

Arthritis Clinical Link Newsletter



Created and Distributed by the Mary Pack Arthritis Program

A Newsletter for health professionals working with people with arthritis

March 2010

Editor's Message

I attended a session at the recent Canadian Rheumatology Association annual meeting on 'An overview of models of care for arthritis'. In the body of the newsletter I will give a summary of the presentation, but what I would like to comment on in the editorial is the discussion that ensued following the presentation. It was clear from comments made by nurses, physical therapists, occupational therapists, and other allied health professionals from many provinces in Canada that our health care system is in tumultuous times with care providers being asked to do more with less. And unfortunately, this is not just a Canadian phenomena. I am currently reading a book entitled, "Chaos and organization in health care" by Thomas H Lee and James L Mongan, and they describe similar pressures affecting the American Health Care System. In the briefest of terms, they believe that the primary problem is the chaos in which services are provided and that one of the solutions is a better organization of how the system works. They then proceed to outline their thoughts on how this might be done. This brings me full circle to a second point that I would like to make on the Models of Care presentation. One of the comments I heard from many attendees at the session was that although the overview of models of care was useful, and that the ensuing half hour discussion was stimulating, people left hungry for concrete ideas on how to do more with less. And I wonder if part of the reason for this is because care providers are struggling with long waiting lists and researchers have yet to find the answers. This will be a theme for the next several issues, but in the meantime I would be interested in hearing from you, and in doing so, you have the chance to **win a copy of Thompson's Rheumatology Pocket Reference**, 3rd Edition by Dr Andy Thompson. What have you done in your practice to improve access for arthritis patients in your community? How have you addressed waiting lists? What interventions have you initiated to provide more effective? Let me know and I'll share your ideas with other ACE members.

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 March 4th. Following their completion of the workshop, I would like to warmly welcome the following individuals to the ACE program:

Nursing

Ruth Dimond - OASIS, Vancouver
Laurie Serafin - OASIS, Vancouver

Lee Ash - Whitehorse General Hospital
Anja Fielding - Home Care, Old Masset Village Council
Jeannine Krauseneck - Qwemtsin Health Society, Kamloops
Michelle Sam - Katzie First Nation, Pitt Meadows
Marguerite Wong - Adjuvantz Patient Support Program, North Vancouver
Tamara Tuller - Ulkatcho Indian Band, Anahim Lake
Donna Foyle - Mary Pack Arthritis, Vancouver

Deb O'Brien - Doctor's Office & East Kootenay Regional Hospital, Cranbrook

Physical Therapy

Wendy Watson - OASIS, Vancouver

Julia Park-Bendel - Home & Community Care, Victoria

Elizabeth Bryce - Saanich Peninsula Hospital

Louise Pothier - Saanich Peninsula Hospital

Freeman Qu - Kelowna General Hospital

Samantha Deakin - Tricity Home Health, Coquitlam

Joanne Robbins - Kootenay Boundary Regional Hospital, Trail

Tracy Kung - Vancouver General Hospital

Michael Elder - Kamloops Community Rehab

Tara Conlon - Vancouver General Hospital

Naomi Sampson - Home & Community Care, Victoria

Carla Barriga - Tri-city Home Health, Coquitlam

Marian Cayer - GF Strong Rehab, Vancouver

Phil Lawrence - Vancouver General Hospital

Occupational Therapy

Taryn Doyle - OASIS, Vancouver

Morag Crocker - OASIS, Vancouver

Rita Mak - Burnaby Hospital

Chad Bauld - Whitehorse General Hospital

Heather Leung - Holy Family Hospital, Vancouver

Wendy Lam - Holy Family Hospital, Vancouver

Lisa Tran - Holy Family Hospital, Vancouver

Maila Lintern - Mary Pack Arthritis, Victoria

As new members of the ACE program, I would encourage each of you to check out the Arthritis Resource Guide for BC website. The main page of this website is a great resource for your clients, as it indicates the arthritis resources that are available in many communities in BC. This can be accessed at www.argbc.ca - Another section on this website includes assessment tools, treatment approaches, patient education handouts, and other health care professional resource materials. These materials can be accessed at: www.argbc.ca/practitioner

Dates Set for Spring 2010 TOTS Clinics

The occupational therapists from the Mary Pack Arthritis Centre in Vancouver will soon be embarking on travelling clinics to the following communities:

Quesnel	April 13 & 14
Prince George	April 14 & 15
Williams Lake	April 16 & 19
100 Mile House	April 20
Lillooet	April 21
Merritt	April 22 & 23
Smithers	April 26
Hazelton	April 27 & 28
Terrace	April 29 & 30
Bella Coola	May 10 & 11
Bella Bella	May 12 & 13

If you have clients who live in these communities or in the surrounding area, and who could benefit from seeing an OT, your help in facilitating a physician's referral would be greatly appreciated. Referrals can be faxed to Sarb Arora - Sarb.Arora@vch.ca

Clinical Pearls of Wisdom

Jill Goyert, an OT in Vancouver, had this advice, "One of my clients who has limited shoulder movement and poor hand function, passed along this idea for managing eye drops. She uses the standard X-style of kitchen tongs, places the eye drop container in the centre of the X (next to the pivot point) and squeezes very lightly.

Jackie Harris, an OT at the Penticton Arthritis Services, submitted these two pearls.

Jackie writes that she discovered that there are two lighted canes on the market and the web sites of the companies selling these canes are as follows: <http://www.pathlighter.com/> and <http://www.lightedwalkingcanes.com/> She felt that these canes were a great idea for the dark Canadian night, as they help to make our seniors more visible, and hopefully reduce the risk of falls.

Jackie also shared the following Winter Mobility Tips that she obtained from Wendy-Lee Hamilton, a PT from Nova Scotia that worked with Jackie on Mobility lectures for BCIT. I have included these tips, verbatim, from a handout by Wendy-Lee. As weather is hopefully past in most parts of BC, you may want to print these out for use in upcoming years.

“Ice and snow can be deterrents to your normal outdoor activities. Here are a few suggestions to keep you from developing cabin fever this winter.

Getting out of the door:

- Keep a bag of inexpensive kitty litter at your doorway, to scatter over the steps for extra traction, before you exit.
- Be aware that an out-swinging door can catch the wind and pull you off balance
- Choose flat bottom shoes boots with good treads
- Ladies fashion boots with high heels are not really a good choice for outdoors.
- Keep a shovel indoors so that you can clear a path as you walk, or hire someone to clear your steps and driveway
- Consider the purchase of ICERS or a similar product, which fit over the bottoms of your boots to provide traction on ice (available at hardware and drug-stores). These types of products are not for indoor use! If you are leaving your home to go shopping, you will need to change into another set of shoes to walk safely indoors.
- If you use a cane, purchase a retractable ice pick for the bottom tip. If you can't find this product, just ask the store staff.
- When walking, use ski poles with metal tips on the bottom. These are designed for use in snow, and greatly improve your stability - four legs are better than two. The wrist loops at the top of the poles are very useful if your hand grip is weak or painful

Getting In/Out of your car:

Many falls occur while climbing into/out of a vehicle (Think of the fate of the turkey's wishbone, and you can visualize the mode of injury!)

- When getting into a car, open the door, step close to the seat and turn your bottom toward the seat. Both feet are to stay on the ground until your bottom is seated on the car seat. Once seated, lift each leg individually into the car. This is exactly the method that Queen Elizabeth and Phillip use. Watch them yourself!! Do the opposite to exit the car. Swing your legs out and place both feet firmly on the ground before you attempt to stand. In icy conditions, fill a margarine tub with kitty litter and leave it in your car. Once you swing open your car door, you can sprinkle the litter over the slippery parking lot before you exit. It only takes a second to do so.

- If you find your upholstered car seat “sticky”, keep a clear plastic bag covering your seat. This reduces the friction between your coat and the seat upholstery and makes it easier to swing both legs out of the car. There is also a new product that is a portable grab bar for car door use. It is called Handybar, and looks a bit like a screw driver handle. It fits into the U-shaped striker on the door frame and is extremely handy when rising from sitting to standing. Handy-bars are available in most drug, hardware, and large department stores, but since this is a new product, I will include some contact information: Contact 1-888-738-0611 or www.handybar.com

Walking:

Given that many rural roadsides are piled high with snow banks, it is often safer to plan an indoor walking route. Contact local community leaders to ask if you can walk in local buildings during non-peak times. For example, your own church may welcome walkers on weekday mornings. Plan a social walking group for regular day-times in your own community. Offer to bring indoor footwear so that floor cleaning is not an issue. Building heating costs are minimal if you leave your coat on. Keep track of your efforts by using a calendar to record your time or distance walked.

Hip Protectors:

Hockey players and figure skaters have long known the benefits of wearing hip protection on icy surfaces. This product is available to minimize injury to

your hip joints should you have a fall. Hip protectors come in the form of a belt or briefs that can be worn indoors and outdoors. There are many styles available from drug stores and medical supply retailers. Research shows that when these garments are worn, the severity of the injury is decreased.

Play safe! When spring arrives, you will find yourself in good condition, and ready to enjoy warm weather. Stay in the game!

Arthritis Health Professions Association (AHPA) Educational Teleconference Series

AHPA has 6 educational teleconferences that are taking place this year. Remaining sessions include:

Thursday, April 29th - Dr. Carrie Matteson - **Predictors of obesity in individuals and populations**

Thursday, May 27th - Dr. Kam Shojania - **Co-morbidities in rheumatoid arthritis**

Thursday, June 17th - Anar Dossa - **Overview of complementary therapies in arthritis**

Thursday, September 30th - Dr. Rick Adachi - **Imaging in arthritis**

Thursday, October 28th - Chuck Ratzlaff - **Knee and hip OA research update: Mechanical risk factors and prevention**

This year access to the educational teleconferences is only being made available to individuals who have purchased an AHPA membership, which costs \$75 for the calendar year. Membership brochures are available online at:

http://www.ahpa.ca/index.php?option=com_content&view=article&id=102&Itemid=103

New Patient Education Materials

A new booklet has been developed that should be of interest to clients with any type of disability who are unemployed or who are having difficulties managing their current work situation. The 14-page booklet is called *Self employment for people with disabilities: A booklet of practical tips and resources for becoming self-employed*. The booklet offers advice that

was obtained from experienced entrepreneurs with arthritis who were part of a research project on the topic of Arthritis & Self-Employment. The booklet covers such topics as Benefit and Challenges of Self Employment, Is Self Employment Right For Me? Deciding What Type of Business to Start? Starting and Building Your Business, and Rewards of Self Employment Success. The booklet is on the www.argbc.ca/practitioner web site under the Patient Education Materials section.

Another publication that has recently been produced is called *Rheumatoid Arthritis: Explaining Your Symptoms*. Topics covered in this booklet include Talking to Your Rheumatology Team, Measuring Your Rheumatoid Arthritis, Talking About How You Are Coping, Managing Your Symptoms, Setting Your Treatment Goals, Glossary of Common Terms in Arthritis, and Where to Learn More. This unbranded publication by one of Canada's pharmaceutical companies can be obtained on the website - be warned that this takes a minute or two to load www.explainingyoursymptoms.ca

BC TAS Events Calendar

The Arthritis Society events in the next few months:

Cranbrook

Osteoarthritis: How to protect your joints
OA: Healthy eating and weight management
Osteoporosis

Duncan

Arthritis self-management program

Kelowna (both events are held monthly)

Inflammatory Arthritis Education Program
Lunch and Learn Sessions

Nanaimo

Chronic pain integrative therapies

North Saanich

Take Charge! Early intervention for OA

North Vancouver

Arthritis self-management program

Port Alberni

Osteoarthritis: medications & supplements

Gardening with arthritis
Salt Spring Island
Arthritis self-management program
Vancouver
Gardening with arthritis
Greater Victoria
Arthritis self-management program
Golfing with arthritis
Stiff fingers? aching feet? Looking for helpful answers?
Chronic pain management workshop
Osteoporosis
Tips & strategies for the kitchen
Arthritis: Just diagnosed program

For a complete list of workshop locations and dates, please use the link below:

<http://www.arthritis.ca/archives/calendar%20events%20archive/default.asp?s=1>

If interested in doing a public education session, please contact the TAS regional coordinator in your area:

North/Vancouver Coastal - Joan Vyner - jvyner@bc.arthritis.ca

Fraser Region - Trish Silvester-Lee - tsilvester-lee@bc.arthritis.ca

Interior/Okanagan - Trudy Battaglio - tbattaglio@bc.arthritis.ca

Vancouver Island - June Painter jpainter@bc.arthritis.ca

The Arthritis Society can assist by providing presentation materials, making room arrangements, and advertising your speaking engagement.

PHSA Online Indigenous Cultural Competency Training

The Provincial Health Services Authority (PHSA) has launched an online cultural competency training program for health care professionals who work directly with First Nations people. This training is designed to increase knowledge, enhance self-awareness, and build on skills.

Online, instructor-facilitated training provides 8 hours of learning over a 4-week period. Online discussions, interactive activities, videos, and contributions between peers and that facilitation team provide rich learning opportunities to expand and share information. Pre- and post-knowledge quizzes assist participants in assessing their learning.

For more information, please contact Cheryl Ward, cultural competency project lead (cward@phsa.ca) or Leslie Varley, director, Aboriginal Health (lvarley@phsa.ca).

BC Hip & Knee Arthroplasty Collaborative: Provincial Orthopaedic Leaders Summit

This summit looks at the successes orthopaedic teams across BC have been having in meeting targets, improving flow, and optimizing outcomes in a climate of fiscal restraints. Teams are invited to attend this free event to address challenges, celebrate achievements and become inspired. Event details are as follows:

Date: April 21st and 22nd, 2010

Location: Chan Patient & Family Centre, 950 West 28th Avenue, Vancouver, BC

For more information: bc.ortho@hotmail.com

For videoconferencing information please contact: Vancouver Island: Courtney Addis - courtney.addis@viha.ca, or Interior Health: Denise Dunton - denise.dunton@interiorhealth.ca

Self-Management Programs in BC

Self-management programs have flourished in BC over the past 20 years. The current centre for self-management in BC is the University of Victoria - Centre on Aging - Ladner. Three different types of self-management programs are currently being offered by the centre including the Chronic Disease Self-Management Program (CDSMP), the Chronic Pain Self-Management Program (CPSMP) and the Diabetes Self-Management Program (DSMP). For a

list of self-management program schedules across BC, please go to:

<http://web.uvic.ca/~pmcgowan/research/cdsmp/>

UBC Changing Aging Program

The Changing Aging Program is designed to help prevent some of the common problems in aging, such as osteoporosis, falls, cardiovascular disease, dependent living, etc. This is instructor-led, machine-based exercise system is taught by UBC students who have received specialized training from experts in exercise physiology for older adults. This program runs through the UBC Bodyworks Fitness Centre, an outreach program of the UBC School of Human Kinetics. For more information go to:

<http://www.hkin.educ.ubc.ca/fitness/changingaging.htm>

Ergo Tool

The Ergonomic Assessment Tool for Arthritis (EATA) is designed to assist occupational therapists and their clients with arthritis complete an ergonomic assessment for the purpose of recommending ergonomic modifications as job accommodations. The tool was developed as part of a comprehensive program to help people with inflammatory arthritis remain employed. The tool consists of a client self-assessment of ergonomic factors at work and an interview conducted by an occupational therapist. The self-assessment, completed by the client prior to the occupational therapy consultation, takes approximately 45 minutes. The consultation visit, including interview, identification of priority issues, and recommendations for ergonomic solutions, takes 45 to 90 minutes. No work site visit is required. For more information on Ergo Tool, please go to:

<http://ergotool.arthritisresearch.ca/>

MPAP Skills Workshop Questionnaire Reminder

MPAP is considering offering a skills workshop for

ACE Physical and Occupational Therapists on the Assessment and Treatment of Three Common RA Hand Deformities: Boutonniere, Swan Neck, and Ulnar Drift. A very short questionnaire surveying interest and learning needs on this topic was recently emailed out to PTs and OTs. Please complete this online questionnaire by Friday, April 16th so that we can take your feedback into consideration.

An Overview of Models of Care for Arthritis

This is the title of a presentation I attended at the Canadian Rheumatology Association by Crystal Mackay from the Arthritis Community Research & Evaluation Unit (ACREU), and is the presentation that I mentioned in the Editor's Message. Her definition of 'Model of Care' was, "A model of care defines the way in which health care is delivered, with an ultimate goal to address the needs of people across the course of their illness, through services provided by a variety of health professionals..." In her presentation, she discussed five different models of care, including multidisciplinary team care, triage, expanded clinical roles, telemedicine, rural consultation, shared care, self-management programs, and screening in primary care (e.g., pharmacists screening for OA).

Recognizing that many in the audience were already familiar with each of these models of care, or ways in which care can be improved, Ms. MacKay left half of her presentation time to discussion. The consensus from this discussion is that this is an issue that all health care professionals across the country are struggling to address.

So this is where I'd like to hear from you. What types of strategies have you instituted to deal with long waiting lists, expand the reach of your services to difficult to serve clients, or improved the service you provide across the continuum of care? **Please email me your ideas**, as simple as they may seem, and I'll summarize these for the next issue - paul.adam@vch.ca . Everyone who submits an idea

will be **eligible to win a copy of Thompson's Rheumatology Pocket Reference**, 3rd Edition. I'll choose the winner by picking one name out of everyone who submits.

Highlights from the ACR Conference - November 2009

As is usual, last November's conference in Philadelphia offered a wide variety of arthritis and more general health-related educational sessions. These are some of the highlights:

Asuko Brittain, PT, CHT and Barbara Porter, OT, two therapists from the Mary Pack Arthritis Program in Vancouver presented a session entitled, "**Best Practice Recommendations for Management of Three Common Hand Deformities in Adult Rheumatoid Arthritis**". This session focused on hand tests and treatment strategies for three common RA hand deformities - Swan-neck, Boutonniere, and Ulnar drift deformities. The Best Practice Recommendations that were the foundation of this presentation had been developed at the Mary Pack Arthritis Program over a 2-year period, and involved input from 40 practicing rheumatology-trained therapists throughout BC, best available evidence, and patient characteristics/preferences. These recommendations are currently available to ACE members on the Arthritis Resource Guide for BC website in the practitioner area under **Guidelines and Professional Education**, and then in the **Assessment Tools and Treatment Approaches** section.

I attended a session on **Web-based Methodologies for the Support and Enhancement of Teaching** presented by Laura Ray from Cleveland State University and Melanie Zibit from Brigham and Women's Hospital. This hands-on presentation gave a nice overview of how Twitter, Blogs, and Wikis can be used to expand one's online reach to enhance patient or professional education efforts. Twitter provides real-time short messaging that works over multiple networks (i.e., mobile phones or the Internet). The Arthritis Foundation in the United States uses Twit-

ter to send out news updates, and the US FDA has used Twitter to send out information on drug recalls, market withdrawals or other safety alerts. Blogs are web-based logs or journals that are maintained by one or more individuals. A person can read a blog while surfing the Internet, or sign up for automatic mailings via an RSS (Really Simple Syndication) feed. Blogs can be open to the public or limited to specific communities, and can host documents, images, audio and video files, as well as websites. Free software for creating a blog is available Word Press (<http://www.wordpress.org/>) or through Blogger from Google (<https://www.blogger.com/start>). Wikis are websites that are maintained by a community of individuals and allow for continuous and collaborative adding, editing and deleting of online content. Access can be public or limited to a specific community, wikis support a variety of file types, and free software to create a wiki is available through Media Wiki (<http://www.mediawiki.org/wiki/MediaWiki>) or Google (<http://www.google.com/sites/help/intl/en/overview.html>)

Catherine McAuley attended a session called, **Participatory Medicine: How Technology can Help Patients be Partners in their Health Care**, by Daniel Sands from the Beth Israel Deaconess Medical Center. She states that he challenged health care professionals to change from an information asymmetry (where the care provider holds all the information) to a model of symmetry where patients are encouraged to find and evaluate information with care care providers for shared decision-making. A useful reference that is available on the Internet is **A User's Guide to Finding and Evaluating Health Information** on the Web through the Medical Library Association -

<http://www.mlanet.org/resources/userguide.html>

Catherine also attended a session called, **Asking and Answering Clinical Questions**. **PICO** is one recommended format for asking clinical questions so that literature searches can be more efficient, and as a tool for screening abstracts to find articles of most relevance. **P** is the **Patient, Population or Problem**

characteristics in which a person may be interested in learning about. **I** is the **Intervention** and refers to the treatment, intervention or test that you may want to do with a patient. **C** is the **Comparison** or the alternative to the treatment (e.g., placebo, different treatment) that was tested. Finally, **O** stands for the relevant **Outcomes** that are of most interest to you. A nice explanation of PICO can be found at

<http://healthlinks.washington.edu/ebp/pico.html> The last session Catherine described was a session that was presented by Janet Austin of the National Institute of Arthritis and Musculoskeletal Skin Diseases called, *Health Literacy: Important Factors to Consider When Surfing the Web for Reliable Health Information for your Patients*. She learned that individuals need the capacity to obtain, process and understand basic health information to make appropriate health decisions and to act on the information. Factors to consider include culture, situation, bias, and accessibility. The “Clear Communication” initiative recommends putting important points first and using an active voice

(<http://www.nih.gov/clearcommunication/index.htm>)

Other useful websites include www.wordscount.info where you can paste paragraphs from websites or documents to evaluate readability and www.cancer.gov/pinkbook that provides online access to a publication called, *Making Health Communication Programs Work*.

Jacklin Hoole, an OT from the Victoria Arthritis Centre, outlined the following information that she found useful:

Psoriatic Arthritis

- Younger patients with severe disease are at a much higher risk for heart attacks. They should be advised to minimize other factors contributing to cardiovascular disease (same with young Lupus patients)(see citation section).
- Associated with metabolic diseases (e.g., diabetes, cardiovascular, obesity), but the connections are not yet well understood
- Anti-TNF biologics work well. They DO inhibit radiographic progression

Ankylosing Spondylitis

- Anti-TNF biologics DO NOT stop radiographic progression
- Anti-TNF biologics DO improve spinal inflammation and improve bone mineral density so they are worthwhile in improving function and pain control
- There is a slightly increased chance of future syndesmophyte development, as we don't know yet what it is that drives bone formation

Scleroderma

- Stretching does help maintain and improve ROM & function
- Stretching must be frequent and beyond resistance
- Because ROM loss is insidious, regular education and monitoring is needed - she asks, should we have a regular, 6-month check to help maintain motivation to do stretches?

Footwear

- Women in the general population are 67% less likely to have hindfoot pain, if they'd worn “good” shoes when they were younger. Good shoes included athletic and casual sneakers (see citation section).

Splinting

- A study on resting splints in OA by J Adams (2008) was conducted on a group of 100 patients with Early RA (i.e., less than 5 years disease duration). Compared groups with resting splint and OT vs. solely OT. The study found that 25% of patients did not wear their resting splints. A second finding was that splint use made no difference in outcomes, including grip strength and ulnar deviation.

Shirin Kazemi, a PT in Vancouver, attended a session on the Getting A Grip on Arthritis national education program, which was instituted in Canada to improve the knowledge and skills of physicians and allied health professionals. Resources from this program are now online and include Arthritis Best Practice Guidelines and a Resource Kit for People with Arthritis www.arthritis.ca/gettingagrip

Mary Pack Arthritis Program - Interdisciplinary Staff Education Day 2010

A notice will be going out shortly to all ACE members inviting you to attend our annual MPAP Staff Education Day that takes place on Thursday, June 10th at the Plaza 500 Hotel in Vancouver. Topics will be focused on chronic pain, lupus, common comorbidities in inflammatory arthritis, and arthritis & employment. ACE members are not required to pay to attend, but must cover their own travel expenses. Available spots are limited so if you are interested in attending, please register as early as possible after receiving your registration notice.

Citations & In The News

Medscape Today provides an abstract and brief introduction to a study that reviewed recent research findings for insoles and footwear in knee osteoarthritis. Jackie Harris in Penticton states, “as in many past knee focused articles (e.g., the lateral wedges) there is little mention of ROM, type of foot (e.g., extreme overpronator vs. neutral foot vs. supinator), and how that might impact suggested treatments. <http://www.medscape.com/viewarticle/704682>

Saag KG & Geusens P. Progress in osteoporosis and fracture prevention: focus on postmenopausal women. *Arthritis Research & Therapy*. October 2009. Free download at <http://arthritis-research.com>

This review article describes the new understanding of basic bone biology, bone mineral density, new imaging approaches, and contributors to secondary osteoporosis. There is also a better understanding of the severe consequences of fractures in terms of morbidity, and short-term re-fracture and mortality risk. The article also outlines current medical interventions, and emerging therapeutic options.

Goronzy JJ & Weyand CM. Developments in the scientific understanding of rheumatoid arthritis. *Arthritis Research & Therapy*. October 2009. Free download at <http://arthritis-research.com>

This paper describes the current understanding of the pathophysiology of early RA and possible mechanisms for preventive interventions in RA. The current understanding of the biochemical changes that lead to cartilage and bone destruction also suggest mediator targets for disease management.

Crow MK. Developments in the clinical understanding of Lupus. *Arthritis Research & Therapy*. October 2009. Free download at <http://arthritis-research.com>

As with the other papers in this series, this article reviews the current understanding of how immune mechanisms link with clinical manifestations of the disease, and how this understanding of immunopathogenesis has impacted clinical research in an attempt to improve treatment outcomes.

Buskila D. Developments in the scientific and clinical understanding of fibromyalgia. *Arthritis Research & Therapy*. October 2009. Free download at <http://arthritis-research.com>

Finally, this last review article describes the current understanding of central nervous system malfunction resulting in amplification in pain transmission in the etiopathogenesis of FM. Various external stimuli such as infection, trauma, and stress are still thought to contribute to the development of this syndrome. The paper also outlines the role that various pharmacologic and non-pharmacologic interventions may play in management of this condition.

Dahaghin S, Tehrani-Banihashemi SA, Faezi ST, Jamshidi AR & Davatchi F. Squatting, sitting on the floor, or cycling: Are life-long daily activities risk factors for clinical knee osteoarthritis? Stage III results of a community-based study. *Arthritis & Rheumatism (Arthritis Care & Research)* October 2009; 61(10): 1337-1342.

This Iranian study used a case-control study design to randomly recruit 480 individuals with knee OA and then compared them to 480 control subjects. A questionnaire was used to record all occupations, sports, and details of 10 Iranian daily activities, and data

were collected using a lifecourse approach. Prolonged squatting and cycling were 2 activities that were risk factors for knee OA. One potential limitation of this study is that the control group, on average, was 10 years younger than the study group.

Hartvigsen J, Nielsen J, Ohm Kyvik K, Fejer R, Vach W, Iachine I & Leboueuf-Yde C. Heritability of spinal pain and consequences of spinal pain: A comprehensive genetic epidemiologic analysis using a population-based sample of 15,328 twins aged 20 - 71 years. *Arthritis & Rheumatism (Arthritis Care & Research)* October 2009; 61(10): 1343-1351.

One of the objective of this study was to assess the relative contribution of genetic and environmental factors to different definitions of spinal pain. Using the Danish Twin Registry, which contained detailed survey information on spinal pain, including location of pain, radiation of pain in the extremities or chest, pain duration, and combinations of pain in more than one spinal area. Data on 15,328 twins were included. Genetic susceptibility explained ~38% of lumbar pain, 32% of thoracic pain, and 39% of neck pain. For patterns of pain, estimates were 7% for lumbar/thoracic, 24% for lumbar/cervical, 0% for thoracic/cervical, and 35% for pain in all three areas.

Dufour AB, Broe KE, Nguyen UDT, Gagnon DR, Hillstrom HJ, Walker AH, Kivell E & Hannan MT. Foot pain: Is current or past footwear a factor? *Arthritis & Rheumatism (Arthritis Care & Research)* October 2009; 61(10): 1352-1358.

This study used cross-sectional data from the Framingham Study to determine if there was any association between foot pain and type of footwear. Data were collected from 3,378 Framingham Study participants who completed the foot examination in 2002-2008. In women, compared with average shoes, those who wore good shoes in the past were 67% less likely to report hindfoot pain, after adjusting for age and weight. In men, there was no association between foot pain, at any location, and footwear.

Macedo AM, Oakley SP, Panayi GS & Kirkham BW. Functional and work outcomes improve in patients with rheumatoid arthritis who received targeted, comprehensive occupational therapy. *Arthritis & Rheumatism (Arthritis Care & Research)* November 2009; 61(11):1522-1530.

This small study compared outcomes in a group of participants who were either employed or self-employed, and who were at moderate or high risk for work disability on the Work Instability Scale (WIS). Sixteen participants received 6 - 8 OT sessions over a 6-month period and usual rheumatology care, while the control group of 16 participants only received usual rheumatology care. The OT intervention included education on self-advocacy, work place rights and responsibilities, ergonomic reviews, discussions with employers regarding reasonable accommodations, posture advice, etc. At the end of 6 months the comprehensive OT group had significantly improved scores on a variety of functional and work-related outcome measures.

Wang C, Schmid CH, Hibberd PL, Kalish R, Roubenoff R, Rones R & McAlindon T. Tai Chi is effective in treating knee osteoarthritis: A randomized controlled trial. *Arthritis & Rheumatism (Arthritis Care & Research)* November 2009; 61(11): 1545-1553.

This small study compared the outcomes of 20 participants who received 60-minute Tai Chi sessions twice weekly for twelve weeks to a control group of 20 participants who received two 60-minute class sessions each week for 12 weeks. Most sessions involved 40 minutes of education on a variety of OA-related topics (e.g., diet & nutrition, therapies to treat OA) and 20 minutes of stretching exercises. At the end of the 12-week intervention the Tai Chi group had significantly reduced pain and improved physical function, self-efficacy, depression, and health status.

Deane KD, Striebich CC, Goldstein BL, Derber LA, Parish MC, Feser MI, Hamburger EM,

Brake S, Belz C, Goddard J, Norris JM, Karlson EW & Holers VM. Identification of undiagnosed inflammatory arthritis in a common health fair screen. *Arthritis & Rheumatism (Arthritis Care & Research)* December 2009;61(12):1642-1649.

The objectives of this study were to identify individuals with undiagnosed inflammatory arthritis (IA) and RA in a health fair screen and to establish in a health fair setting the diagnostic accuracy of combinations of the Connective Tissue Disease Screening Questionnaire (CSQ) and autoantibody testing for IA. Screening for IA/RA was performed at health fair sites using a combination of the CSQ, joint examination, rheumatoid factor, and anti-CCP antibody testing. Six hundred and one subjects were screened and 51% participated because of having joint symptoms. Eighty-four subjects (14%) had one or more swollen joints. Of the 601 subjects screened, 9 (1.5%) had IA, but had no prior diagnosis of RA, and 15 (2.5%) had IA and RF and/or anti-CCP positivity, suggesting early RA. The diagnostic accuracy of combinations of the CSQ and autoantibody testing for the identification of IA yielded maximal sensitivity, specificity, and positive and negative predictive values of 95.3%, 99.2%, 71.4%, and 97.7%, respectively.

Crossley KM, Marino GP, Macilquham MD, Schache AG & Hinman RS. Can patellar tape reduce the patellar malalignment and pain associated with patellofemoral osteoarthritis?. *Arthritis & Rheumatism (Arthritis Care & Research)* December 2009;61(12):1719-1725.

The objectives of this study were to compare patellar alignment in people with and without patellofemoral joint OA and to evaluate the immediate effects of patellar taping on patellar alignment and pain in people with patellofemoral joint OA. This small study measured patellar malalignment using MRI in 14 individuals with patellofemoral joint OA and 14 matched controls. People with patellofemoral joint OA had greater lateral displacement and bisect offset compared with controls. Lateral patellar tilt angle

did not differ between groups. In the patellofemoral joint OA group, patellar tape resulted in a significant lessening of lateral alignment, with reduced lateral displacement, and increased patellar tilt angle. Mean pain during squatting decreased with patellar tape by 15mm on a 100-mm scale.

Lemmey AB, Marcora SM, Chester K, Wilson S, Casanova F & Maddison PJ. Effects of high-intensity resistance training in patients with rheumatoid arthritis: A randomized controlled trial. *Arthritis & Rheumatism (Arthritis Care & Research)* December 2009;61(12):1726-1734.

One of the objectives of this study was to confirm the efficacy of high-intensity progressive resistance training (PRT) in restoring muscle mass and function in patients with RA. Twenty-eight patients with established, controlled RA were randomized to either 24 weeks of twice-weekly PRT or a ROM home exercise control group. ANOVA revealed that PRT significantly increased lean body mass (LBM) and appendicular lean mass (ALM). Training-specific strength increased by 119%, chair stands by 30%, knee extensor strength by 25%, arm curls by 23%, and walk time by 17%. Despite its high intensity and volume, the PRT program did not exacerbate disease activity or systemic inflammation.

Weisman MH, Chen I, Clegg DO, Davis JC, Dubois RW, Prete PE, Savage LM, Schafer L, Suarez-Almazor ME, Yu H & Reveille JD. Development and validation of a case ascertainment tool for ankylosing spondylitis. *Arthritis Care & Research* January 2010;62(1):19-27.

The objective of this study was to test questions derived from a comprehensive literature review and advisory board in a case-control study designed to identify patients with AS from among patients with chronic back pain. Question items with a significant positive relationship to AS were male sex, neck or hip pain/stiffness, longer pain duration, decreased pain/stiffness with daily physical activity, pain relief within 48 hours of NSAID use, and diag-

nosis of iritis. The tool demonstrated a sensitivity of 67.4% and a specificity of 94.6%. One of the limitations of this study is that respondents were patients with an established diagnosis of AS and thus likely to be at a later disease stage. This tool needs further validation in an early disease stage population.

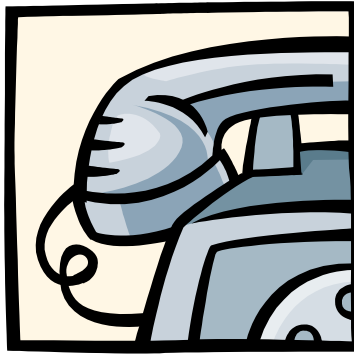
McKnight PE, Kastle S, Going S, Villanueva I, Cornett M, Farr J, Wright J, Streeter C & Zautra A. A comparison of strength training, self-management, and the combination for early osteoarthritis of the knee. *Arthritis Care & Research* January 2010;62(1):45-53.

This was a comparison study of the benefits of strength training, self-management, or a combination of the two interventions. Two hundred and one individuals with knee OA, pain and self-reported physical disability were randomized to one of the three arms and completed the two-year trial. Adherence was modest in all three arms: strength training (55.7%), self-management (69.1%), and combined programs (59.6%). All three groups showed significant and large increases in physical function, including leg press, ROM, work capacity, balance, and stair climbing. All groups also showed decreases in self-reported pain and disability. There were no significant differences between the three groups.

Volkman, ER, Grossman JM et al. Low physical activity is associated with proinflammatory high-density lipoprotein and increased subclinical atherosclerosis in women with systemic lupus erythematosus. *Arthritis Care & Research* February 2010;62(2):258-265.

This study investigated the association between physical activity, functional activity of high-density lipoprotein (HDL), and subclinical cardiovascular disease in patient with SLE. Two hundred and forty-two SLE patients participated in this 4-year cross-sectional study. Low physical activity was found to be associated with increased subclinical atherosclerosis and proinflammatory HDL in patients with SLE.

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 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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