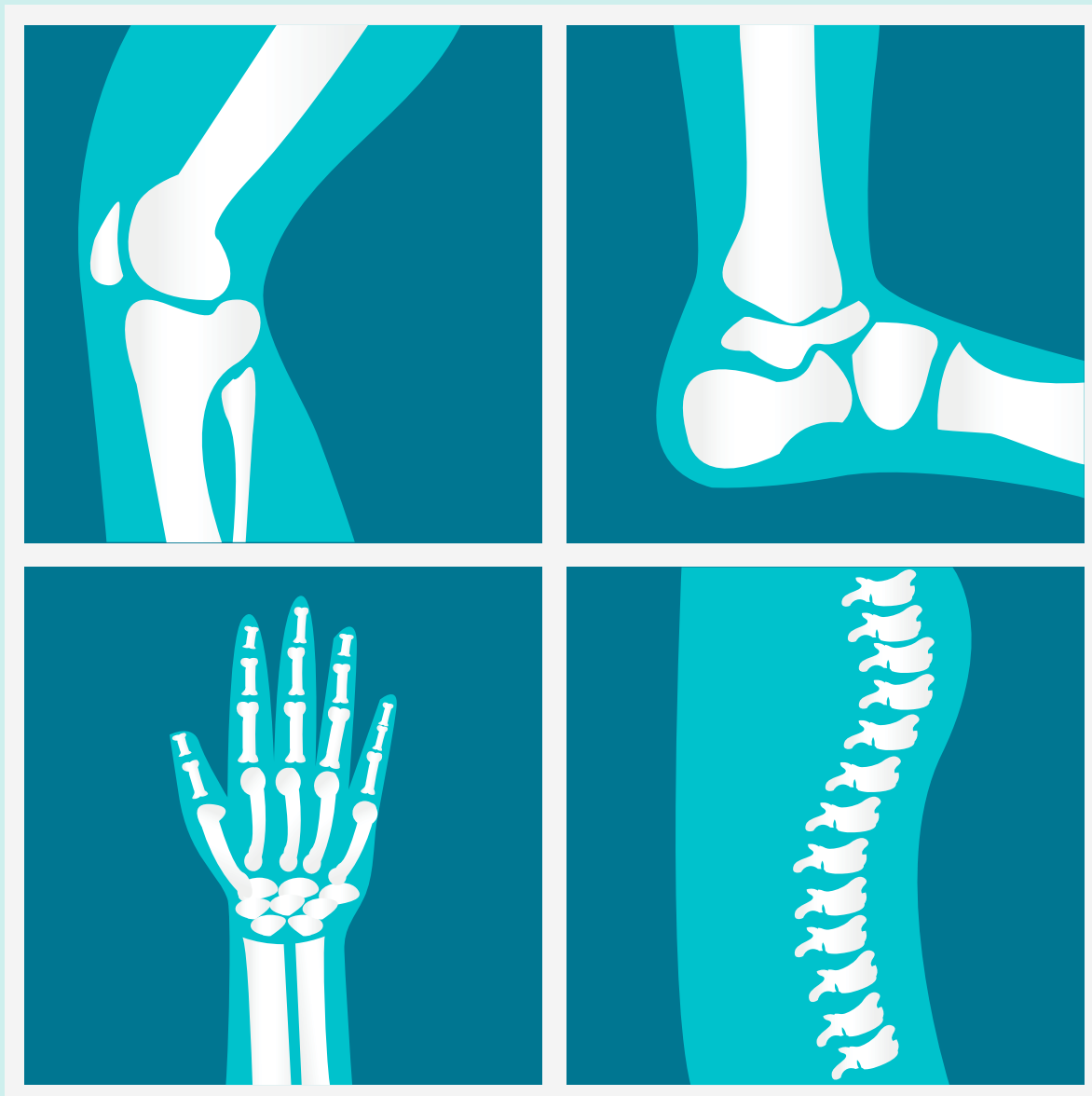


A comprehensive guide to **arthritis management.**

Full campaign on healthinsight.ca

Managing Pain & Inflammation



FOREWORD

This article was produced in partnership with **Arthritis Research Canada.**

Arthritis: It's More Serious Than You Think



Patti Nakatsu

As an invisible disease, arthritis affects over 350 million people worldwide, including 6 million Canadians — young and old. Arthritis can cause life-threatening complications such as a heart attack, stroke, or even blood clots and is the number one reason for work disability in Canada, costing the Canadian economy an estimated \$33 billion per year. Arthritis is responsible for 1 in 10 doctor visits and 1 in 16 hospitalizations.

Plagued by misconceptions, many often think arthritis only involves minor aches and pains in older adults.

That is not the reality. It's only through arthritis research that we can find answers and save lives. As the number of cases of arthritis continue to climb so does the need to make arthritis research a priority.

Arthritis affects your joints and the tissues which surround the joints causing permanent damage. It causes inflammation, stiffness, and can drastically affect ones mobility.

With four centres across Canada, Arthritis Research Canada is the largest clinical arthritis research centre in North America, conducting research to explore every possible avenue of

discovery aimed at arthritis prevention, early diagnosis, new and better treatment, and improved quality of life. While a lot has been done to combat the 100+ different types of arthritis, more research is needed to ensure rheumatologists can meet the needs of the 6 million Canadians. ●



To find out more about arthritis, research currently underway, or how you can participate in arthritis research go to

arthritisresearch.ca

EXPERTS PANEL

This article was produced in partnership with the **Canadian Chiropractic Association.**

Pain Changes Everything — and Chiropractic Care Changes Pain



Alison Dantas
CEO,
Canadian
Chiropractic
Association

The Canadian Chiropractic Association is determined to help more Canadians live the healthy, active lives they want by promoting the unique value and expertise that chiropractors offer.

Approximately 11 million Canadians are affected by spine, muscle, and nervous system conditions — and their related pain and inflammation. Six million have arthritis. As a form of treatment, around 4.7 million adult Canadians turned to a chiropractor in 2019.

Chiropractors diagnose and treat the causes of pain related to the spine,

muscles, and nervous system, including conditions like arthritis. Chiropractic is a hands-on, non-invasive, and drug-less practice. The main activity is physical manipulation, especially of the spine. Chiropractors carry out precise movements of the vertebrae to correct joint motion, thereby restoring proper movement, relieving pain, and reducing inflammation. Other treatments can include soft tissue therapy, exercise, ultrasound, laser treatment, and rehabilitative exercise.

To make chiropractic care accessible to Canadians who want it, the

Canadian Chiropractic Association works with other health care professionals, governments, and private health insurers.

Chiropractors are here to ease Canadians' pain and enable them to live their best lives. ●



To find a chiropractor near you, head to

chiropractic.ca



Back Pain? It Might Not Be What You Think



Graeme Reed
Interim President,
Canadian Spondylitis Association

Moving away to university is supposed to be an exciting time. For me, it was the start of a long journey to being diagnosed with ankylosing spondylitis. Arthritis is a common condition that many Canadians live with, and that's generally associated with finger, wrist, or ankle pain. Axial spondylitis or ankylosing spondylitis is a form of inflammatory arthritis that results in a gradual onset of spinal pain and stiffness and a long delay from the onset of pain until receiving a diagnosis. I was lucky, being diagnosed in four years.

Spondylitis is a disease that doesn't discriminate. The condition affects both men and women, often early in their adult life and, if untreated, damage is irreversible and can be severely disabling. The good news is that young people, such as myself, and the

newly-diagnosed are now able to access a wide variety of treatment options.

Medications range from traditional non-steroidal anti-inflammatories to disease-modifying rheumatic drugs to revolutionary modern biologics. When these medications are combined with exercise, a healthy diet, meditation, and, in the most severe cases, surgery, spondylitis patients are generally able to live productive lives with reduced pain. However, many patients don't have access to the treatment options that they need.

Organizations like the Canadian Spondylitis Association are essential in helping to support patients in living well with their spondylitis. The association is committed to raising awareness, providing direct support, developing educational tools, and advocating for accessible treatment options. ●

“Spondylitis is a disease that doesn't discriminate.”

i Chronic back pain? Learn about the difference between mechanical vs. inflammatory back pain at spondylitis.ca

spondylitis.ca

Juvenile Arthritis Is Devastating Canadian Children. You Can Help



Jennifer Wilson
Executive Director,
Cassie & Friends

When we think of a “typical” person with arthritis, most of us picture someone elderly. The truth is that arthritis can strike anyone at any age, including the very young. An estimated 24,000 Canadian children (3 in 1,000) are living with juvenile arthritis and other rheumatic diseases.

For these children, the disease can cause great pain and get in the way of the joyful and active lifestyle we associate with childhood. “It's not just aches and pains,” says Jennifer

Wilson, Executive Director of Cassie and Friends, Canada's only charity dedicated entirely to juvenile arthritis and similar conditions. “A lot of these kids are on aggressive and serious treatments which can have a burden on the family that's frequently underestimated.”

Easing this burden is at the core of Cassie and Friends' mission. “We're 100 percent focused on kids and helping them and their families live their healthiest lives possible,” says Wilson. “Any way that we can support

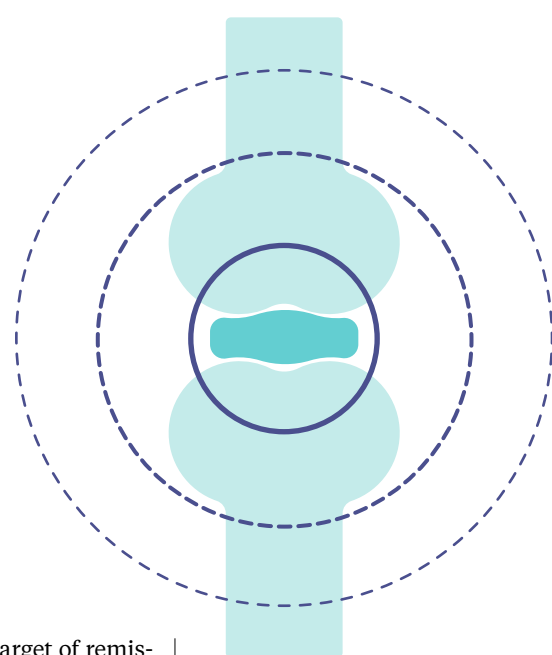
kids' families, even just by covering unexpected expenses or reducing stress in the smallest way, is worth it. Those small costs, both financial and emotional, really add up.” ●

i Join Cassie and Friends at the Toronto Scotiabank Charity Challenge this October. Learn more at cassieandfriends.ca

cassieandfriends.ca

This article was made possible with support from AbbVie.

Remission From Pain: The New Story of Rheumatoid Arthritis



The world of rheumatoid arthritis has changed a lot in the last couple of decades. A cure remains out of reach, but remission is here to stay.



Dr. Philip Baer
Vice President,
Ontario Rheumatology Association

Rheumatoid arthritis (RA) affects about 1 in 100 Canadians, both old and young. This progressive and incurable autoimmune disease can have substantial negative impacts on quality of life. But, where once there was little to be done, many of those diagnosed today can realistically hope to live a life largely free of arthritis-related pain and disability.

When RA is left untreated, the disease wreaks severe and wide-ranging damage. “RA is a systemic disease that affects the whole body,” explains Dr. Philip Baer, Vice President of the Ontario Rheumatology Association. “It's a quite serious condition for which we don't have a cure, but we do have much better treatments than we used to. Just because there's no cure for RA doesn't mean it can't be effectively managed.”

RA is a chronic disease, so most patients will require ongoing treatment throughout their lives. At the same time, once a patient finds the right treatment plan, they can potentially live a life effectively free of the disease's burden. “In rheumatology we've learned some valuable lessons from cancer treatment,” says Dr. Baer. “As with some cancers, if we're very aggressive with RA therapy at the very beginning, there's a window of opportunity where

we can treat toward a target of remission. Remission doesn't mean you're cured, but it means that you're in a state where you don't feel like the disease is affecting your daily life.”

Disability from inflammation is reversible. Disability from damage is not.

When an RA patient is in remission, not only do they feel better, but their disease is no longer progressing. Preventing the permanent damage caused by RA has rheumatologists heavily focused on getting patients in the door as early as possible for diagnosis and treatment.

“What first drives people to a doctor is usually joint pain, stiffness, and swelling,” says Dr. Baer. “The pain can be quite severe. People often have trouble sleeping, as well as difficulty at work, at home, and in their leisure activities. Fortunately, most of this early disability is due to inflammation, not to permanent damage, and disability from inflammation is reversible with treatment. With aggressive early treatment, we can often get people back to where they were before their symptoms started.”

Anyone with arthritis-like symptoms should talk to their health care provider about seeing a rheumatologist as soon as possible.

Novel treatments aiming for more ubiquitous remission.

People with newly-diagnosed RA today can have realistic hope of achieving remission. Still, we must not forget the work yet to be done. We must ensure that all Canadians have equal access to the best treatments, and that treatment options continue to improve. As it stands, roughly 70 percent of patients receiving treatment for RA are not yet achieving remission.

“In the last 20 years, rheumatology has been revolutionized,” says Dr. Baer. “We have so many patients who are doing so much better than they were before. At the same time, we still have many patients who would benefit from current novel therapies and novel therapies yet to come, and I'm confident that we'll see ongoing innovation.” ●

i Ask your rheumatologist about your treatment options.

“As it stands, roughly 70 percent of patients receiving treatment for RA are not yet achieving remission.”



PHOTO: COURTESY OF JENNIFER GAUTHIER

For Women With Rheumatic Disease, Family Planning and Health Planning Go Hand in Hand

Arthritis affects men, women, and children of every age. For women, especially those looking to become pregnant, the health challenges are unique.

Jennifer was a 19-year-old student at Laurentian University in Sudbury, ON when she first noticed stiffness and pain in her left wrist. The year was 2012, and she didn't yet know that she was suffering from ankylosing spondylitis (AS), a form of inflammatory arthritis that affects the spine.

As the months went by, Jennifer's symptoms worsened. "I was developing a lot of infections and rashes, and experiencing joint pain and stiffness in my lower back, hips, knees, wrist, and fingers, which really affected my ability to complete activities of daily living like holding a milk carton, turning door knobs, or standing in the city bus," Jennifer recalls. "Outside of school, I spent most of my time at the hospital for medical testing and procedures, or the emergency room and clinics due to new and odd symptoms suddenly appearing."

A lifelong disease, but a manageable one

Once Jennifer was diagnosed with AS four years later in 2016, she was finally able to work with her health care team to develop a treatment plan that worked for her. "The road to finding the right treatment plan is continuous, but fortunately, I've always felt well-supported and looked after by my rheumatologist, registered nurse, and other physicians," Jennifer says. "For the last couple of years or so, I've been taking immunosuppressive treatment and disease-modifying anti-rheumatic drugs. I've also worked on finding the right balance between exercising and allowing my body to rest. With some time, I became accustomed to this lifestyle and luckily, with time and patience, I was able to find a good treatment plan for me."

Jennifer expects to be on treatment for the rest of her life, though she feels fortunate to have been able to begin treatment at a relatively young age. As a progressive and incurable autoimmune disease, AS only gets worse over time unless properly managed. "Early detection and treatment are very important," says Dr. Maeve Gamble, a rheumatologist at Arva Clinic near London, ON. "If left untreated, the joints can become damaged or fused. Once the damage from AS is done, it can't be reversed. Beyond joint damage, chronic inflammation can have other detrimental effects such as an increase in heart disease and other health conditions."

Motherhood with ankylosing spondylitis

Her AS now informs every aspect of Jennifer's life. She chooses lower-impact sports for recreation, receives accommodation for her condition in the workplace, and even takes it into account in family planning with her spouse. "Not being a mother has never been an option for me," Jennifer says. "Living with arthritis has without a doubt influenced the way we plan on approaching parenthood. Most women my age don't necessarily have to consider the impacts that treatments, or lack thereof, could have on them and their baby."

Once thought to be a disease primarily of men, more sophisticated imaging techniques have been detecting AS with even greater frequency among young women, meaning many prospective mothers like Jennifer are facing similar concerns. The most important thing is not to approach it alone. With the help of a health care team, pregnancy and AS are manageable together. "Active disease in early pregnancy and discontinuation of medications are risk factors for the disease

“

Not being a mother has never been an option for me.

flaring," warns Dr. Gamble, but she adds, "If the disease is well-controlled, and that may require medications considered safe in pregnancy, pregnancy outcomes are very similar to the general population."

Each patient is unique.

Their treatment should be, too.

It has become clear, the secret to a well-controlled disease is a highly-individualized treatment plan. Fortunately, this personalization is becoming more robust as treatment options grow. "This is a great time to be a rheumatologist because there are so many therapeutic options available to patients today," says Dr. Gamble. "This allows us to personalize treatments for patients. It's important to involve the patient in the therapeutic decision-making process because this will ultimately improve their compliance and outcomes."

If you have AS, or a stiff back that improves with activity, don't be a stranger to your health care team and don't be afraid to advocate for yourself. By being engaged in your treatment plan, you can ensure that it's in line with the things that you want in life, and that's especially critical if you're a woman thinking about pregnancy. "It's important to learn about your options in order to make an educated decision regarding what's most suitable for you," says Jennifer. "Most importantly, don't let this disease stop you from achieving your goals and enjoying your life." ●



Dr. Maeve Gamble
Rheumatologist,
Arva Clinic

Chronic inflammatory disease and pregnancy: Start the conversation

Learn what you should consider before, during and after the birth of a baby at aimotherhood.ca



 Inspired by patients.
Driven by science.

This article was brought to you by a leading research-based pharmaceutical company.

Untreated, Rheumatoid Arthritis Can Be Devastating — With Proper Treatment, There's Hope

Arthritis is everywhere so it's easy to underestimate its severity. For many Canadians living with inflammatory rheumatoid arthritis, it can be thoroughly debilitating.



PHOTO: COURTESY OF CHRONIC EILEEN

In 2015, Eileen of Vancouver was a new mother in her twenties. If that wasn't hard enough, she was also experiencing chronic pain and inflammation in her hands, feet, and knees. "I was unable to function," Eileen says. "Simple tasks like grocery shopping, taking my kid out to play, or making it to work on time became increasingly difficult because of pain, fatigue, consistent fevers, and increasing depression."

At first, Eileen chalked all this up to post-pregnancy hormones, but her symptoms worsened and she knew she had to seek help. The diagnosis came back unmistakably. Eileen had rheumatoid arthritis. "I was only 29," she recalls. "I had no clue I could get arthritis so young, or what arthritis really was."

Chronic, incurable, and surprisingly common

Rheumatoid arthritis (RA) is an autoimmune disorder that affects about one percent of adult Canadians. The effects on the body are wide-

ranging and go well beyond the finger stiffness that many first think of.

"RA is a lot more than joint pain. It's a systemic illness," says Dr. Elizabeth Hazel of the McGill University Health Centre's Rheumatology Division in Montreal. "While the first symptoms may be painful swollen joints, most patients will have associated fatigue, morning stiffness, and may even feel like they have the flu."

Early intervention makes all the difference

Because RA is a progressive disease that causes irreversible damage, the earlier the diagnosis and treatment, the better the outcome. Though it's incurable, the right treatment plan can not only slow progression of the disease, but restore quality of life. "Before finding a medication that worked for me, my joints would be on fire," says Eileen. "Today I still have pain and fatigue, but I can function significantly better, including walking up a flight of stairs

or crushing five kilometres on the elliptical several times a week. It took a long time to get here and a lot of different medications, but the relief is worth it."

That time on the elliptical isn't just a result of Eileen's treatment plan, but also part of it. As a systemic disease, RA responds to practical therapy. Medication plays an important role, but so do things like quitting smoking, maintaining a healthy diet, exercising regularly, and taking care of mental wellness.

"It's important for anyone who is living with RA or any chronic illness to take ownership of their disease," says Dr. Hazel. "If available, I highly recommend that patients be referred to rehabilitation programs that include sessions in occupational therapy, physiotherapy, nutrition, psychology, social work, and work reorientation."

Living with RA is a journey, but the first step of that journey is always talking to your health care professional to find the best personalized treatment plan. ●

From Biologics to Biosimilars: The Art of Equivalence

Drugs derived from complex biological sources, known as biologics, have been in use for over a century. With advances in biotechnology, the field has exploded and significantly improved the lives of patients with cancer, diabetes, arthritis and inflammatory bowel disease (IBD). As patents on some biologics expire, pharmaceutical companies are bringing their own less-costly versions of these treatments, known as biosimilars, to market.

Different but equivalent

Biosimilars aren't new. Health Canada has approved 18 biosimilars for use by Canadian patients since 2014. Biosimilars, by definition, aren't perfect copies of the drugs they mimic. The standards for achieving biosimilarity, however, are very high. "The biosimilar molecules must demonstrate having the same basic protein structure, with only minor folding or side-chain differences," says Dr. Janet Pope, a rheumatologist at St. Joseph's Health Care and a professor of medicine at Western University.

The onus of responsibility is on drug manufacturers to demonstrate to Health Canada that any minor differences between biosimilars and the original biologic will not affect patient treat-

ment outcomes. This rigorous approval process means that patients and health care providers can have confidence in the quality, safety and efficacy of the biosimilar as any other biologic drug. Moreover, according to the Patented Medicines Prices Review Board, the use of biosimilars can save the Canadian health care system approximately \$1.8 billion per year, which can help drug plans ensure Canadians have access to innovative medicines.

As they come to market, biosimilars are providing new options for treating a wide variety of conditions, including IBD such as ulcerative colitis. "Characteristic symptoms of ulcerative colitis include rectal bleeding, reduced stool consistency, and increased frequency and urgency of bowel movements," says Dr. Neeraj Narula, Director of the IBD Clinic at McMaster University. "Biologics have changed the landscape of ulcerative colitis and are very effective therapies. Biosimilars are effective and they work in the same fashion as the originator molecule, so I don't have concerns when using biosimilars for patients in need of biologic therapy."

More choices, better outcomes

Biologics have proven to be very effective in managing severe cases of rheumatoid arthritis,

and some of the first biosimilars approved in Canada were indicated for arthritis. As a result, rheumatologists have been on the front lines of patient concerns about switching.

"There was a time when the public and some physicians didn't understand that generics would save a lot of money without putting someone at risk," says Dr. John Esdaile, Scientific Director of Arthritis Research Canada. "Those on a chronic prescription for a drug often don't notice they're being switched back and forth among the generics. No one thinks much about this anymore. The main difference today is that the injection system to administer a biosimilar is different from the originator's. In the future, we'll talk of biosimilars and no one will care. Both the rheumatologist and their pharmacist will be knowledgeable about the topic and help their patient make the transition to a biosimilar."

Biosimilars are expanding the breadth of treatments available to patients and health providers in rheumatology, IBD, and many others, but there remains a need for public education. It's essential that patients taking or considering biologics have an informed dialogue with their doctors about biosimilars and how they can fit into their personalized treatment plans. ●

Biologics, Biosimilars, and Inflammatory Arthritis

What is inflammatory arthritis (IA)?

IA is a group of conditions wherein the body attacks healthy tissues, particularly around the joint, causing inflammation. Inflammation can also cause stiffness and, if left untreated, can lead to significant, irreparable damage. IA can also cause inflammation in the lungs, eyes, heart, and arteries. This can lead to cardiovascular disease, chronic pneumonia, vision loss, and/or premature death.



What are biologics?

Biologics are treatments derived from living cells that target a specific molecule. They're not made from synthetic chemicals.

What are biosimilars?

Biosimilars are treatments made after a biologic's patent expires. Any differences between a biosimilar and its reference biologic drug don't result in differences in safety or efficacy.



6 Million
Canadians live with arthritis

By 2035, 1 in 4 Canadians will have arthritis

Health Canada's rigorous approval process means that patients can have the same confidence in the quality, safety, and efficacy of a biosimilar as any other biologic drug. Structural, functional, and human clinical studies must demonstrate that there are no clinically-meaningful differences.



Overall, biosimilars offer more choice for people living with IA. The first step to discussing whether a biologic or biosimilar is the right course of treatment starts with a conversation with your rheumatologist.

Source: Health Canada, CAPA

Both biologics and biosimilars treat



Rheumatoid arthritis



Ankylosing spondylitis



Psoriatic arthritis



Juvenile arthritis