Special Report

Supplement to MAYO CLINIC HEALTH LETTER

AUGUST 2014



Hand pain Placing yourself in good hands

Extend your arms for a minute and marvel at your remarkable hands — tools that have served, guided, built, soothed and caressed. These complex masterpieces made up of bones, muscles, tendons, ligaments and nerves enable you to connect to the world through touch and utility.

Hands are on the front lines of your daily activities, which makes them vulnerable to injury or degenerative conditions, especially after years of wear and tear. Like most things, it's easy to take your hands for granted until something goes wrong. Problems with your hands transform simple, necessary tasks — cooking, bathing, dressing, driving and typing — into frustrating and stressful ordeals.

But chronic hand dysfunction and pain need not be an inevitable part of aging. Depending on your condition, there are many different strategies — ranging from joint-friendly tools for easing everyday tasks to cutting-edge surgery — that can alleviate, manage and even prevent hand pain.

Joint trouble

Arthritis — literally "inflamed joint" — occurs when the normally smooth surfaces between your joints become irregular and no longer fit well together. There are two main forms of arthritis:

Osteoarthritis — Of the more than 100 types of arthritis, osteoarthritis, also called wear-and-tear arthritis, is the most common. Osteoarthritis occurs when cartilage slowly wears down due to age or injury, such as dislocations or fractures near the joints. Osteoarthritis affects more than 27 million people in the U.S. and is on the rise due to the aging population and increasing prevalence of obesity. More than 55 percent of people are affected by age 70.

Osteoarthritis of the hands most often develops in predictable joints — the base of the thumb and the joints closest to your fingertips. Bony growths, known as Heberden's or Bouchard's nodes, may form at your middle and end finger joints, giving your hands a knobby appearance.

Pain, stiffness and swelling are often aggravated by activity and relieved by rest and are the most common symptoms of osteoarthritis. You may not feel the pain immediately, but it may show up hours later or even the next day. Morning pain and stiffness is common, though not as long lasting as it is with rheumatoid arthritis. Opening jars or turning keys



Osteoarthritis

may become painful, prompting you to change the way you use your hands. In other cases, you may feel no pain or stiffness, even though your joints are swollen.

The main goals of osteoarthritis treatment are to relieve pain, restore function and stop progression of the disease. The most effective treatment usually includes a combination of simple self-care, medication and — if needed — surgery.

Your doctor may recommend the following:

■ *Rest for your joints* — Brief periods of rest may help when your arthritis flares up or if you've been particularly active. Splints or soft sleeves may help stabilize and take a load off of your joints. However, wearing a splint for too long can cause your muscles to deteriorate (atrophy), so limit use to when your joints hurt and when you're sleeping or doing activities that aggravate your joints.

■ *Exercise* — It's important to maintain motion in your fingers and to use your hands as much as your comfort level allows. Studies show that strength and flexibility exercises offer pain relief and improved function for arthritis.

■ *Hot and cold* — Ice packs or bags of frozen vegetables may relieve swelling and raise your pain threshold. Heating pads or warm paraffin wax dips also can soothe aching hands.

Medication — Pain relievers and nonsteroidal anti-inflammatory drugs (NSAIDs), including acetaminophen (Tylenol, others), ibuprofen (Advil, Motrin IB) or naproxen (Aleve), are often recommended first for arthritis pain relief. Topical creams containing capsaicin or anti-inflammatories, such as diclofenac (Pennsaid, Solaraze, Voltaren), may be an alternative to oral medication, but some require a prescription. If these medications aren't effective, cortisone injections

Hand anatomy

The ability of your hand to perform powerful action — as well as perform intricate fine movements — reflects its masterful construction. Each of your hands contains 27 bones. They account for about a quarter of the total bones in your body.

Complex as they are, hands are vulnerable to a variety of ailments. Your primary care provider can diagnose and treat some hand conditions. If necessary, you may need to be referred to a doctor who specializes in the treatment of hand conditions (hand surgeon). Depending on your specific problem, a rheumatologist, neurologist or rehabilitation specialist may be necessary. In fact, doctors from several different areas of medicine could be involved in your care.

Ganglion cysts

If you notice a small lump on your wrist or end of your finger, chances are it's a ganglion cyst. Ganglion cysts root themselves in a joint and form a balloon-shaped, fluid-filled mass that pushes up your skin. Ganglion cysts that develop at the end joint of your finger are known as mucous cysts.

These types of cysts are typically associated with arthritis and most commonly affect women between the ages of 40 and 70. Though unsightly, ganglion cysts are harmless, often disappearing spontaneously. If a cyst causes pain and affects mobility, the fluid can be drained (aspiration) or surgically removed. may be considered. However, the effect can vary and tends to diminish with subsequent injections. Side effects limit how many times they can be repeated.

■ Surgery — If nonsurgical treatments don't provide adequate relief, surgery may be the next step. If possible, preserving or reconstructing the joint is the goal. In the case of thumb base arthritis, a popular joint reconstruction technique involves removing the degenerated joint surface and replacing it with rolled-up soft tissue, such as a tendon.

For severe osteoarthritis, joint fusion or joint replacement may an option. Fusion offers pain relief, but you'll no longer be able to bend your finger at that joint. Continued advances in joint replacement are providing new options for people with joint destruction in the fingers and wrist. For example, new minimally invasive surgeries are making it possible to perform some joint replacements with smaller incisions and a shorter, easier recovery.

Rheumatoid arthritis — Rheumatoid arthritis is the next most common form of arthritis after osteoarthritis. It occurs when your immune system — normally your body's first line of defense against outside organisms — turns on your body and attacks the tissue enveloping your joints (synovium). Inflammation in your synovium causes adjoining ligaments and tendons to stretch, deforming and loosening your joints. Joints may appear red and puffy and feel warm to the touch.

Because rheumatoid arthritis and osteoarthritis cause similar symptoms, they often get confused. In fact, rheumatoid arthritis has several features that make it different from osteoarthritis. In rheumatoid arthritis, the joints are painful, hot, red and swollen. Hot and red joints are indicative of an inflammatory process. Osteoarthritis is thought to generally have less of an inflammatory component.

Unlike other forms of arthritis, rheumatoid arthritis is considered a systemic illness, meaning it can affect many parts of your body at once. Rheumatoid arthritis also generally occurs in a symmetrical pattern, affecting both sides of your body equally. Sometimes, it's accompanied by fatigue and fever.

Researchers believe that rheumatoid arthritis begins to damage your joints within a year or two after beginning its course, which underscores the need for early diagnosis and treatment. However, no single test exists for rheumatoid arthritis, so it can be difficult to diagnose, especially in the early stages.

Rheumatoid arthritis therapies aim to relieve pain, improve function and halt progression of the disease. Similar self-care strategies — such as rest, joint splinting and exercise — combined with medication are important in the comprehensive management of rheumatoid arthritis.

Early use of disease-modifying antirheumatic drug (DMARD) therapy is standard rheumatoid arthritis treatment. NSAIDs or cortisone injections may be combined with DMARDs to relieve swelling. DMARDs, known as biologic response modifiers, also may be used to treat more severe rheumatoid arthritis.

Tendon trouble

Like bundles of cable cord, a network of tendons runs from your forearm muscles into your hand, moving to and fro in slick tendon sheaths. Healthy hands are literally well-oiled machines, relying on a harmonious working relationship of bone, tissue and fluid for optimal efficiency. Injury or inflammation can easily throw a monkey wrench into the works, especially the complicated tendon structure. Problems involving the tendons include:

■ *Trigger finger* — Trigger finger or trigger thumb occurs when the sheath, or pulley, through which your tendon moves becomes inflamed and constricts your tendon, making it hard for it to slide back and forth. Friction can cause

your tendon to develop nodes, further impeding the pulley. Because of the increased resistance, you may feel pain, popping or a catching sensation. Sometimes, your finger becomes locked and is hard to straighten.

Treatment for trigger finger focuses on reducing swelling in the tendon sheath to allow the tendon to glide freely once again. Immobilizing the affected finger with tape or a splint, combined with taking anti-inflammatory medication, may resolve the problem. For persistent symptoms, a cortisone injection may be considered. If symptoms don't improve, your doctor may recommend repeating the injection or trying surgery.

Surgically opening the sheath allows your tendon to glide more easily. Two types of outpatient surgery, percutaneous or open surgical release, are equally effective for treating trigger finger, with only a 3 percent recurrence rate.

■ *De Quervain's disease* — De Quervain's disease, also known as de Quervain's tenosynovitis, affects the two tendons going to the base of your thumb. Attached to muscles in your forearm, these tendons are responsible for extending your thumb backward and moving your thumb away from your hand. Both tendons share a thick sheath, normally gliding easily side by side. In de Quervain's disease, the tendon sheath becomes inflamed and narrow, causing pain and swelling, especially when grasping something or twisting your hand.

Doctors aren't totally sure what causes de Quervain's disease. Trauma or repetitive pinching with your thumb while simultaneously moving your wrist may thicken the tendon sheath, resulting in inflammation. Certain conditions, such as pregnancy, rheumatoid arthritis or a type of pseudogout, may make you more susceptible to de Quervain's disease. Although people of all ages get it, de Quervain's disease is most commonly seen in women between the ages of 30 and 50.

Typically, a physical examination is sufficient to make a diagnosis of de Quervain's disease. However, X-rays may be done to rule out arthritis as a potential cause of pain. Your doctor may ask you to perform the Finkelstein test, where you place your thumb on your palm, close your fingers over it to make a fist, then bend your wrist downward. If you have de Quervain's disease, this motion is quite painful.

Treatment for de Quervain's disease involves reducing inflammation and relieving pain, often with ice packs and NSAIDs. Splinting or taping the thumb to your index finger forces your thumb to rest, giving it time to heal. Once symptoms have resolved, gentle stretching exercises should be performed regularly. Steroid injections also can be quite helpful in more-severe cases.

• Dupuytren's contracture — This is an abnormal thickening of the tissue just beneath the skin of your palm and sometimes extending into your fingers. Noticeable pits, nodules and eventually bands of tissue (cords) may form, bending the fingers inward (contracture).

You may first notice the symptoms of Dupuytren's contracture if you're unable to lay a hand flat on an even surface, such as a table. Certain activities, such as putting your hands in your pockets or wearing gloves, may become difficult. Nodules may initially be tender, but that usually resolves over a few months. Sometimes, people mistake the cords for tendons, but they actually lie between the skin and tendons.

Depending on the severity of your condition, there are several treatment options available. Observation may be the best approach for mild cases, especially if your hand function is unaffected. Corticosteroid injections may relieve pain and slow disease progression but won't help straighten the fingers.



Trigger finger





Dupuytren's contracture



Carpal tunnel syndrome

If your hand function is severely affected, collagenase injection therapy, percutaneous needle aponeurotomy (PNA) or surgery may help uncurl bent fingers. In collagenase injection therapy, your doctor injects an enzyme directly into the affected tissue. Within hours, the enzyme begins dissolving the contracted cords, allowing the fingers to straighten. This type of therapy is most effective on milder contractures.

Straightening more-severe contractures may require PNA or surgery. During PNA, your surgeon inserts a needle under your skin and uses it to cut the affected tissue. Surgery involves making an incision in your hand and dividing or removing the thickened bands of tissue. Compared with surgery, PNA is less invasive, and lower in cost, requires only local anesthetic and can be performed in your doctor's office. However, PNA has a higher recurrence rate than does surgery.

Nerve trouble

Like lights flashing on a switchboard, a network of nerves branches throughout your hand, sending and receiving messages from your brain. The hand's main nerves — radial, median and ulnar — travel downward through your arm, giving feeling and movement to distinct zones in your hand. Classic symptoms of nerve trouble — numbness, tingling and pain — indicate pressure, usually from bone or swollen tissue, somewhere along a nerve's path.

The most common nerve troubles affecting the hand are nerve compression syndromes or entrapment neuropathies. Carpal tunnel syndrome remains the most well-known and diagnosed nerve compression syndrome of the median nerve, though the lesser known cubital tunnel syndrome, which affects the ulnar nerve, also is prevalent. Radial tunnel syndrome is the most common condition affecting the radial nerve. Here's a closer look at some of these nerve problems: *Carpal tunnel syndrome* — This occurs when your median nerve becomes compressed or squeezed at the wrist. The carpal tunnel houses nerves and tendons, but has little room for much else in the narrow, rigid passage. Infection, trauma, an underlying medical condition, or forceful, repetitive activities often cause swelling, resulting in increased pressure on the nerve. Contrary to popular belief, there's little clinical data to prove that gentler repetitive activities, such as typing, cause carpal tunnel syndrome. In many cases, an underlying cause can't be found.

Symptoms often start gradually, with burning, tingling and numbness in your

thumb and fingers, excluding the pinkie and outer half of your ring finger. Although your hand may feel swollen, no swelling is apparent. Shaking your hands may temporarily alleviate symptoms. Nighttime flare-ups are common, as many people curl their wrists while sleeping, increasing pressure on the nerve at the wrist. Certain activities, such as holding a phone or book, may trigger symptoms.

Diagnosing carpal tunnel syndrome begins with a physical exam of the hands, arms, shoulders and neck to help determine if there's an underlying disorder that may be causing your symptoms. Your doctor may try to provoke carpal tunnel syndrome symptoms by manually compressing the median nerve in your wrist or having you

perform certain hand maneuvers. X-rays may help determine if arthritis or fractures are causing your symptoms. Electrodiagnostic studies also may be conducted to test nerve impulses.

Depending on the severity of symptoms, sometimes it's better to have surgery sooner rather than later. For mild carpal tunnel syndrome symptoms, simple measures are first line therapy. Wearing a brace, especially at night or during daytime activities that trigger symptoms, helps keep your wrist in a neutral position. NSAIDs help reduce inflammation and relieve pain. Corticosteroids or lidocaine injections into your wrist often provide immediate pain relief.

If initial treatments don't work, surgery can relieve pain and prevent irreversible damage. Known as carpal tunnel release surgery, this procedure involves severing the ligament that surrounds the wrist, thereby increasing the size of the tunnel and decreasing pressure on the median nerve. Carpal tunnel release surgery can be performed by making a 1- to 2-inch incision in the wrist (open release) or using smaller incisions (endoscopically). Depending on the severity of the nerve compression, surgery may provide immediate relief of symptoms. If the nerves are severely compressed, surgery may simply halt the progression of the symptoms. Recovery to full activities may take months.

■ *Cubital tunnel syndrome* — Your ulnar nerve runs from your neck to your hand and can be compressed at several places along the way, most commonly in the narrow cubital tunnel near the elbow. Just under your elbow's bony bump (medial epicondyle), the ulnar nerve runs close to the surface. Your ulnar nerve produces the electric tingle you feel when hitting your funny bone.

With cubital tunnel syndrome, you may feel an ache inside your elbow, but most symptoms occur in the hand. Numbness and tingling are common in your little finger and half of your ring finger — areas served by the ulnar nerve. A weakened grip and difficulty with finger coordination — such as when typing or playing an instrument — may occur. Symptoms are often exacerbated when your elbows are bent, such as when driving or holding the phone.

In many cases, the cause of cubital tunnel syndrome is unknown. Because of the slim passageway and location of the ulnar nerve on a constantly flexing joint, it's especially vulnerable to compression. Repetitive activities that require you to bend or lean on your elbows put you at higher risk of this condition.

Because muscle wasting can occur from untreated cubital tunnel syndrome, it's important to see your doctor if symptoms are severe or have lasted more than six weeks. Most likely, your doctor will first recommend nonsurgical treatments such as NSAIDs, corticosteroid injections, splinting and education on how to protect the nerve. To keep your arm and wrist from becoming stiff, specific nerve-gliding exercises may be helpful. If simple measures don't help, there are a few surgical options for cubital tunnel syndrome.

Cubital tunnel release, or decompression, surgery involves cutting and dividing the ligament "roof" of the passage, allowing more room and taking pressure off of the ulnar nerve.

Radial tunnel syndrome — This occurs when the radial nerve is squeezed somewhere along the 5-centimeter-long radial tunnel that runs near your elbow. The radial tunnel runs underneath the supinator muscle — the same muscle that allows your arm to twist, such as when opening a jar or turning a screwdriver.

Repetitive, forceful pushing, pulling, bending and twisting or a severe blow can stretch or irritate the radial nerve, causing pain and tenderness on the outside of your elbow. Tennis elbow and radial tunnel syndrome are often confused, as they share some symptoms. However, radial tunnel syndrome pain starts about 2 inches lower than tennis elbow pain, and unlike tennis elbow, pain doesn't increase when your flexed wrist is resisting pressure. Pinpointing the exact area of pain is vital to properly diagnose your condition.

Tenderness over the radial tunnel is the hallmark of radial tunnel syndrome. Your doctor may have you perform specific maneuvers with your arm and hand.





Natural remedies

While pain medications can be very effective, they have drawbacks to consider — such as high costs, side effects or incompatibility with other medications — that prompt people to seek relief elsewhere. The following natural medicines show promise in treating arthritis:

■ *Capsicum* — Also known as cayenne pepper, capsicum peppers contain capsaicin, the substance that puts the fire in hot peppers. Applied topically, capsaicin cream is effective for treating arthritis pain.

■ Indian frankincense — Also known as boswellia, Indian frankincense extract contains boswellic acid, which seems to act as an antiinflammatory. Participants in two clinical trials reported noticeable pain relief within about a week of taking daily doses of specific Indian frankincense extracts.

• *Turmeric* — The substance that lends turmeric its vibrant yellow color, curcumin, may have anti-inflammatory properties. After 8 weeks of taking a specific turmeric extract, research participants reported pain relief and improved function.

■ *SAMe* — There's evidence that SAMe may reduce the pain of osteoarthritis and may be well-tolerated. Results suggest that SAMe may be as effective as anti-inflammatory drugs. Doses have ranged from 600 to 1,200 milligrams taken by mouth daily, but the optimal dose still needs to be determined.

If you'd like to try natural medicines to treat your arthritis, first talk with your doctor. Unlike carpal and cubital tunnel syndromes, electrodiagnostic tests generally aren't helpful in diagnosing radial tunnel syndrome.

Conservative treatment is typically the first course of action — including NSAIDs, splinting, nerve gliding exercises and avoidance of activities that aggravate your radial nerve. For severe cases, surgery involves an incision in your arm along the radial nerve, moving muscle and soft tissues aside and cutting any bands of tissue that are compressing the nerve.

Trauma

Constant use takes a toll on hands, leaving them vulnerable to injury from overuse or trauma. Age-related issues, such as lack of balance, vision problems and decreased bone density, also raise the risk of falling and fall-related injuries. Treating hand injuries immediately is important in maintaining optimum hand function. Some types of trauma include:

• Sprains — These occur when your ligaments are stretched, torn or pulled away (avulsed) from bone. Because ligaments act like tape holding your hand structure together, sprains can destabilize the entire hand, causing stiffness, pain, swelling and bruising. Falling on the hands frequently results in wrist or thumb sprains.

Many people ignore a sprain, hoping it will heal on its own. But untreated sprains can lead to chronic instability, weakness and arthritis. Mild to moderate sprains may require only pain medications, splinting and rest. As your sprain heals, gentle stretching exercises can ease stiffness. Torn or avulsed ligaments require a doctor's care. Depending on your injury, the ligament may need surgical repair or reconstruction.

■ *Fractures* — More than 1 in 3 people older than 65 fall each year, resulting in about 1.6 million emergency room visits annually.

When you fall, a natural tendency is to break your landing with an outstretched arm, which can fracture the fragile bones in your wrist, hand and fingers. Emergency physicians see this phenomenon so often, they've dubbed it fall on outstretched hand (FOOSH).

One of the most common fall-related injuries is a broken wrist known as a Colles' fracture. It occurs in one of the wrist bones on the thumb side, just above the wrist joint. Even a minor fall can fracture bones weakened by osteoporosis. Immediately following a hand, finger or wrist fracture, the injured area typically swells and feels tender.

A scaphoid bone fracture in the wrist is an exception. Often the result of a fall, many people with a fractured scaphoid think they have only a sprained wrist because there's little swelling and no visible deformity. Simple sprained wrists are rare, so it's important to see your doctor if wrist pain lingers more than a day or so after injury.

Often, a cast or splint can stabilize a fracture until it heals. Some fractures require surgery to realign the pieces and fix them in place. Wires, screws or plates may be required to hold the bones together. After immobilizing the hand in a cast or splint, even uninvolved joints can get very stiff. Hand exercises are often necessary to help regain motion. Hand and wrist injuries can lead to permanent loss of motion and can take a year or more to reach full recovery, depending on the injury and its severity.

Hand infections

Without prompt treatment, minor hand infections can quickly become devastating. The majority of people with acute hand infections are healthy adults who have neglected or put off treatment of minor trauma. Bacteria, viruses and parasites can destroy healthy tissue, multiply and enter the bloodstream. Even a small scratch on your finger can potentially disable your hand, or worse. Chronic conditions, including rheumatoid arthritis and type 2 diabetes, also put you at greater risk of infection. Superficial hand infections involve the skin and tissue above the tendons. These infections include:

■ *Paronychia* (*par-o-NICK-e-uh*) — Acute paronychia is a bacterial infection in the cuticle around your fingernail. Signs and symptoms include redness, swelling, pain and, eventually, drainage of pus. Manicures, artificial nails, nail biting and hangnails are common causes. Warm soaks and antibiotics may resolve early cases, but more-severe cases may require surgical drainage or lifting the nail to treat the infection underneath.

Chronic paronychia affects the cuticle also, but this type of infection is fungal. People whose hands are often wet, such as bartenders or dishwashers, are particularly susceptible. You may lose your nail, and the infection may go deeper into your finger. Treatment ranges from topical antifungal medications to total nail removal.

■ *Fingertip infection (felon)* — A serious, painful infection or abscess in the fleshy pad (pulp) of your fingertip typically follows a puncture wound. Increased pressure and throbbing pain from an untreated felon can become intolerable. Felons that are treated with warm soaks, rest, elevation and antibiotics before swelling begins may heal without further treatment. Abscesses require surgical drainage and thorough cleaning (debridement) to halt the infection.

Herpetic whitlow — This viral infection, usually on the fingers, is caused by the herpes virus entering broken skin. Herpetic whitlow starts with a burning, tingling feeling in your skin followed by small, painful blisters. Health care workers and people regularly exposed to the herpes virus are at higher risk. A topical antiviral medication may be effective. With rest, elevation and NSAIDs, herpetic whitlow usually resolves in two to three weeks.

■ Cellulitis — These infections appear as warm, red, swollen areas with welldefined borders. Joints underneath the affected area are painful and stiff. Cellulitis may be treated with antibiotics and close follow-up. More-serious cases may require intravenous antibiotics and hospitalization, as they can progress to a deeper, more-serious infection.

Deep hand infections

Deep infections occur in the tendon sheaths, joints and spaces inside your hand. These include:

• Tendon sheath infection — Puncture wounds or tiny cuts on your fingers, especially near a joint, can result in an infected tendon sheath. Synovial fluid inside the enclosed sheath is the optimal environment for bacteria to flourish. Swelling inside the sheath may cause rupture and subsequent infection in surrounding soft tissue. This type of infection requires urgent surgical drainage and antibiotics.

■ Deep fascial space infections — Your palm has three closed compartments that can become infected, most commonly from punctures and occasionally from a superficial infection that's gone deeper. Tenderness and swelling affect the palm above the infected area. Deep-space infections are considered surgical emergencies.

• Septic arthritis — A wound in or near a joint or a draining arthritic cyst can result in a severe joint infection called septic arthritis. Bacteria can erode joint

Complementary therapies

Many people with arthritis find complementary therapies are a safe, gentle addition to their treatment plan. They don't cure arthritis, but they can ease symptoms. Perhaps one of the following therapies has something to offer you:

■ *Tai chi* — This Chinese mindbody exercise combines flowing, gentle movement, meditation and deep breathing. Offered in group classes, tai chi is becoming more common in fitness centers.

• Acupuncture — Rooted in traditional Chinese medicine, acupuncture uses small, thin needles which are inserted through the skin at specific anatomic points. Puncturing these points is thought to release blocked energy along pathways called meridians. Acupressure uses applied pressure to unblock the meridians and can be self-administered.

■ *Yoga* — Yoga combines exercise with meditation and relaxation through a series of specific movements. There are many different kinds of yoga. One of the most common types, hatha yoga, is very gentle and easy on the joints. When doing yoga, be careful of overstretching ligaments and arthritic joints. Tell your instructor that you have arthritis and when necessary, ask for help with modifications such as extra support or blocks to restrict movement.

Massage — Although massage techniques vary, common elements include direct physical contact and manipulation of muscles. Some massage techniques incorporate elements of acupressure by compressing specific meridians. Make your massage therapist aware of your arthritis so that direct pressure on the joint is either avoided or very gentle.

Helpful gadgets

Arthritis pain in your hands can turn simple, daily activities into difficult and frustrating tasks. Many medical supply stores offer unique tools designed to make living with arthritis easier. Here are examples:

In the kitchen

- A cutting board with spikes that grip your food for you
- Eating utensils with cushioned, shock-absorbing grips and adjustable metal shafts that shift to any angle
- Silicone anti-slip mats hold mixing bowls in place

In the bathroom

- A prescription medicine bottle opener that takes off caps, removes cotton, pushes pills through foil and splits tablets
- An extended-reach device with a soft silicone end that holds and releases toilet paper for easier bathroom hygiene
- Long-handled brush and comb with curved bristles that conform to your head

In the home

- A multipurpose dressing tool with a hook for zipping and a loop for pulling buttons through holes
- An ergonomic, no-grip pen that allows the weight of your hand to apply ink to paper
- A large-button TV remote
- Voice-recognition software that types what you dictate

Out and about

- A handle that attaches to your seat belt and extends out
- a few inches, bringing the belt within easy reach
- A cushion-handled tool that carries grocery bags
- A palm-sized tool that allows you to easily unbuckle a seat belt

cartilage in a matter of days. If treatment is delayed, infection of the bone (osteomyelitis) may result. Typically, at least one operation is needed to remove infected tissue. Many people also require weeks of intravenous antibiotics.

■ Necrotizing fasciitis — Caused by a toxin-producing bacterium, this rapidly progressing soft tissue infection mimics cellulitis symptoms in its early stages. However, necrotizing fasciitis is life-threatening and requires immediate intervention. In addition to skin signs and symptoms, necrotizing fasciitis causes fever, dehydration, low blood pressure and electrolyte imbalance.

Getting a grip on hand health

Chronic hand pain need not be an inevitable part of aging. Safeguard your hand health by knowing what to look for and treating any problems promptly. With knowledge — and sometimes the help of your doctor — you can manage or even prevent hand pain from holding you back. \Box