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Arthritis: Twinges In The Hinges

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One in seven Americans suffers from some form of arthritis. One of every three families is affected. Each year there are nearly a million new victims—one every 33 seconds.

The economic impact of arthritis touches everyone. Lost wages and lost taxes, together with medical and disability payments, total \$14 billion each year.

Despite the staggering statistics and the immeasurable human misery, arthritis remains misunderstood. All too often, it is thought to be only "minor aches and pains," usually associated with old age. Nearly everyone has heard of some home remedy-or new "miracle" treatment for arthritis. Not many people know that almost all forms of arthritis can be treated, and know how to seek out those proper, proven treatments.

There is one group that never underestimates the impact of arthritis. They are the people who sell arthritis "cures." The medications and devices promoted in arthritis quackery are big business. Americans spent about \$950 million on various unproven remedies and quack devices in 1981. This is 25 times the amount that was spent on legitimate arthritis research.

The only well-preserved spine of Neanderthal man is bent from arthritis. But when the first Neanderthal bones were discovered in 1856, the treatment for arthritis had still not advanced beyond the cave era. In the 1850's, Americans with arthritis could choose among some 1,500 advertised cure-alls, but the ingredients were usually flavored water, alcohol, narcotics, or toxic substances.

Although there is still no cure, arthritis is no longer the hopeless disease it once was. Over the last 125 years,

and particularly during the last generation, advances in therapy have greatly improved the prospects for arthritis victims. With early diagnosis and treatment, many patients can now avoid disability and lead relatively normal lives.

Current therapy takes several forms, including medication, exercise, and other physical measures. In cases of severe joint damage, surgery may be needed. Individual treatment varies, depending on the type of arthritis, its severity, and the patient's response to therapy. Treatment can even vary for the same disease. Whatever the ailment, though, the most important step in treatment is proper diagnosis.

Is it Arthritis?

About one out of every six visits to a family physician or internist is for problems involving muscles, joints, tendons, or ligaments. Many such complaints arise from localized muscle pain or some other symptom that will clear up in a few days even without treatment. All that may be needed is rest and a mild pain medication. Frequently, claims for unproved or quack arthritis remedies are based on "successful" treatment of just such ailments.

If pain in one or more joints persists for a week or two, or recurs over a period of weeks, consult a physician. Infectious arthritis, gout, rheumatoid arthritis, and occasionally, osteoarthritis, may begin as an acute inflammatory arthritis, with redness, heat, pain, and swelling of the involved joint. Such dramatic symptoms usually prompt the victim to seek immediate medical attention.

More often, though, arthritis symptoms come on gradually. The symptoms may appear for a few days and go away, then come back stronger and disappear again. There may be weeks or months between goings and comings, but gradually the disease reappears at shorter intervals until it becomes a daily problem that can't be ignored.

Flare-ups and remissions are common in rheumatoid arthritis, arthritis of the spine, and other inflammatory arthritic diseases. Consequently, check any recurring joint symptoms with a doctor, no matter how mild or "temporary" they might appear at first. A personal medical history, physical examination, X-rays, and specific laboratory tests can help distinguish arthritis from other ailments and differentiate one type of arthritis from another. Sometimes examination of the joint fluid is also necessary. The sooner treatment begins, the greater the likelihood of avoiding permanent joint damage.



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Drug Treatment

Medication is the first line of defense against arthritis. The immediate goal of drug therapy is to reduce inflammation and pain. Ultimately, the objective is to preserve joint function. Reduction in pain and swelling helps the patient maintain joint mobility, which might otherwise not be possible. The antiinflammatory effect also serves to minimize or prevent joint damage.

The most frequently prescribed drug is aspirin. Its familiarity as a household remedy for minor aches and pains often makes people doubt that aspirin can work effectively against serious forms of arthritis. But it does. In large doses, commonly 10 to 15 five-grain tablets daily, aspirin is as effective in suppressing joint inflammation as the newer and costlier drugs.

Although aspirin is the mainstay for a majority of arthritis patients, it is not a perfect drug. People vary in their tolerance for aspirin, and some cannot take it at all. Large doses may cause stomach irritation and gastrointestinal bleeding, which can be mild or severe. Other common side effects include ringing in the ears, temporary hearing loss, and interference with blood-clotting mechanisms. To control such effects, physicians may reduce the dosage, prescribe aspirin combined with antacid, or try other salicylate drugs similar to aspirin.

Some patients, however, may not get adequate relief from aspirin or other salicylates. Nor are these drugs effective in all arthritic disorders. In such instances, other drugs are used. Finding the right drug may be a process of trial and error. In treatment of acute gout, for example, as aspirin has no place, the physicians usually prescribe another anti-inflammatory agent, or colchicine. In infectious types of arthritis, antibiotics are the principal drugs utilized. Generally, the safest drugs that are likely to be of benefit are tried first. Typically, several drugs may be evaluated, in varying doses, until the best one is found.

While none of the newer drugs represent a breakthrough, these agents provide much more flexibility in treatment than was possible before. Since individual patients may respond better to one drug than another, the availability of several increases the chances of finding the best plan, particularly for patients who don't do well on aspirin.

Since 1974, six new drugs (termed non-steroidal anti-inflammatory agents) have been introduced. The first was ibuprofen (Motrin), soon followed by naproxen (Naprosyn), fenoprofen (Nalfon), tolmetic (Tolectin), sulindac (Clinoril) and most recently meclofenamate (Meclofen). In appropriate dosages, the drugs are comparable to aspirin in antiinflammatory effect, and for some patients their side effects seem milder than those from high doses of aspirin. All are more expensive than aspirin.

Another drug sometimes used in place of aspirin is indomethacin. Introduced in 1965, it is currently market-

ed under the brand name Indocin. Its side effects tend to be more frequent and sometimes more severe than those of aspirin. Nevertheless, about 25 percent of patients with rheumatoid arthritis show good or excellent improvement with indomethacin, so the drug may be tried when aspirin is ineffective or poorly tolerated. Clinical experience suggests that indomethacin may also be helpful in arthritis of the cervical spine, gout, psoriatic arthritis, and osteoarthritis, particularly osteoarthritis of the hip.

Other Alternatives

Aspirin, indomethacin, and the six new agents are considered the safest drugs for long-term treatment. If a patient doesn't respond adequately, however, there are others that may be used. These involve a greater risk of serious side effects. But they can be helpful to patients who might not otherwise obtain relief.

Phenylbutazone was introduced in 1949 for treating rheumatoid arthritis and related disorders. It is available generically and under various brand names (Azolid, Butazolidin, and others). It is an effective anti-inflammatory agent, but its potential side effects on the kidneys, stomach, and bone marrow usually limit it to short-term use. At times, though, it is used for extended therapy under close medical supervision, which includes periodic blood counts and urinalyses. Some clinicians believe it is especially effective for spinal arthritis. A chemically related drug, oxyphenbutazone (Tandearil), exhibits similar effects.

Drugs known as antimalarials are sometimes used in rheumatoid arthritis and systemic lupus erythematosus. Derived from quinine, antimalarials may help reduce symptoms when prescribed in limited doses over a long period of time. They can produce serious side effects, especially in the eye, and their use must be carefully monitored. Two commonly used antimalarials are chloroquine and hydroxchloroquine, (Plaquenil) both generic drugs.

Among the oldest compounds used in rheumatoid arthritis are gold salts. There was uncertainty for many years about how well gold worked in reducing the severity of inflammation. Recent studies have established its effectiveness in selected cases of rheumatoid arthritis that don't respond to other treatment. It usually takes 10 to 20 weeks to find out whether gold therapy benefits a patient. Treatment is started with weekly administration, and patients are watched carefully for side effects, which include skin rash and kidney damage. Gold salts have to be given by injection and require periodic blood tests and urinalyses. Research surveys indicate that about two thirds of the patients obtain a beneficial treatment response.

A potential substitute for gold treatment is the drug penicillamine (Cuprimine and Depen), approved by the Food and Drug Administration for use in rheumatoid arthritis. Although chemically related to penicillin, it is

not an antibiotic. Penicillamine has been used successfully for more than 20 years to treat Wilson's disease, a disorder of copper storage in the liver and brain. Its effectiveness in rheumatoid arthritis is also well established. The problem is its toxicity.

The most common side effect is skin rash. But serious blood and kidney disorders can also occur, sometimes very quickly, making it imperative to stop the drug immediately. Approximately two thirds of patients experience side effects of mild to moderate severity.

Clinical trials indicate that penicillamine is at least as effective as gold therapy in severe rheumatoid arthritis. Like gold, it is very slow-acting and can take months to produce beneficial effects. Several additional months may be required to adjust the dosage properly. Patients who don't respond to gold treatment or can't tolerate it may be candidates for penicillamine. Because of its potential toxicity, the drug is generally reserved for severe rheumatoid arthritis that doesn't respond to other therapy. Use of this drug requires frequent blood and urine tests and close physician supervision.

Experimental drugs now under study for arthritis include agents that suppress the body's immune system—its natural defense against foreign organisms. Research indicates that cells that normally protect the body may actually contribute to the inflammatory process in some forms of arthritis. Hence, certain immunosuppressive drugs used in cancer treatment or in organ transplantation are being tried, on a limited basis, in severe rheumatoid arthritis. Among the agents being evaluated in the U.S. are azathioprine, (Imuran—now approved by the F.D.A.) and cyclophosphamide. Since such drugs can be highly toxic their use is limited to severe and unresponsive cases.

Cortisone-related steroids, such as prednisone, are another class of drugs that must be used with caution. Steroids are the most potent antiinflammatory drugs available and can provide dramatic relief of pain and swelling in inflamed joints. However, their numerous side effects limit their usefulness in prolonged therapy.

Unlike gold salts or penicillamine, which can be well tolerated by some patients for years, steroids eventually produce serious side effects in all patients during extended therapy, unless given in very low doses. Accordingly, when oral steroids are the only alternative in certain cases, they are generally used in the lowest dosages that will improve symptoms—sometimes on an every-other-day basis—rather than in doses large enough to achieve complete relief. Direct injection of steroids into a particularly painful joint is still a common method of providing relief, however, and is relatively free of hazard if limited to infrequent use.

Physical Therapy

While medication is the cornerstone of arthritis treatment, physical measures are also important. Part of the goal is to achieve a proper balance between rest and ex-

ercise. During a flare-up, rest can be as important as medication. Complete body rest, usually in bed, helps to reduce inflammation. Exercise must be kept to a minimum to prevent further damage.

Heat treatment, such as hot soaks, baths, and showers, are commonly prescribed to relieve pain and stiffness. Occasionally, a patient will respond better to cold packs around an acutely inflamed joint than to heat. Whirlpool baths or other forms of hydrotherapy may also be advised for some patients.

Individual joints are sometimes rested in removable, lightweight splints. That helps lessen inflammation and keeps the joint in a normal-use position, protecting it against muscle contractions that might lead to deformities. Splints can also be used to help straighten out a joint that has become fixed in a flexed position. The splints are usually adjusted every few days toward the desired position.

Once inflammation and pain subside, more emphasis is placed on exercise. For arthritis patients, exercise does not mean engaging in athletics or similarly strenuous activities. It involves putting joints gently through their full range of motion every day. This helps maintain normal joint movement and strengthen muscles, which may become weak during inactivity. As joint function improves, the exercises may be done against slight resistance, provided there is no pain. Generally, each patient requires an individually prescribed program of exercises.

If an appropriate program of rest and exercise is followed faithfully, it serves not only to prevent deformities but also to help correct those that might have developed. One problem, however, is that some patients who feel better forgo their exercises and medication. The result may be an earlier or more severe return of symptoms than might otherwise have occurred.

Surgery

Until recent years, severe arthritic damage to a joint usually meant chronic pain and permanent disability. Once the damage was done, it was irreversible. For many patients, however, that's no longer true. Since the early 1960's, when the first successful total hip-joint replacement was performed, numerous surgical techniques have been developed to undo the crippling effects of arthritis.

Total hip replacement represents one of the major advances in orthopedic surgery of the past century. Introduced by Dr. John Charnley in England, the procedure utilized a joint made of metal and plastic parts secured in place with bone cement.

The knowledge gained in hip surgery has since fostered many advances in the replacement of other joints. The knee joint—a common site of arthritic damage—can now be replaced with artificial components. And research is in progress on similar operations for the hand, wrist, elbow, ankle, and shoulder.

Complications or failure can occur with any of the operations, and not every patient with severe disability is a candidate for joint replacement. For many patients, though, the operations can relieve pain, correct deformities, and improve joint function.

Other surgical techniques besides joint replacement have been developed for arthritic problems. Removal of diseased tissue in the joint capsule may relieve pain for a period of years. Bow leg or knock knee caused by joint erosion may be corrected by an osteotomy, which realigns the bone by removing a small, wedge-shaped section of it. An unstable joint may be fused to stiffen it, usually to relieve pain and correct deformity. A joint may also be reconstructed, sometimes using similar tissue from another part of the body.

To a large extent, the success of joint surgery depends on the patient's willingness to participate actively in a lengthy post-operative therapy program. Appropriate exercise is essential to gain function and strength in the reconstructed parts. Without such effort, the best surgical procedures may fail.

Seeking Medical Care

When people first seek medical help for arthritis symptoms, they ordinarily turn to an internist or family physician. When diagnosis and treatment of the more serious forms of arthritis require specialized knowledge, the patients may be referred to a rheumatologist, a specialist in arthritic diseases. Contact the Arthritis Foundation for Nebraska for information on service available in Nebraska at 120 North 69th St., Room 202, Omaha, NE 68132.

Unproved Remedies

Over the years, some doctors have publicized offbeat remedies or therapies for arthritis. If later proved ineffective, they often fall by the wayside. But not always. The physician's faith in the remedy—or faith in its money-making potential—may help generate enough publicity to keep it alive. And any remedy, no matter how controversial, can seem inviting to an arthritis victim in chronic pain.

Among the holdovers still attracting attention is dimethyl sulfoxide, or DMSO. First publicized in the early 1960's, DMSO has been touted as a possible treatment for various ailments, including musculoskeletal injuries and some arthritic diseases. Recently, the FDA approved its use as an injectable drug for interstitial cystitis, a bladder disorder. Although this was the first time DMSO had been approved in the U.S. for humans, it had been generally available for unauthorized use ever since it was sanctioned as a veterinary drug several years ago.

In 1974, the National Academy of Sciences/National Research Council called for studies of DMSO in several disorders. DMSO was tested on patients with scleroder-

ma, an arthritic disease primarily affecting the skin. It failed to help.

To date, the effectiveness of DMSO in any long-term treatment of arthritic disease has not been established. Nevertheless, campaigns similar to those mounted for the cancer nostrum Laetrile have recently won state legalization for Federally unauthorized uses of DMSO in Florida and Oregon. And several clinics in Mexico claim to treat arthritis patients with DMSO (however, some drugs brought back to the U.S. from such clinics have contained potent ingredients other than DMSO).

Meanwhile, alleged breakthroughs in arthritis treatment appear periodically in newspapers and magazines.

In one, arthritis was reported to be an allergic disease that could be alleviated by a starvation diet. In another, some 500 arthritis patients were said to have improved dramatically after treatment with a flu vaccine. In a third, arthritis patients were supposedly helped by taking tablets derived from yucca plants.

When arthritis specialists associated with the Arthritis Foundation investigated the reports, they could find no scientific evidence to back up the claims.

Any physician knows how to relieve severe arthritic pain. Cortisone and similar steroid drugs can provide sensational reduction of pain and inflammation in a matter of hours.

But daily use of steroids for prolonged periods can cause serious side effects, particularly at high dosages. Those effects can sometimes be more severe than the arthritis, and even life-threatening. Accordingly, while steroids and other potent drugs still serve valuable purposes in arthritis treatment, their use is commonly reserved for specific situations where the benefits outweigh the risks.

What's the Problem

*More than 31 million adults and children in the U.S. have arthritis in some form.

*Of these, more than 20 million are women. Many are in their early 20s or younger. Even childhood arthritis is more common in girls.

*Osteoarthritis is the wear-and-tear type. It is usually mild, but can cause a lot of pain.

*The most serious major type is rheumatoid arthritis (RA). It is a chronic inflammatory disease that (if left untreated) can lead to permanent joint deformities, disability and damage to the body's vital organs.

RA can do this, but the point is it doesn't have to. A proper treatment program, started early and continued, can control the pain and prevent deformities.

Arthritis is a painful and potentially disabling disease. For women, it can have a serious effect on their lives. But, they must realize that it is not hopeless. Something can be done.

Why Are Women Hit So Hard?

Scientists don't know why rheumatoid arthritis discriminates against women. They have established that arthritis symptoms often decrease during pregnancy, only to flare up again after delivery. While natural hormonal changes in the female body may have something to do with it, this is not the whole answer.

A women with arthritis can have a normal life with minimal pain and disability if she learns how to live within her illness. Here are some important points to remember.

- Do everything your doctor advises. Don't skip taking prescribed medication. Do the exercises and take the rest periods recommended.
- Don't rely on self-medication and word-of-mouth remedies, fad diets, or "cures."
- Keep rested and well-nourished, but not overweight. Do not overtire yourself.
- Relax your standards when necessary—at home and on the job. If you have to, break off a task before completion, rest a bit, and come back to it later.
- Be open and frank with your family about your limitations and problems.
- Learn as much about arthritis as you can.

No Cure for Arthritis Yet

Researchers are making progress in working toward a cure, and finding the solution is hopefully now just a matter of time. But in the meantime, don't believe anyone who says he has a "cure" for arthritis.

Don't think, however, that because there is no cure there is no effective treatment for arthritis. Legitimate treatment by a qualified doctor can bring relief and prevent disability.

Arthritis Quackery

Arthritis lends itself perfectly to the quack's standard line of mumbo-jumbo.

For one thing, arthritis has a way of coming and going unpredictably. The symptoms of pain and swelling can simply disappear, sometimes for weeks or months. These disappearances are called remissions. Unfortunately, they are usually temporary and symptoms may return in full force.

The arthritis victim who has temporary remission by coincidence, just when he is trying something new or special—for instance, one of those "miraculous" copper bracelets, or a special diet, or "immunized" milk—thinks the new product brought about his relief. Score a point for the quack.

Also, many arthritis victims suffer severe and constant pain. No one wants to put up with pain, and if it's bad enough, most people will try anything to get rid of it. The trouble is, some quack remedies are dangerous. Others are merely harmless but expensive. Most impor-

tant, quack cures and remedies waste not merely money, but valuable time during which arthritis may do irreversible damage to the joints.

Don't help the quack perfect his art...don't get hooked on special diets and devices...and don't be a sucker for glamorous sounding products which promise an end to suffering. Often the chief ingredient is aspirin. Aspirin can be an arthritic's best friend, but only if taken in the proper way, under a doctor's supervision. Most of the fancy aspirin substitutes are merely aspirin in a more expensive package.

Remember that the final victory over arthritis will come from men of science, not doubletalk experts.

Spotting the Quack

How do you spot the health quack in action? What should make you suspicious about a questionable medical claim? What should make you check with The Arthritis Foundation or other authority before you buy and try a new remedy?

Here are some simple clues:

1. He may offer a "special" or "secret" formula or device for "curing" arthritis.
2. He advertises. He uses "case histories" and testimonials from satisfied "patients."
3. He may promise (or imply) a quick or easy cure.
4. He may claim to know the cause of arthritis and talk about "cleansing" your body of "poisons" and "pepping up" your health. He may say surgery, X-rays, and drugs prescribed by a physician are unnecessary.
5. He may accuse the "medical establishment" of deliberately thwarting progress, or persecuting him...but he doesn't let his method be tested in tried and proved ways.

Arthritis Warning Signs

See your doctor if you have:

- Persistent pain and stiffness on arising.
- Pain, tenderness or swelling in one or more joints.
- Recurrence of these symptoms, especially when they involve more than one joint.
- Recurrent or persistent pain and stiffness in the neck, lower back, knees and other joints.

References and Resources

All materials for "Arthritis: Twinges In the Hinges" were provided by the Arthritis Foundation, 120 North 69th Street #202, Omaha, NE 68132.