THE EVERYTHING® HEALTHY LIVING SERIES

Arthritis: Types of Arthritis

The most important information you need to improve your health

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Avon, Massachusetts

Contents

Introduction

For more than 10 years, millions of readers have trusted the bestselling Everything series for expert advice and important information on health topics ranging from pregnancy and postpartum care to heart health, anxiety, and diabetes. Packed with the most recent, up-to-date data, Everything health guides help you get the right diagnosis, choose the best doctor, and find the treatment options that work for you.

The Everything® Healthy Living Series books are concise guides, focusing on only the essential information you need. Whether you're looking for an overview of traditional and alternative migraine treatments, advice on starting a heart-healthy lifestyle, or suggestions for finding the right medical team, there's an Everything Healthy Living Book for you.

Arthritis

It can be completely unnerving to have nothing wrong with you one day and severe pain the next day. Since pain is a somewhat common symptom associated with many different conditions, it is hard to know initially what to do or how to react to the sudden change. Not every type of arthritis develops suddenly, but that sense of confusion that builds when you accept that it's not going to go away can sometimes lead you down the wrong path.

No matter what type of arthritis you have, early diagnosis and early treatment can help prevent joint damage and disability. There are many approaches to treating arthritis, both conventional and alternative. There are myriad books written on the subject. The Internet provides even more information about arthritis. It can almost be considered too much information, because a person experiencing the initial onset of arthritis symptoms often doesn't know where to begin. Should you pick up a book

about osteoarthritis and learn all about it? Maybe you should choose the book about rheumatoid arthritis? Perhaps it's sufficient to self-treat with over-the-counter arthritis medications? How do you know you are making the right decisions?

Choosing the right starting point can impact the course of your disease. It's imperative to be evaluated by a rheumatologist, a specialist in diagnosing and treating arthritis and related conditions. Getting an accurate diagnosis is the first step to getting proper treatment and managing the disease.

Chronic arthritis affects every aspect of daily living. This practical guide will show you how to live better with arthritis. The day you are diagnosed with arthritis is the first day of your new reality. Your new reality can overwhelm you, or you can choose to face it with courage and perseverance. Your willingness to accept your new reality and adjust and adapt to it, as well as your ability to cope and an unwillingness to give up, are all factors that will influence how well you live with arthritis.

The intent of this book is to help you learn about the disease, teach you to be your own advocate, help you make better decisions, and inspire you to realize that there is still a high quality of life after an arthritis diagnosis. The first step: Understanding that change is inevitable.

If you'd like to learn more about arthritis, check out *The Everything® Health Guide to Arthritis*, available in print (978-1-59869-410-9) and eBook (978-1-60550-230-4) formats.

Common Types of Arthritis

Though the name seems representative of a single disease, arthritis is actually a group of diseases that have symptoms affecting the joints of the body and the tissues that surround the joints. Over 100 different types of arthritis range from mild forms of the disease to types that can be severe and disabling. Some types are rare, while about a dozen are considered common types of arthritis.

Osteoarthritis

Osteoarthritis is the most common type of arthritis. It is the type of arthritis most people are familiar with because it is most prevalent and is associated with aging. Osteoarthritis is also known by other names that are more reflective of the underlying disease process, including: “wear-and-tear” arthritis, degenerative arthritis, degenerative joint disease, and osteoarthrosis.

In a healthy person, the ends of the bones that form a joint are cushioned by cartilage, allowing for smooth, unconstrained movement of the joint. With osteoarthritis, the cartilage breaks down and deteriorates. As the cartilage deteriorates and is worn away, bone rubs on bone, resulting in pain, stiffness, and reduced mobility.

Bone spurs (also known as osteophytes) may develop which intrude on the joint space and fragments of bone may dislodge, which also interferes with normal movement of the joint. The lining of the joint, or synovium, becomes inflamed as cartilage breaks down, starting a process which itself causes even more cartilage deterioration and joint damage.

Symptoms of Osteoarthritis

Osteoarthritis can affect any joint, but the weight-bearing joints of the hips, knees, and spine are most commonly symptomatic. It is also not

unusual for osteoarthritis to develop in the joints of the fingers or feet. A single joint or multiple joints may be affected by osteoarthritis.

Alert

According to the Arthritis Foundation, osteoarthritis of the knees and hips is the most common cause of arthritis-related disability in the United States. In people who have knee osteoarthritis, moderate physical activity at least three times per week can reduce the risk of arthritis-related disability by 47 percent.

Signs and symptoms associated with osteoarthritis include:

- Gradual onset of symptoms
- Joint stiffness in the morning, which usually lasts less than one half hour
- Joint stiffness following inactivity or staying in one position for a prolonged period
- Joint pain or stiffness following overuse of the affected joint
- Joint pain that is typically worse in the evening than the morning
- Limited range of motion in the affected joint
- Joints that lock up or feel like they are giving out
- Localized inflammation
- Bony outgrowths
- Crepitus (a crackling noise)

Diagnosis and Treatment of Osteoarthritis

X-ray evidence of joint damage, a physical examination performed by your doctor, and a medical history that includes details about the onset of symptoms help diagnose osteoarthritis. Blood tests are ordered for the purpose of ruling out other types of arthritis. For example, blood test results that are abnormal in rheumatoid arthritis or other inflammatory forms of arthritis are usually normal in cases of osteoarthritis.

Though there is no cure for osteoarthritis, treatment is aimed at controlling symptoms, preserving residual joint function, and improving mobility. Medications are commonly prescribed to treat osteoarthritis (for example, NSAIDs and analgesics). Local injections of corticosteroids or viscosupplementation agents are also treatment options.

Some osteoarthritis patients find relief from topical creams or certain nutritional supplements. You may find that hot or cold packs can relieve symptoms. The benefits of exercise, physical therapy, and weight management can't be understated for controlling pain and symptoms associated with osteoarthritis. Surgery, though considered a last-resort treatment option for severe cases, can yield dramatic results.

Risk Factors and Prevalence of Osteoarthritis

Risk factors for osteoarthritis include age, gender, heredity, and obesity. Other risk factors may include previous injury, developmental abnormalities, and occupation.

Approximately 21 million Americans have been diagnosed with osteoarthritis. Though osteoarthritis can affect people of any age, it is more prevalent among older people. If x-rays were taken of everyone over seventy years old, about 70 percent would reveal x-ray evidence of osteoarthritis. Interestingly, only half of the group with x-ray evidence actually becomes symptomatic.

In general, more women than men develop osteoarthritis. However, under the age of fifty-five, more men than women are likely to develop osteoarthritis.

Obesity, because of the additional stress added to weight-bearing joints, is a risk factor for developing osteoarthritis. The knee joint is most affected by osteoarthritis in people carrying excess weight. Being mindful of the risk factors, especially those you can control such as your weight, may impact the course of your disease.

Fact

According to the CDC, weight loss of eleven pounds reduces the risk of developing knee osteoarthritis by 50 percent. One study from the Parker Institute concluded that in patients with knee osteoarthritis, weight reduction of 10 percent improved function by 28 percent.

Rheumatoid Arthritis

Rheumatoid arthritis is an autoimmune, systemic, inflammatory form of arthritis. It is a chronic, progressive disease. Joints are the main part of the body affected by rheumatoid arthritis, but systemic involvement is possible too, meaning that organs can be affected.

Joint damage develops differently in rheumatoid arthritis than osteoarthritis. With rheumatoid arthritis, immune cells go awry and attack the body's own healthy tissues. This happens when a three-phase inflammatory process takes place: Swelling of the joint lining (synovium) occurs; pannus (inflamed tissue spreads from the synovial membrane and invades the joint) causes the synovium to thicken; and inflamed cells release enzymes which can digest bone and cartilage, resulting in joint damage.

Symptoms of Rheumatoid Arthritis

As with osteoarthritis, rheumatoid arthritis can affect any joint. A major difference between the two most common forms of arthritis is that rheumatoid arthritis usually affects joints symmetrically. With rheumatoid arthritis, it is common for the same joint on both sides of the body to be affected (e.g., if your left knee is affected, your right knee will likely be affected too).

Rheumatoid arthritis causes joint pain, stiffness, swelling, redness, warmth, and limited range of motion. Damage can occur to tendons and ligaments, as well as bone and cartilage. Other signs and symptoms that point to rheumatoid arthritis include:

- Prolonged morning stiffness that lasts more than an hour
- Small joints of hands and feet commonly affected
- Malaise (a vague feeling of discomfort)
- Fatigue
- Low-grade fever
- Loss of appetite
- Rheumatoid nodules (a small collection or growth of tissue)
- Pain associated with prolonged sitting or staying in one position
- An association with Sjögren's syndrome (dry eyes and mouth)

Symptoms associated with rheumatoid arthritis are variable; the course of disease is not exactly alike for any two rheumatoid arthritis patients. Your individual course of disease may vary as well, as you experience periods of flares and remissions.

Diagnosis and Treatment of Rheumatoid Arthritis

Once again, there is no single test used to definitively diagnose rheumatoid arthritis. Other types of arthritis have similar symptoms, making rheumatoid arthritis difficult to diagnose. There are a number of diagnostic tools and factors that, used in combination, help formulate the diagnosis. A medical history and physical examination are used initially to search for symptoms.

Laboratory blood tests can reveal abnormalities consistent with having rheumatoid arthritis. Rheumatoid factor, erythrocyte sedimentation rate, C-reactive protein, and anti-CCP tests are routinely ordered to help diagnose rheumatoid arthritis. X-rays and MRIs (magnetic resonance imaging) are useful for showing evidence of joint damage. In the first few months after onset of the disease the evidence may not yet appear on x-ray images.

Early diagnosis is important so that treatment can begin. Decades ago, rheumatoid arthritis was treated conservatively. Conventional thinking was

that patients should be treated with the least amount of medication that evoked a response. With the development of newer medications, some of which have the potential to slow disease progression and prevent severe joint erosions, researchers and the medical community agree that early, aggressive treatment is the way to go for patients who have no contraindications (i.e., reasons a patient should not take a particular medication).

Alert

Early aggressive treatment is emphasized for rheumatoid arthritis because joint damage often occurs within the first two years of the disease. People with rheumatoid arthritis have a high risk of disability and twice the risk of mortality as people in the general population who do not have the disease.

There is no cure for rheumatoid arthritis, but treatment can help control symptoms and preserve joint function. Medications, along with other complementary treatments, are usually considered the best course of treatment for most rheumatoid arthritis patients. It is not uncommon for patients to try several treatments before deciding which ones yield optimum results. You may have to make changes to your treatment plan several times over the course of months and years.

Risk Factors and Prevalence of Rheumatoid Arthritis

Numerous studies have looked at what causes the abnormal immune response associated with rheumatoid arthritis. Genetic predisposition combined with a triggering event is a popular theory.

Rheumatoid arthritis can affect anyone of any age, including children. Typically, the age of onset for rheumatoid arthritis is between thirty and sixty years of age. Approximately 2.1 million people in the United States are affected by rheumatoid arthritis (about 1 percent–2 percent worldwide). About 70 to 75 percent of rheumatoid arthritis patients are

women. Of lifestyle factors, smoking has been shown to increase the risk of developing rheumatoid arthritis.

Psoriatic Arthritis

Psoriatic arthritis is a type of arthritis belonging to the group known as the spondyloarthropathies. Psoriatic arthritis, as its name indicates, combines aspects of chronic joint pain and the skin disease psoriasis. Like rheumatoid arthritis, psoriatic arthritis is an inflammatory form of arthritis.

In 85 percent of patients who develop psoriatic arthritis, symptoms of psoriasis appear before symptoms of arthritis, or at the same time. In up to 15 percent of cases, arthritis precedes symptoms of psoriasis.

Symptoms of Psoriatic Arthritis

There are five types of psoriatic arthritis categorized by symptoms:

- Symmetric
- Asymmetric
- Distal interphalangeal predominant
- Spondylitis
- Arthritis mutilans

Symmetric psoriatic arthritis affects joints on both sides of the body. It is similar to rheumatoid arthritis because it affects multiple joints, but is generally considered milder than rheumatoid arthritis. With psoriatic arthritis there is usually less deformity than is characteristic of rheumatoid arthritis.

Asymmetric psoriatic arthritis can affect any joint of the body, but not the same joint on both sides of the body, as is the case with the symmetric type. Sausage-like toes and fingers from swelling are common characteristics of asymmetric psoriatic arthritis. Asymmetric is considered the most common type of psoriatic arthritis.

Distal interphalangeal predominant psoriatic arthritis primarily involves the distal joints of the fingers and toes. Nail changes are also a predominant feature.

Spondylitis psoriatic arthritis is characterized by inflammation of the spine. About half of the patients with the spondylitis type have a genetic marker, HLA-B27.

Arthritis mutilans is a very rare, but severe and disabling type of psoriatic arthritis. Joint deformity is the primary symptom, with small joints in the hands and feet most affected. Neck and lower-back pain are also problematic.

Question

Is psoriasis a contagious skin condition?

Psoriasis is not contagious. Psoriatic lesions appear as whitish, scaly patches of inflamed cells, but the lesions are not infectious and are not open wounds.

Diagnosis and Treatment of Psoriatic Arthritis

As with the other types of arthritis already mentioned, a medical history and physical examination are important during the diagnostic process. Blood tests are ordered, but with the intent of ruling out other types of arthritis. The erythrocyte sedimentation rate that is often elevated with rheumatoid arthritis may also be elevated with psoriatic arthritis. Elevated levels of blood uric acid are not uncommon, making it necessary to rule out gout.

The medications used to treat psoriatic arthritis are basically the same as those used to treat rheumatoid arthritis. Additionally, topical creams and light treatments help with the psoriasis.

Risk Factors and Prevalence of Psoriatic Arthritis

Men and women are affected equally by psoriatic arthritis. The disease usually has an age of onset between thirty and fifty years old.

About 15 percent of psoriasis sufferers go on to develop psoriatic arthritis. Estimates suggest that 40 percent of people with psoriatic arthritis have a family history of psoriasis or arthritis, pointing to a genetic component. About 1 million Americans have psoriatic arthritis. About 2 percent of Caucasian people in North America suffer with psoriasis.

Juvenile Rheumatoid Arthritis (JRA)

About 300,000 children in America are affected by some form of juvenile arthritis or rheumatic disease. Joint inflammation and joint stiffness which persist for more than six weeks in a child age sixteen years old or younger is the initial criteria used to diagnose juvenile rheumatoid arthritis, more commonly referred to as JRA. There are three classifications for juvenile rheumatoid arthritis: pauciarticular, polyarticular, and systemic.

Pauciarticular JRA

Pauciarticular JRA affects four or fewer joints. About 50 percent of children with JRA have the pauciarticular type, making it the most common type of JRA. This type is further subdivided into early onset and late onset. Early onset affects more girls than boys by a 4:1 ratio. Typically, the children are very young, under five years of age. A common symptom associated with pauciarticular JRA is inflammation of the eye. Late onset is more common in boys, half of whom are positive for genetic marker HLA-B27. The large joints are commonly affected, and if there is eye inflammation it is usually not chronic.

Polyarticular JRA

Polyarticular JRA affects five or more joints and affects about 30 to 40 percent of children who have JRA. Girls are affected more often than boys by a 3:1 ratio. The small joints are more commonly affected, but large joints can also be affected. Two sub-groups of polyarticular JRA are determined by the presence or absence of rheumatoid factor. Most polyarticular JRA patients who are positive for rheumatoid factor are girls,

age eight years old or older with symmetric arthritis affecting the small joints, who are also positive for HLA-DR4 (a genetic factor). They typically have a more severe course of the disease that resembles adult rheumatoid arthritis.

Systemic JRA

Systemic JRA, also referred to as Still's disease, equally affects boys and girls, with a usual age of onset between one and six years old. Approximately 10 percent of children with JRA have the systemic type. Fever and skin rash are distinguishing features. Internal organs may be affected. Usually the child is negative for rheumatoid factor and antinuclear antibodies.

Essential

The American Juvenile Arthritis Organization (AJAO) is a valuable resource for children, teens, and young adults affected by juvenile arthritis. AJAO, a council of the Arthritis Foundation, provides information, programs, and support for JRA patients and their families. The Web site can be found at *www.arthritis.org*

Juvenile Arthritis — Naming Issues

It has been suggested that the term *juvenile rheumatoid arthritis* is confusing because it implies it's the same condition as adult rheumatoid arthritis, just with earlier onset. However, most children with arthritis do not have a form of disease that correlates with adult-onset rheumatoid arthritis. To make the distinction, some resources refer to childhood arthritis as juvenile chronic arthritis (JCA) or juvenile idiopathic arthritis (JIA). Still others suggest that simply juvenile arthritis (JA) is more accurate. Still, because old habits die hard, *juvenile rheumatoid arthritis* remains a commonly used terminology. It is important to remember that juvenile arthritis is not a single disease; it refers to a group of symptoms with many causes.

Young children may not complain of pain, so parents must be observant of signs that could be indicative of arthritis. Signs may include fatigue, lack of appetite, and lack of interest in playing or activities that would normally elicit a positive response. If the child is old enough to walk, the parent may also observe a subtle limp. A pediatrician or family doctor should be consulted. The signs and symptoms shouldn't be shrugged off as growing pains. If needed, a consultation with a pediatric rheumatologist may be ordered. Early diagnosis and treatment is very important so symptoms can be managed.

Ankylosing Spondylitis

In the United States, about 129 out of 100,000 people have ankylosing spondylitis. Ankylosing spondylitis (previously referred to as rheumatoid spondylitis, Marie-Strumpell's spondylitis, and poker back) is a chronic inflammatory type of arthritis that primarily affects the sacroiliac joints and the spine. The lower back is most often affected, but the mid-portion of the back and neck can also be involved. Progressive stiffening of the spine is common, and ankylosis (fusion) of some or all of the spinal joints occurs in later years for many but not all patients. There is a concern about fusion occurring in a non-upright position. Good posture, as well as early treatment, is important.

Joints other than the spinal joints can also be involved. The hips, knees, and shoulders may be involved; however, it is uncommon for the small joints of the hands and feet, wrists, or ankles to be affected by ankylosing spondylitis.

Ankylosing spondylitis is classified as one of the spondyloarthropathies because of shared characteristics with psoriatic arthritis and reactive arthritis. According to the Primer on Rheumatic Diseases (Arthritis Foundation), there is a strong inherited component associated with ankylosing spondylitis. About 90 percent of people with ankylosing spondylitis have the genetic marker HLA-B27. The test for the

genetic marker is not definitive for ankylosing spondylitis, but suggests a predisposition to it. Many people with ankylosing spondylitis have family members with the disease. About 6 percent of the general population has the genetic marker as well, but will likely not develop ankylosing spondylitis.

Early diagnosis is important, but it is not uncommon for the diagnosis to come with some difficulty. X-ray evidence of ankylosing spondylitis may not appear for many years. Recognizing common symptoms so you can tell your doctor what you are experiencing is helpful. Common symptoms include:

- Back pain and stiffness that can result in bent posture
- Back pain that persists for more than three months
- Back pain which is dull as opposed to sharp
- Morning stiffness, especially of the back or spine
- Pain in areas other than the back (e.g., ribs, shoulder blades, hips, thighs, heels)
- Iritis (inflammation of the eye)

Both men and women can develop ankylosing spondylitis, but it is three times more prevalent in men. Onset of the disease is usually between fifteen and forty years old, though it can develop at any age. Treatment options are similar to those used to treat rheumatoid arthritis: medications to control inflammation; physical therapy to maintain mobility and joint flexibility; and surgery to repair joint damage. However, there is no surgery to repair the spine for this disease. Ankylosing spondylitis is usually a slow, progressive disease and symptoms range from mild to severe. Most people with ankylosing spondylitis continue to work and function relatively normally. Long duration of the disease can result in neurological, cardiac, and pulmonary complications, but such complications are very rare.

Alert

Maintaining good posture is very important for people with ankylosing spondylitis. Make sure to keep your spine straight when walking or sitting. It is best to sleep on a firm mattress or to sleep on your stomach, with either a thin pillow or no pillow. You should refrain from curling up in bed.

Infectious Arthritis

Primary symptoms of infectious arthritis include joint pain and swelling. Usually only one joint is affected, but two or even three joints can be affected. A germ, whether a bacterium, virus, or fungus, is responsible for the inflammation associated with infectious arthritis.

Infectious arthritis can affect people at any age, and affects men and women equally. People with conditions that make it hard to fight infection (for example, diabetes, AIDS, kidney disease) may be more prone to develop infectious arthritis than others. Also, patients with a history of arthritis are more likely to develop infectious arthritis.

Germs have a tendency to infect weak or damaged joints. Patients who have had joint replacements are also more likely to develop infectious arthritis, as germs may target the joint prostheses.

Some of the medications used to treat inflammatory forms of arthritis lower the body's immunity or resistance to infection. If you take these medications, you are more susceptible to developing infection and infectious arthritis. People who work at certain jobs that require the handling of infectious materials may also be more at risk for developing infectious arthritis.

Fact

Most cases of infectious arthritis are caused by bacteria, including gonococcus, staphylococcus, streptococcus, pneumococcus, haemophilus, spirochetes, and tuberculosis. Viruses that can cause infectious arthritis may be associated with infectious hepatitis, mumps, and infectious mononucleosis, but parvovirus is the most common. Fungi are the least-

common causative germ of infectious arthritis, but most come from the soil, bird droppings, and plants.

Warning signs for infectious arthritis depend on the causative germ. If the causative germ is a bacterium, pain and swelling is usually localized and comes on suddenly, possibly with fever and chills. If the causative germ is a virus, widespread pain is more common, but with no fever. If the causative germ is a fungus, there is gradual onset of pain and swelling that is either localized or widespread, and mild fever is possible.

The germs have numerous available ports of entry into the body, passing through the skin, nose, throat, ears, or even a wound. The infection itself may make you quite sick before the germ travels to the joints. An infection can be passed from one person to another, but infectious arthritis cannot be passed from one person to another.

Infectious arthritis, due to a bacterium or fungus, has a good chance of being cured if treated early. If treatment is postponed or if treatment is lacking, joint damage can get worse and the infection can spread to other parts of the body.

Medications are usually prescribed to treat inflammation associated with infectious arthritis, and antibiotics or anti-fungal medications are given to treat the infection. There is no medication given to treat a virus.

Reactive Arthritis

Reactive arthritis, classified as a seronegative spondyloarthropathy, typically follows an infection. Common causes include food poisoning or another infection of the intestine (called gastrointestinal reactive arthritis). Chlamydia, a sexually transmitted disease, is another common cause of reactive arthritis. Venereal infections of the bladder, urethra, or vagina can also cause reactive arthritis in many patients (called genitourinary or urogenital reactive arthritis). Reactive arthritis itself is not transmittable from one person to another.

Symptoms may include:

- Painful, swollen, stiff joints that may also be red and warm
- Stiffness that may be aggravated in the morning
- Lower-back pain
- Heel pain (such as Achilles heel)
- Eyes sensitive to light
- Mouth sores
- Sores on the genitals

Symptoms typically appear one to three weeks following an intestinal infection. Salmonella, shigella, campylobacter, and yersinia are common causative bacteria associated with intestinal infection. With reactive arthritis, one joint is usually involved rather than multiple joints; it's usually knees, ankles, or toes that are involved. The sacroiliac joints are also commonly involved. Symptoms of reactive arthritis may also affect body parts other than the joints, including tendons, skin, and eyes.

About 50 to 75 percent of patients with reactive arthritis are positive for HLA-B27. The genetic marker points to a genetic predisposition for the disease. Cases of reactive arthritis can resolve in days or weeks, while some take nearly four to twelve months to resolve. Recurring bouts of reactive arthritis are possible. Aside from medications used to treat the infection, anti-inflammatory medications are also used to treat arthritis and joint symptoms.

Reactive arthritis usually affects people between twenty and fifty years old. There is equal prevalence of reactive arthritis among males and females as a result of intestinal infections. However, men are nine times more likely than women to get reactive arthritis following venereal infections.

Question

What is the prognosis for patients who have been diagnosed with reactive arthritis?

According to NIAMS, about 20 percent of people with reactive arthritis will have chronic arthritis symptoms which are mild. Studies have revealed that between 15 and 50 percent of patients will relapse and develop symptoms again sometime after the initial symptoms have resolved. The relapses are possibly associated with reinfection.

Also, according to NIAMS (the National Institute of Arthritis and Musculoskeletal and Skin Diseases), researchers are trying to ascertain more about the causal relationship between infection and reactive arthritis. It's still not known why infection triggers arthritis, and more specifically, why not everyone with an infection develops reactive arthritis. People with HLA-B27 are more at risk for developing reactive arthritis than those who lack the genetic factor, so the answers may, in part, have a genetic basis. Combination treatments, such as antibiotics and TNF blockers or other immunosuppressant medications, are also being studied for treatment of reactive arthritis.

Other Types of Arthritis and Rheumatic Conditions

There are other arthritis-related conditions that aren't considered rare, but are not as common or prevalent as osteoarthritis and rheumatoid arthritis. Some of the less-common types of arthritis can occur as primary diseases or as secondary conditions; it's possible to have more than one type of arthritis. Because of the complexity of each of the conditions and the possibility of overlapping symptoms, it can't be emphasized enough that your doctor must serve as the detective.

Gout and Pseudogout

Gout is recognized as one of the most intensely painful types of arthritis. Pain, inflammation, swelling, warmth, and redness of a single joint are typical symptoms associated with gout. The most common joint affected is the big toe, but other joints can also be affected.

Cause of Gout Versus Cause of Pseudogout

Gout is caused by the accumulation of excess uric acid in the body resulting in the formation of crystals that are deposited in the joints. The deposition of uric acid crystals in the joints causes the inflammatory response. Uric acid is a by-product of the breakdown of purines found in all human tissues and many of the foods you eat. Gout can result from excess production of uric acid in the body or insufficient elimination of uric acid by the kidneys. Gout may be triggered by:

- Eating a diet of purine-rich foods
- Excessive alcohol intake
- Being overweight
- Genetic factors

- Surgery
- The use of certain medications
- Lead exposure
- Joint injury

Pseudogout, as the name implies, is a condition that is often mistaken for gout. A different crystal is involved in pseudogout, however. In pseudogout, calcium pyrophosphate crystals are deposited in the joints. The condition is also referred to as calcium pyrophosphate deposition disease or CPPD. The knees are the most commonly affected joints with pseudogout. Wrists, shoulders, ankles, elbows, or hands can also be affected. Pseudogout may be triggered by:

- Increased age
- Genetic factors
- Hypothyroidism
- Hematochromatosis
- Low magnesium blood levels
- Overactive parathyroid
- Hypercalcemia

Question

Do gout attacks typically come on gradually or occur suddenly?

Gout attacks typically develop very suddenly, and it is common for the first gout episode to occur at night. People can wake with a red, swollen, inflamed toe (or other joint) after going to bed without any signs or symptoms.

Diagnosis and Treatment

The symptoms of gout and pseudogout can be mistaken for other types of inflammatory arthritis. A proper diagnosis comes from identifying the crystal in the fluid of the affected joint. Your doctor will aspirate the

fluid from the joint and examine it under a microscope for the presence of the crystals. In gout, the crystals may also be found in tophi, which are deposits found under the skin.

Gout is typically treated with diet modification, weight reduction, adequate fluid intake, and the use of medications that control the inflammation (e.g., NSAIDS or corticosteroids). Other gout medications include: colchicine which treats acute gout attacks, probenecid which helps with elimination of uric acid, and allopurinol which blocks production of uric acid.

Pseudogout is also treated using anti-inflammatory drugs and low doses of colchicine.

Prevalence of Gout

The National Institutes of Health reports that gout accounts for 5 percent of all cases of arthritis. The CDC reports that about 5.1 million adults report having doctor-diagnosed gout.

Anyone can develop gout or pseudogout, but more men than women are affected by gout. Men over the age of forty and women past menopause are at greater risk. Pseudogout crystals are found in about 50 percent of people in their nineties.

Scleroderma

Scleroderma is an arthritis-related condition that is classified as an autoimmune connective-tissue disease. You may think scleroderma is a single disease, but it's not. Scleroderma is a symptom of a group of diseases that are complicated by the abnormal growth of connective tissue supporting skin and other organs. The term *scleroderma* literally means "hard skin." Some types of scleroderma are limited to skin thickening, tightening, and hardening, while other types of scleroderma may affect blood vessels or internal organs.

Scleroderma Types

There are two major types of scleroderma, and those are further classified. The two major types of scleroderma are:

Localized scleroderma — Primarily affects the skin and is further subdivided into morphea and linear. Morphea is characterized by hard, oval patches on the skin. Linear is characterized by a line of thickened, discolored skin commonly on the arms, legs, or forehead.

Systemic sclerosis — Is further subdivided into limited scleroderma, diffuse scleroderma, and sine scleroderma. Limited scleroderma typically has gradual onset, is limited to certain areas of the body, and may affect internal organs eventually. Diffuse scleroderma is characterized by sudden onset, thickening covering a large area of the body, and may also affect internal organs. Sine scleroderma does not affect the skin.

CREST

Systemic sclerosis patients may have a typical pattern of symptoms referred to as CREST. The acronym CREST stands for:

- Calcinosis — calcium deposits in connective tissue
- Raynaud's phenomenon — small blood-vessel constriction in response to cold or stress
- Esophageal dysfunction — muscle in lower esophagus functions improperly
- Sclerodactyly — tight, thick, shiny skin on toes and fingers
- Telangiectasias — tiny red spots on face and hands

Diagnosing Scleroderma

There is no single test that is used to diagnose scleroderma, although most people with scleroderma are positive for antinuclear antibodies. A physical examination, in combination with blood tests to rule out other conditions, plus telltale symptoms of organ involvement, are all used to formulate a diagnosis.

There is neither a cure for scleroderma, nor a treatment that can prevent the thickening which is characteristic of the disease. While there is no great treatment for the skin, there are reports of benefits with some medications. Medications are usually prescribed for the consequences of scleroderma such as arthritis, pulmonary hypertension, hypertension, heartburn, kidney problems, and more.

Alert

Medications used to treat other autoimmune conditions, including rheumatoid arthritis and lupus, typically have little effect on scleroderma patients. Scleroderma is a somewhat rare disease with only twelve to twenty new cases per million diagnosed each year.

Prevalence of Scleroderma

Approximately 75,000 to 100,000 people in the United States are affected by scleroderma. Women between the ages of thirty and fifty are the most commonly affected group, but men, women, and children can all develop scleroderma.

Lupus

Lupus, short for systemic lupus erythematosus or SLE, is a chronic inflammatory disease that can affect the skin, joints, kidneys, lungs, and nervous system, as well as other organs of the body. Lupus is also considered an autoimmune disease. Common symptoms associated with lupus include:

- Arthritis in multiple joints
- Rashes including the characteristic butterfly-shaped rash over the nose and cheeks
- Fever
- Fatigue
- Weight loss

- Mouth sores or nose sores
- Hair loss
- Seizures or strokes
- Mental issues
- Low blood counts
- Urinalysis showing poor kidney function
- Chest pain or heartburn
- Sun sensitivity

Lupus has other symptoms as well. Some symptoms develop gradually and overlap with symptoms of other conditions, making lupus difficult to diagnose.

There are at least five recognized types of lupus:

Systemic lupus erythematosus — as described previously, this is the type of lupus most often referred to when people speak of lupus

Discoid lupus erythematosus — chronic skin disorder characterized by red, raised rash which appears on the face and scalp typically, but may appear on other areas of the body and may cause scarring. Rash may last and may reoccur. Only a small percentage of people with discoid lupus develop systemic lupus erythematosus

Subacute cutaneous lupus erythematosus — skin lesions on body parts exposed to the sun that do not cause scarring

Drug-induced lupus — a type of lupus caused by medications. Several medications can cause drug-induced lupus, which has symptoms similar to SLE. Symptoms usually go away when the offending medication is completely stopped

Neonatal lupus — a rare form of lupus that can develop in newborn babies of women with systemic lupus erythematosus, Sjögren's syndrome, or even in women who have no disease

Diagnosing and Treating Lupus

A combination of clinical symptoms indicating lupus and blood tests are used to help diagnose lupus.

The presence of antiphospholipid antibodies suggests the possibility of future complications including miscarriage and blood clots.

The course of treatment prescribed for lupus depends on the individual patient's needs. The unpredictability of lupus can make it necessary to change the course of disease treatment at times. NSAIDs, corticosteroids, antimalarial drugs, immunosuppressants, and DMARDs are used to treat lupus.

Essential

Nearly all patients with lupus are positive for the antinuclear antibody test. More specific antibody tests, such as anti-double strand DNA (dsDNA) and anti-smith (Sm), are used to confirm the diagnosis of lupus. Complement levels are also useful in diagnosing and monitoring lupus.

Prevalence of Lupus

Lupus affects ten times more women than men. Lupus commonly develops between the ages of eighteen and forty-five, though younger or older people can develop the disease too. African Americans have a higher rate of lupus than other groups. There also appears to be a strong genetic connection. Studies have shown that lupus is more common in families where one family member already has lupus, according to the Arthritis Foundation. According to the CDC, a conservative estimate suggests that lupus affects about 239,000 people in the United States.

Sjögren's Syndrome

Sjögren's syndrome is an inflammatory autoimmune disease that can affect various body parts, but primarily affects the tear and saliva glands, causing dry eyes and dry mouth. People who suffer with dry eyes may be at increased risk for eye infections or damage to the cornea. Patients often

complain of eye irritation such as grittiness or a burning sensation. People who have dry mouth may complain of having difficulty swallowing, especially dry foods, and may also have swelling around the face and neck. Dry mouth can increase the risk of dental decay, gingivitis, or oral thrush.

Primary or Secondary Sjögren's Syndrome

The condition is referred to as primary Sjögren's syndrome when there is no other connective-tissue disease associated with it. Sjögren's syndrome may occur commonly in patients with rheumatoid arthritis, and in those cases it is referred to as secondary Sjögren's. Extraglandular complications can occur, but are considered rare, including: joint pain without the presence of another rheumatic disease; rashes from inflammation of small blood vessels, lung, liver, or kidney inflammation; neurological problems (such as numbness and weakness); and malignancy.

Secondary Sjögren's syndrome develops in people who have another rheumatic disease. Most often, the other rheumatic condition is rheumatoid arthritis, lupus, or scleroderma.

Fact

Sjögren's syndrome is named after a Swedish doctor, Henrik Sjögren. Sjögren was the first to describe symptoms of chronic arthritis along with dry eyes and dry mouth in a group of women in the early 1900s. Ninety percent of people with Sjögren's syndrome are women.

Diagnosing and Treating Sjögren's Syndrome

Physical symptoms, blood tests, and special tests are used to diagnose Sjögren's syndrome. The physical symptoms serve as early indicators. Blood tests, such as the antinuclear antibody test and more specific antibody tests for anti-SSA and anti-SSB, are used to confirm the diagnosis. Special tests include the Schirmer test for tear production, salivary gland biopsy, salivary gland scans, and flow testing.

Sjögren's syndrome treatment focuses on relieving the symptoms of dry eyes and dry mouth and includes saliva stimulators, sprays, gels, and gum. Salagen and Evoxac are prescription medications that stimulate the flow of saliva. Dry eyes can be helped with artificial tears or eye ointments, and Restasis or hydroxypropyl cellulose may be prescribed. Extraglandular complications associated with Sjögren's syndrome may be treated with corticosteroids and DMARDs. For obvious reasons, it is important to consult regularly with a dentist and ophthalmologist as well as your rheumatologist.

Prevalence of Sjögren's Syndrome

Sjögren's syndrome most commonly develops between the ages of forty-five and fifty-five, though it can develop at any age. According to the American College of Rheumatology, ten times more women than men have Sjögren's syndrome, and about half of the affected patients have rheumatoid arthritis or another rheumatic disease. Approximately 1 to 2 percent of the population is affected by Sjögren's syndrome (between 1 and 4 million Americans).

Fibromyalgia

Fibromyalgia is a syndrome which is hard to diagnose and somewhat hard to explain because symptoms can be so variable. Fibromyalgia symptoms primarily include chronic widespread muscular pain, tenderness, and fatigue. Long ago, the disease was called fibrositis, but that was a misnomer because it implied there was inflammation. There is no inflammation associated with the pain and stiffness of the muscles, tendons, and joints seen with fibromyalgia. It is also important to note that fibromyalgia does not affect or damage internal organs.

In 1990, the American College of Rheumatology defined criteria for diagnosing fibromyalgia, which until then wasn't understood very well. The criteria included:

- A history of widespread pain in all four quadrants of the body for three months or longer
- Pain in eleven of eighteen tender points

Fibromyalgia has also been associated with a heightened sensitivity to pain, migratory pain, chronic regional pain, and abnormal central nervous-system function according to some researchers. Other symptoms that are often associated with fibromyalgia include:

- Headaches
- Sleep disturbances
- Irritable bowel or bladder
- Cognitive difficulties (sometimes called fibro fog)
- Jaw pain
- Pelvic pain
- Restless leg syndrome
- Hearing, vision, and balance problems
- Heat and cold sensitivities
- Chemical sensitivities or allergies
- Mitral valve prolapse
- Neurological problems
- Depression or anxiety

Diagnosing and Treating Fibromyalgia

The cause of fibromyalgia is unknown, though there are more and more clues coming from fibromyalgia research. Diagnosis is difficult and is based essentially on symptoms. There are no x-rays, blood tests, or other diagnostic tests available that confirm fibromyalgia.

Fibromyalgia is treated using medication and nonpharmacologic therapies. Medications are chosen based on their ability to relieve symptoms. There is no medication that cures fibromyalgia. Analgesic medications, sleep medications, and antidepressants are often employed to

treat fibromyalgia. Guaifenesin, a common cough-syrup ingredient, has been shown to help with fibromyalgia symptoms. Most recently, antiepileptic drugs Neurontin (gabapentin) and Lyrica (pregabalin) have been deemed promising as a treatment for fibromyalgia.

Prevalence of Fibromyalgia

Of people with fibromyalgia, more than 80 percent are women. Most commonly, fibromyalgia strikes between thirty-five and fifty-five years of age. Though men, children, and older persons can also develop fibromyalgia, it is not common in those groups.

Like other rheumatic conditions, fibromyalgia can occur as a primary disease or as a secondary condition along with another rheumatic condition. It has been estimated that fibromyalgia affects between 2 and 4 percent of the population. The CDC estimates that 3.7 million adults in the United States have fibromyalgia.

Alert

Since pain and tenderness are the primary symptoms of fibromyalgia, it is hard for doctors to set it apart from the other rheumatic diseases that have similar symptoms. X-rays and blood tests can be used to rule out other rheumatic conditions, narrowing the possibilities down to fibromyalgia.

Carpal Tunnel Syndrome

Carpal tunnel syndrome occurs when the median nerve is compressed, resulting in pain, numbness, tingling, weakness, or a burning sensation in your hand and fingers (except for the little finger, which remains unaffected). The median nerve runs from your forearm into your hand through a tunnel in your wrist. Wrist bones comprise the sides and bottom of the tunnel, while the transverse ligament forms the top of the tunnel. There are also tendons in the tunnel that connect muscle to bone, but the median nerve is the culprit in carpal tunnel syndrome. Compression of the

median nerve, whether it is from swelling or narrowing of the tunnel, is the cause of symptoms. In some cases, enlargement of the median nerve can cause carpal tunnel syndrome, but more often it is compression of the nerve.

Symptoms associated with carpal tunnel syndrome typically begin gradually with a sensation of itching, tingling, or burning in the palm of the hand or index finger, middle fingers, or thumb. One or both hands may be affected. Often, a feeling of fullness or swelling is present even when no swelling is truly evident. Clumsiness and problems with tasks requiring manual dexterity are frequent complaints.

Pain may radiate from the hand up to the elbow. It is common for carpal tunnel symptoms to be worse at night and when the hand is warm. The muscles at the base of the thumb can atrophy.

Diagnosing and Treating Carpal Tunnel Syndrome

According to the Arthritis Foundation, several physical tests help diagnose carpal tunnel syndrome. One of the physical tests is called Tinel's sign; it involves tapping the front of your wrist to check for pain and tingling. Another test, known as Phalen's sign, involves bending the wrist downward, holding, and releasing to check for pain and tingling. Nerve conduction studies can also provide more information. To rule out other conditions, blood tests and x-rays may be ordered.

Essential

The cause of carpal tunnel syndrome is not always known. Wrist injury, swelling associated with different types of arthritis, repetitive motion, certain occupations, diabetes, thyroid disease, inflammatory arthritis such as rheumatoid arthritis, and hormonal changes have all been linked to carpal tunnel syndrome. However, sometimes it can develop for no obvious reason.

Treatment of carpal tunnel syndrome focuses on relieving pain and restoring normal sensations. NSAIDs (nonsteroidal anti-inflammatory drugs) and corticosteroid injections are often used to control inflammation. Protective splints can help the condition from worsening in many cases. If work or certain activities aggravate symptoms, modifying those activities or using adaptive equipment can help by decreasing pain, stiffness, and swelling. Surgery is a common but last-resort solution. The procedure, called a carpal tunnel release, relieves pressure on the median nerve.

Prevalence of Carpal Tunnel Syndrome

Women are more commonly affected by carpal tunnel syndrome than men; according to the National Institutes of Health, women are three times more likely than men to develop carpal tunnel syndrome. Though it can develop at any age, onset is most common after age fifty. Carpal tunnel syndrome is rare in children.

In 2002, the Bureau of Labor Statistics reported that carpal tunnel syndrome accounted for the highest number of missed workdays (twenty-seven), more than missed days due to back injury or broken bones. It has been estimated that about 3 percent of women and 2 percent of men will at some time develop carpal tunnel syndrome.

Lyme Disease

Lyme disease is an infection caused by the spirochete *Borrelia burgdorferi*. The spirochete can live within certain ticks (most commonly the deer tick), and is spread to humans via the bite of an infected tick.

Stages of Lyme Disease

The early localized stage of Lyme disease is characterized by a skin rash (erythema migrans) at the tick-bite site. The rash, which is said to look like a bull’s eye, appears anywhere from three days to weeks after the tick bite. Typically, the rash is small at first, but gets larger. If the rash doesn’t occur or goes undetected, the bacterium may spread through the

bloodstream to other parts of the body. If that happens, the person enters the next stage of Lyme disease, called early disseminated stage, in the weeks after the tick bite.

In the early disseminated stage, the person affected may develop other symptoms including:

- Muscle pain
- Joint pain
- Multiple rashes
- Fever
- Headaches

In late stage infection, which can occur months or years later, there can be more significant arthritis involvement, nervous-system problems, sleep problems, memory issues, and heart problems. Lyme arthritis, as it is sometimes called, typically causes swelling in one or both knees, but it can affect other large joints of the body too.

Diagnosing and Treating Lyme Disease

The CDC has adopted a two-step diagnostic approach for Lyme disease. The ELISA blood test is used to define certain antibodies that would occur as the immune system responds to the infection. The Western blot test is then used to confirm borderline results or positive results. These blood tests shouldn't be performed until the patient shows symptoms which may be linked to Lyme disease. False positives or false negatives may occur prior to that time.

Fact

In 2005, according to the CDC, "23,305 cases of Lyme disease were reported, yielding a national average of 7.9 cases for every 100,000 persons. In the ten states where Lyme disease is most common, the average was 31.6 cases for every 100,000 persons."

Lyme disease is treated in its early stages with a two- to three-week course of oral antibiotics. If there are some other complications, intravenous antibiotics may be used. Antibiotics can be used if diagnosis is late or delayed, but there may be residual symptoms in such cases. Being treated early with antibiotics is your best chance for full recovery.

Prevention and Prevalence of Lyme Disease

Lyme was named in 1975 after an outbreak occurred in Lyme, Connecticut. It was discovered that people who work or spend leisure time in wooded areas, especially during tick season, were at higher risk of developing Lyme disease. To prevent the disease, make sure to wear protective clothing outdoors — long pants and long sleeves especially. It's also a good idea to use insect repellant with DEET, check for ticks when you come in from outside, clear away wooded, brushy, or grassy areas close to your home, and be aware of what the rash typical of Lyme disease looks like.

There is a peak of infection in the Northeast and Upper Midwest in late spring and early summer. A second peak period occurs in the fall. During late summer and winter, there is less chance of tick bites.

Raynaud's Phenomenon

Raynaud's phenomenon is a condition that affects blood vessels in the fingers, toes, ears, nose, and lips. During a Raynaud's attack the blood vessels constrict, which decreases blood flow. Typically, attacks last around fifteen minutes, but may last only one minute or up to several hours. When a Raynaud's attack occurs, there can be pain, numbness, tingling, swelling, throbbing, and discoloration of the affected digit or lobe. It is possible for sores to develop on the affected body part. Raynaud's attacks are often brought on by exposure to cold or periods of excessive stress.

Primary Raynaud's phenomenon is considered the more mild form of the condition. No other disease is associated with primary Raynaud's phenomenon. Secondary Raynaud's phenomenon is less common, yet more severe. Secondary Raynaud's phenomenon is associated with other connective-tissue diseases.

Diagnosing and Treating Raynaud's Phenomenon

Beyond a physical examination (which looks for blueness or pallor of the skin and redness with rewarming, as well as pitting scars or ulcers of the skin) and blood tests (sedrate and antinuclear antibody test) to rule out other rheumatic diseases, there are some specific diagnostic tests for Raynaud's phenomenon: nailfold capillaroscopy and a cold stimulation test.

Treatment of Raynaud's phenomenon is focused on preventing future attacks and permanent tissue damage. It is very important to warm the affected areas, keep yourself warm, manage your stress, stop smoking, relax, and exercise.

Medications such as calcium channel blockers, vasodilators, and smooth muscle relaxers are helpful. Surgery may be used in extreme cases. Usually, people adjust to living with Raynaud's phenomenon and are conscious of what can aggravate the condition.

Prevalence of Raynaud's Phenomenon

Approximately 85 to 95 percent of people with scleroderma or a mixed connective-tissue disease (MCTD) also have Raynaud's phenomenon. It is estimated that a third of lupus patients also have symptoms associated with Raynaud's phenomenon.

About 75 percent of all primary Raynaud's cases occur in women ages fifteen to forty. According to NIAMS, it has been estimated that Raynaud's phenomenon affects 5 to 10 percent of the general population in the United States, though estimates vary.

Alert

It is imperative for a person who suffers from Raynaud's phenomenon to keep warm. Wear gloves, even inside the house, if it helps. Rule number one is to protect yourself from the cold in any way you can.

Less Common Forms of Arthritis

There are many other types of arthritis and arthritis-related conditions that haven't yet been discussed. Here are ten more to consider:

Tendinitis — Tendons attach muscle to bone. Tendinitis is inflammation, swelling, or irritation of a tendon.

Bursitis — The bursa is a fluid-filled sac which lies between a tendon and skin, or between a tendon and bone. Bursitis is inflammation of the bursa sac.

Osteoporosis — Osteoporosis is a disease which causes bones to become less dense or brittle. Because of that, the bones are more prone to fracture. Several risk factors contribute to osteoporosis, including menopause and taking corticosteroids.

Costochondritis — Costochondritis is inflammation of a rib or the cartilage connecting a rib. It can cause chest pain that is indistinguishable from cardiac chest pain without an evaluation by a doctor.

Polymyositis — Polymyositis is a systemic connective-tissue disease characterized by inflammation and degeneration of the muscles. It is classified as a myopathy.

Dermatomyositis — Dermatomyositis is a connective-tissue disease that is characterized by inflammation of the muscles and the skin. Think of dermatomyositis as polymyositis plus skin inflammation. It is also classified as a myopathy.

Polymyalgia rheumatica — PMR is a rheumatic condition associated with moderate to severe muscle pain and stiffness in the neck, shoulder, and hip area.

Vasculitis — Vasculitis is inflammation of the blood vessels. Many rheumatic conditions are associated with vasculitis.

DISH — DISH is an acronym for Diffuse Idiopathic Skeletal Hyperostosis, which is a degenerative type of arthritis with calcification along the sides of the vertebrae.

Felty's syndrome — Felty's syndrome is a disorder characterized by rheumatoid arthritis, an enlarged spleen, a decreased white blood cell count, and recurrent infection.

Polyarthritis is one of the other common terms you may hear. Polyarthritis is any type of arthritis that affects five or more joints. Typically, polyarthritis implies one of the inflammatory types of arthritis.

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