limp of four days duration. He had been previously well, aside from a cold two weeks previously, and two episodes of otitis media as a toddler. He has been growing and developing normally. There was no history of injury. He had no fever, rash, nor any other constitutional symptoms. There has been no travel and no history of tick bites.

On examination, he looked well, and had no abnormalities on general examination. There was no bruising or swelling noted over the right leg. He had a slight limp. He had limitation of internal rotation of the right hip, but the right knee examined normally, as did the remaining joints.

Plain X-rays of the hip and knee were reported as normal. Complete blood count (CBC) and differential were normal, and the erythrocyte sedimentation rate (ESR) was 17 mm/hr.

Limp is a common problem in children. In some cases, limping may be caused by non-painful conditions such as neuromuscular disease; however musculoskeletal (MSK) pain is the most common reason for a limp. The estimated prevalence of MSK pain among school-age children varies, however; a Finnish population-based study¹ determined that 18.3% of 3rd and 5th graders had lower limb pain. MSK pain accounts for approximately 6% of children's visits to a primary-care practitioner.²

There are a number of common and/or serious conditions that can cause a limp in children.³

Trauma

Injury is the most common cause of MSK pain and limp. The trauma history is usually recent (*i.e.*, within hours of presentation). In younger children, fractures are more commonly noted than soft tissue injuries such as sprains. Finding a fracture with no history of trauma, or a mechanism of injury that is not consistent with the fracture, should make one suspicious for a diagnosis of non-accidental trauma (*e.g.*, child abuse).

The patient had no history of trauma and his X-ray did not show a fracture.

Infections

Both septic arthritis and osteomyelitis can present with a limp. In children, these infections typically result from bacteremia and hematogenous spread. Children with septic arthritis are generally unwell, with fever, significant pain, and often refuse to walk or move the involved joint. Children with osteomyelitis will have a similar presentation; however, the symptoms may be less acute and severe. In addition to fever, localized tenderness would be noted at the site of the infection. Blood work typically reveals an elevated white blood cell (WBC) count and ESR. Unusual infections, such as Lyme disease, can be considered when there is a history of tick bite or travel in an endemic area.

The patient was not febrile and still looked well. The joint was not extremely tender and there was no localized bone tenderness. In combination with the normal CBC and only mildly elevated ESR, neither septic arthritis nor osteomyelitis are likely.

Reactive/Post-infectious Arthritis

Following streptococcal infection, children can develop an arthropathy—either alone or along with other features of acute rheumatic fever. Reactive arthritis can also occur after a diarrheal illness.

The patient had no history of a preceding bacterial or diarrheal infection and no other signs of rheumatic fever.

Inflammatory Arthritis

Acute arthritis in single or multiple joints can occur in the context of inflammatory syndromes, such as Henoch-Schönlein purpura (an acute vasculitis with purpura, abdominal pain, and nephritis) or Kawasaki disease (an acute vasculitis with rash, fever, mucous membrane

changes, lymphadenopathy, and coronary arteritis). In chronic inflammatory diseases, such as inflammatory bowel disease or lupus, arthritis can also be a presenting feature, however, it usually presents along with other characteristic signs and symptoms. Juvenile idiopathic arthritis (JIA) often presents with a limp, but symptoms develop gradually and it is unusual for children to present within a few days of the onset of symptoms. Although monoarthritis is common in JIA, isolated hip arthritis is unusual, especially in younger children.

The patient had no other signs or symptoms of a generalized acute or chronic inflammatory condition. Given the acuity of his symptoms, and the involvement of the hip at this age, JIA would be unlikely.

Malignancy

While malignancy is not common in childhood, approximately 10% of children with acute lymphocytic leukemia (ALL) present initially with pain and/or limp. The pain is often out of proportion to the physical findings and is worse at night. Abnormalities of the blood counts, such as low WBC and/or platelet counts, would be suspicious for this diagnosis. Other malignancies such as neuroblastoma and lymphoma can also produce a limp. Localized bone tumours, such as osteosarcoma, would be uncommon in younger children, and would often be visible on a plain X-ray.

The patient's overall wellness, lack of nighttime pain, and his normal CBC and X-ray make malignancy unlikely.

Repetitive Stress/Overuse

While uncommon in young children, teenagers can develop pain and limp secondary to mechanical overuse. Symptoms typically worsen with activity and improve with rest.

The patient's age and the absence of an activity precipitating his symptoms make this unlikely.

Specific Hip Problems

In an older child, the possibility of a slipped capital femoral epiphysis causing pain and limitation of the hip would be a consideration. Presentation can be acute or more chronic. The diagnosis is made by anteroposterior (AP) and lateral plain film X-ray of the hip.

In a younger child, it is important to differentiate between two conditions which occur most commonly in children (boys more often than girls) aged 4 to 10 years:

1. Transient synovitis of the hip is a common, self-limited condition that often follows one to two weeks after an upper respiratory tract infection. Children are well; X-rays and blood work are usually normal. Ultrasound will demonstrate a joint effusion; however, it is not necessary in the majority of cases. Signs and symptoms typically improve significantly within seven to 10 days, and complete resolution would be expected within two to three weeks.

2. In contrast, Legg-Calvé-Perthes disease (idiopathic avascular necrosis of the hip) is less common, has a less acute onset, and symptoms and signs continue for months to years. X-rays may be normal for up to one month, then show characteristic changes of sclerosis and/or resorption of portions of the femoral head (early) followed by deformity of the femoral head (late). If this diagnosis is suspected, close follow up with repeated clinical and X-ray examination is required.

The patient had an acute limp with findings localized to his hip, which presented shortly after an upper respiratory infection. His normal CBC, minimally elevated ESR, and normal X-ray are all consistent with the diagnosis of transient synovitis of the hip. However, the most valuable "diagnostic test" in this case was reassessment in two weeks, at which time the patient's symptoms had resolved and his hip examination was completely normal.

Summary: While MSK pain and limps are common in children, a good history and physical examination, accompanied by basic screening tests of X-ray, CBC, differential, and ESR should be sufficient to make a correct diagnosis in the majority of cases.

Janet Ellsworth, MD, FRCPC

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References:

1. El-Maetwally A, Salminen JJ, Auvinen A, et al. Risk factors for traumatic and non-traumatic lower limb pain among preadolescents: a population based study of Finnish Schoolchildren. *BMC Musculoskelet Disord* 2006; 7:3
2. De Inocencio J. Epidemiology of musculoskeletal pain in primary care. *Arch Dis Child* 2004; 89(5):431-4.
3. Tse SM, Laxer RM. Approach to Acute Limb Pain in Childhood. *Pediatrics in Review* 2005; 27(5):170-9.