

Chapter 1 : Osteoarthritis Treatment

Natural and Alternative Therapies Many people with OA use natural or alternative therapies to address symptoms and improve their overall well-being. These include nutritional supplements, acupuncture or acupressure, massage, relaxation techniques and hydrotherapy, among others.

Tamoxifen played a protective effect on articular cartilage in intact male rabbits, suggesting that its therapeutic effect might not only be associated with its anti-estrogenic role [47]. Furthermore, both levormeloxifene and cis-3,hydroxyphenyl 4- 2pyrrolidinoethoxy phenyl chromane suppressed OVX-induced acceleration of bone and cartilage turnover and ameliorated destruction of cartilage in female rats [49 , 50]. Similarly, Saito et al. The consistent effect of SERMs in vivo indicates a protective effect on chondrocytes. However, these effects were reversed with increased dose, demonstrating that low-dose raloxifene has the potential to cease or decrease cartilage degeneration in OA. In another study, the natural SERM genistein antagonized lipopolysaccharide-induced OA-like chondrocyte changes with a significant decrease of COX-2 protein and NO level in the supernatant of cultured human chondrocytes, indicating that genistein may maintain joint health through an anti-inflammatory effect [55]. Clinical studies SERMs appear to have protective effects on joint tissues. SERMs regulate metabolism of articular cartilage and subchondral bone, maintain their normal biomechanical structure and performance, and possibly delay disease progression of OA. Moreover, SERMs may play protective roles on the synovium and other joint tissues, maintaining joint health as a whole. In the Health, Aging and Body Composition Study cohort, raloxifene significantly reduced subchondral bone attrition, bone marrow edema-like abnormalities, and knee pain according to Western Ontario and McMaster Universities Arthritis Index scores when compared with the control group [33]. A further study found that SERMs have a positive effect on cartilage metabolism. This suggests that SERMs may play a short-lived role on cartilage and a long-term role on bone [56]. In recent studies, bazedoxifene not only prevented bone loss and maintained BMD by reducing bone turnover in postmenopausal women, but also improved the microstructure of bone. Consequently, bazedoxifene enhanced bone strength and reduced the risk of vertebral and nonvertebral fractures in postmenopausal women [57 – 61]. Remarkably, Fujita et al. The mechanisms of action of SERMs within joint tissues are being gradually elucidated [53 , 54 , 63]. Consequently, tamoxifen and raloxifene have been identified as GPER1 agonists [53]. Estrogen-related drug mechanisms of action in OA Recent research has confirmed that significant changes in the subchondral bone occur during OA progression [64]. Key changes in the subchondral bone include high bone turnover with decreased BMD and bone biomechanical structural damage in the early stages of OA, which either coincide with or precede cartilage degeneration [64]. Subchondral bone degeneration may be the trigger for changes in the cartilage biomechanical and biochemical microenvironment, thus promoting cartilage erosion and ultimately OA progression [65]. Consequently, subchondral bone is a potential therapeutic target, and drugs acting on subchondral bone represent potential disease-modifying OA drugs [2 – 4]. Similarly, the main pathological change in OA is degeneration of the articular cartilage that promotes subchondral bone lesions during progression of OA, particularly in late OA stages when cartilage erosion is extensive [4 , 43]. Therefore, subchondral bone and cartilage are strongly dependent on each other during the progression of OA. In short, OA disease-modifying drugs must be able to act on both of these joint tissues to prevent the development and progression of OA. Estrogen-related drugs that act on both subchondral bone and cartilage are good candidates for early-stage OA treatment, especially osteoporotic OA. These drugs are potent in antagonizing bone resorption, which can effectively decrease bone remodeling and prevent subchondral bone loss and the deterioration of microarchitecture and biomechanical properties [18 , 19 , 23]. Thus, the protective effect of these drugs on articular cartilage may be an indirect effect through protection of the subchondral bone. Additionally, these drugs directly target cartilage tissue, preventing cartilage damage and maintaining healthy cartilage [26 , 66]. In addition to the direct or indirect protective role of these drugs on articular cartilage,

subchondral bone, and the surrounding joint tissues, including the synovium and muscle, the joint tissues themselves interact with each other, thus maintaining joint organ homeostasis as a whole and finally delaying joint degeneration [56]. Moreover, the beneficial effect of estrogen-related drugs on OA may be, at least in part, associated with amelioration of the abnormal mechanical stress via or by regulating ER. Mechanical stress has an important role in the pathogenesis of OA [67], whereby abnormal mechanical stress is reported to promote deterioration of the subchondral bone and articular cartilage during OA progression [68]. A recent study has reported that estrogen reduces mechanical injury-related cell death and proteoglycan degradation in an ER-mediated pathway in mature articular cartilage. This suggests that estrogen agents ameliorate abnormal mechanical stress to protect cartilage-related sports injuries or OA [27]. On the contrary, downregulation of ER expression is evident during cartilage degeneration [69 , 70], which may be associated with abnormal mechanical stress [27]. More recently, lower serum estrogen has been shown to downregulate ER expression, with estrogen therapy upregulating ER expression [70 , 71], a finding that may relate to the beneficial effects of estrogen agents on OA. In fact, these changes are similar to ER changes in disc degeneration and its estrogen therapy [69 , 72]. In summary, abnormal mechanical stress changes the articular microenvironment to decrease expression of ERs, which is associated with subsequent joint degeneration. We therefore hypothesize that the upregulated expression of ER by estrogen may correlate with amelioration of abnormal mechanical stress, a hypothesis that warrants further investigation. Efficacy of estrogen-related drugs on joint tissues Current observational studies suggest that estrogen may be involved in the progression of OA and have potential protective effects on joint tissues. However, some studies suggest that the role of estrogen is controversial and warrants further study. In contrast, preclinical and clinical studies indicate that SERMs not only have consistently positive effects on OA [33 , 36 , 38 , 39 , 53 , 54], but also significantly reduce estrogen treatment-related adverse events. However, the positive estrogen-like effects of SERMs on bone tissue are weaker than those of estrogen [44], and therefore need to be strengthened. A number of reasons may account for this interesting phenomenon. First, estrogen has an extensive effect *in vivo*, regulating many metabolic pathways within various tissues [73 , 74]. However, the interaction of these metabolic pathways may weaken the effect of estrogen on articular tissues *in vivo*. Conversely, SERMs exhibit tissue-specific ER antagonist or agonist activity, with selective effects on specific tissues [11 – 13]. Consequently, the impact of other metabolic pathways on the effect of SERMs in articular tissues is weaker than that of estrogen. SERMs could thus produce greater estrogen-like effects *in vivo* [50]. New estrogen-like drugs are continuously reported. Conversely, the many adverse reactions of estrogen could be antagonized by SERMs. We speculate that the effects of TESC on joint tissues may be greater than those of SERMs, with a generally desirable safety and tolerability profile. Safety and tolerability of estrogen-related drugs Research has revealed that SERMs are suited for the treatment of OA with relatively favorable safety and tolerability profiles. Long-term estrogen therapy stimulates breast and endometrial hyperplasia with significantly increased risk of breast and endometrial cancer [73]. Moreover, this drug increases the risk of cardiovascular events and stroke, especially thromboembolic diseases [74]. These adverse effects severely limit the clinical application of estrogen. Almost all SERMs have anti-estrogenic action in the breast and do not increase the risk of breast cancer. Moreover, some SERMs such as tamoxifen, toremifene, and raloxifene can be used for the treatment or prevention of estrogen-sensitive breast cancer [44]. SERMs have relatively varied effects on the uterus. Furthermore, very few SERMs, such as tamoxifen, stimulate endometrial proliferation with the increased risk of endometrial cancer. In fact, the majority of SERMs have neutral or anti-estrogenic effects on the endometrium and do not increase the risk of endometrial cancer [13]. In addition, most SERMs do not increase the risk of cardiovascular events [11]. Although some SERMs are reported to slightly increase the incidence of hot flashes or vulvar vaginal atrophy, the symptoms are mild and do not affect the clinical application of SERMs. Currently, the primary limit of clinical application of most SERMs is the increased risk of venous thrombosis embolism [44]. Conclusion At present, the roles of estrogen in joint tissues or OA are controversial. However, SERMs have consistently protective effects on joint tissues or in OA with relatively

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favorable safety and tolerability profiles. SERMs and estrogen may represent therapeutic options to treat joint diseases in the future. Although, there is a wide range of SERMs, their chemical structure and biological function are quite complex. Further research is needed to identify the most suitable types of SERMs to treat OA and to clearly identify their action mechanisms on joint tissues. A new group of estrogen-related drugs, TSECs are reported to have a beneficial effect on bone tissue [75 , 76]. Furthermore, TSECs may have the potential to protect other joint tissues, suggesting they may become favorable therapeutic alternatives for treatment of OA. These findings warrant further clarification in future preclinical and clinical studies. Y-P X wrote the manuscript. All authors read and approved the final submitted manuscript. Competing interests The authors declare that they have no competing interests.

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Chapter 2 : Osteoarthritis - Diagnosis and treatment - Mayo Clinic

Natural Treatment for Arthritis. Osteoarthritis, the most common form of arthritis, is a biomechanical and physiological disease. The cartilage that provides a buffer between bones breaks down and.

Advertisement Osteoarthritis is a chronic long-term disease. Long-term management of the disease will include several factors: Managing symptoms, such as pain, stiffness and swelling Improving joint mobility and flexibility Maintaining a healthy weight Getting enough of exercise Physical Activity One of the most beneficial ways to manage OA is to get moving. While it may be hard to think of exercise when the joints hurt, moving is considered an important part of the treatment plan. Studies show that simple activities like walking around the neighborhood or taking a fun, easy exercise class can reduce pain and help maintain or attain a healthy weight. Strengthening exercises build muscles around OA-affected joints, easing the burden on those joints and reducing pain. Range-of-motion exercise helps maintain and improve joint flexibility and reduce stiffness. Aerobic exercise helps to improve stamina and energy levels and also help to reduce excess weight. Talk to a doctor before starting an exercise program. Department of Health and Human Services recommends that everyone, including those with arthritis, get minutes of moderate exercise per week. Weight Management Excess weight adds additional stress to weight-bearing joints, such as the hips, knees, feet and back. Losing weight can help people with OA reduce pain and limit further joint damage. The basic rule for losing weight is to eat fewer calories and increase physical activity. Stretching Slow, gentle stretching of joints may improve flexibility, lessen stiffness and reduce pain. Exercises such as yoga and tai chi are great ways to manage stiffness. These are pain relievers and include acetaminophen, opioids narcotics and an atypical opioid called tramadol. They are available over-the-counter or by prescription. These are the most commonly used drugs to ease inflammation and related pain. NSAIDs include aspirin, ibuprofen, naproxen and celecoxib. Corticosteroids are powerful anti-inflammatory medicines. Hyaluronic acid occurs naturally in joint fluid, acting as a shock absorber and lubricant. However, the acid appears to break down in people with osteoarthritis. Physical and Occupational Therapy Physical and occupational therapists can provide a range of treatment options for pain management including: Ways to properly use joints Heat and cold therapies Range of motion and flexibility exercises Assistive devices Assistive Devices Assistive devices can help with function and mobility. Many devices can be found at pharmacies and medical supply stores. But some items, such as custom knee braces and shoe wedges are prescribed by a doctor and are typically fitted by a physical or occupational therapist. Natural and Alternative Therapies Many people with OA use natural or alternative therapies to address symptoms and improve their overall well-being. These include nutritional supplements, acupuncture or acupressure, massage, relaxation techniques and hydrotherapy, among others. Surgery Joint surgery can repair or replace severely damaged joints, especially hips or knees. A doctor will refer an eligible patient to an orthopaedic surgeon to perform the procedure.

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Chapter 3 : Statin Drugs Linked To Worsening Osteoarthritis Of The Knee | The Sleuth Journal

Atherosclerosis and Coronary Artery Disease Drugs and Their Natural Alternatives. 8. Attention Deficit Hyperactivity Disorder Drugs and Their Natural Alternatives.

By Emily Delzell Advertisement However you ended up with knee osteoarthritis OA “ whether from an injury or carrying some extra weight on your joints or the genetic luck of the draw “ the result is pretty much the same: But there are ways to ease discomfort and delay or avoid knee replacement surgery. Other treatments target only OA symptoms, he explains. Losing just a little weight can have big effects. Research shows that each 1-pound loss reduces the load on the knees by about 4 pounds. Research published in the Journal of the American Medical Association in shows weight loss also lowers levels of the bodywide inflammation that contributes to joint damage in OA and related conditions. Recent research provides more detailed guidance for therapists treating people with knee OA, Dr. The AAOS expert panel notes that most of the studies that showed strong evidence for exercise benefiting knee OA involved programs led by these specialists, who can also advise on biomechanical devices such as braces and orthoses. Anil Bhavre, a physical therapist and director of the Wasserman Gait Laboratory at the Rubin Institute for Advanced Orthopedics in Baltimore, prescribes exercises that improve strength and flexibility in the hips, hamstrings and quadriceps. Self-Management All the guidelines and experts agree that education and self-management “ building a strong understanding of how OA affects you, as well as your best therapeutic and mental strategies for coping “ are among the top recommendations for coping with knee OA pain. But what is ideal self-management? Many people, for example, think exercise is going to hurt their joints, when, in fact, it will improve their condition and their pain. Segal, is recognizing the difference between beneficial exercise and activities that stress joints. Rapid pivoting moves like those done in soccer or downhill skiing also can cause problems. Try doubles tennis instead of singles or cross-country skiing instead of downhill, for example. These guidelines stop short of endorsing the therapy, but note some trials do show a benefit and that, for certain patients, particularly those who have multiple health problems that limit treatment options, acupuncture may play a role in managing knee OA pain. A Cochrane Database review of clinical trials of acupuncture for knee and hip OA found the therapy improved pain by about four points and physical function by about 11 points on a point scale after eight weeks of treatment. Nelson advises patients interested in acupuncture to give it a try and see if they benefit. McAlindon, who notes OARSI recommended it for people with OA in multiple joints and complicating conditions that leave them with limited treatment options. Studies show people with rheumatoid arthritis get similar modest benefits. Joint Alignment Devices Problems with biomechanics “ how the spine, hips, knees and feet line up to work together “ worsen the pain of knee osteoarthritis and damage affected joints, says Bhavre. Physical therapists are often the ones to tape a kneecap, but a patient can learn to do it.

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Chapter 4 : Nondrug Therapies for Knee OA | Natural Treatments | Arthritis Foundation

NSAIDs (non-steroidal anti-inflammatory drugs) are medications that reduce inflammation and pain but do not contain steroids. NSAIDs are included in many over-the-counter and prescription pain medications and include drugs like ibuprofen, aspirin and naproxen.

It affects more than 30 million Americans, an increase from 21 million U. In addition to painkilling drugs, many sufferers are discovering safer natural symptom relief. It is not, however, limited to the elderly. Anyone who injures or overuses their joints, including athletes, military personnel and people who work physically-demanding jobs, are susceptible to developing the disease as they age. OA is a chronic condition that can affect any joint, but occurs most often in knees, hips, lower back and neck, small joints of fingers and the bases of the thumb and big toe. Currently, there is no cure for osteoarthritis. There are more than different types of arthritis. Official estimates indicate about 54 million adults and almost , children have a type of doctor-diagnosed arthritis. Rheumatoid arthritis is the second-leading type of arthritis but, by contrast, affects less than two million Americans. It affects other parts of the body besides the joints. It begins at a younger age than osteoarthritis, causes swelling and redness in joints, and may make people feel sick, tired, and uncommonly feverish What causes osteoarthritis? In healthy joints, cartilage covers the end of each bone. Cartilage is a slippery tissue that provides a smooth, gliding surface for joint motion and acts as a cushion between bones in joints. It also absorbs shock from the energy of movement. In osteoarthritis, the cartilage breaks down, causing pain, swelling and problems moving the joint. As the disease worsens over time, the joint may lose its normal shape. When bones break down they may develop growths called spurs. Bits of both bone and cartilage may chip off and float around in the joint. This can cause inflammation and further damage the cartilage. In the final stages of osteoarthritis, the cartilage wears away and bone rubs against bone, leading to joint damage and more pain. Symptoms of osteoarthritis Osteoarthritis symptoms often develop slowly and worsen over time. Common osteoarthritis joint symptoms include swelling, pain, stiffness and decreased range of motion. Symptoms may come and go, and can be mild, moderate or severe. They may stay about the same for years but may progress or get worse over time. It should not be ignored. Severe OA can result in chronic pain, inability to do daily activities and make it difficult to walk, kneel, climb or descend stairs, or get in and out of a car. The Mayo Clinic lists signs and symptoms of osteoarthritis to include: Your joint may hurt during or after movement. Your joint may feel tender when you apply light pressure to it. Joint stiffness may be most noticeable when you wake up in the morning, or after a period of inactivity. You may not be able to move your joint through its full range of normal motion. You may hear or feel a grating sensation when you use the joint, sometimes with a muffled popping sound. These extra bits of bone, which feel like hard lumps, may form around the affected joint and even appear as small protrusions. Too many Americans ignore their symptoms, or try to manage pain through self care treatments, not all of which may be in their best interest. If you suspect osteoarthritis or any other arthritis type, first consult your medical doctor or a rheumatologist, who specializes in diagnosing and treating arthritis and other rheumatic diseases. How is osteoarthritis treated? Improving joint care controlling pain with medicine or other measures and achieving a healthy lifestyle. Most treatment plans often include ways to manage pain and improve function. Exercise Joint protection assistive devices, bracing, splinting, physical therapy. Pain relief leg elevation, pillows, positional sleeping change and other self-help methods, including natural supplements. Medications more than medications and drugs being used in the treatment of arthritis, both over-the-counter OTC and prescription. All such pharmaceuticals have side effects that for some people create adverse reactions. Complementary Alternative Medication CAM involves natural treatments, including herbal pain relief and joint health products that many patients are attaining favorable results without experiencing the side effects from drugs. My husband and I both have osteoarthritis. His was in both knees from sports injuries when younger, mine was in my neck caused by a lateral whiplash injury that developed into arthritis. We both were initially treated by medical doctors with

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acetaminophen Tylenol , then aspirin, later non-steroidal anti-inflammatory drugs NSAIDS including ibuprofen and finally, naproxen. I discovered that I could not handle the nausea and other common side effects from these drugs. They were ineffective, anyway, which was part of the reason the doctor gradually introduced a succession of OTC drugs. This unfavorable experience led me to trying complementary alternative natural means, which at first unsuccessfully included chiropractors, magnets, and even acupuncture therapy. Please follow this link for our arthritis story. In doing research, I was struck by the comparative safety of natural products, many of which use herbal ingredients that have been historically effective for centuries. When they are pure and without being tainted or contaminated, they are remarkably safe from stomach bleeding, nausea, kidney, liver or heart risks. I began using dietary supplements vitamins, minerals, and herbal products but had a hard time finding products and brands that I could trust. But often I could not find a trusted brand. The industry is rife with supplement problems. The answers led me to the 1 natural nutrition company in the U. Their products are sensational. I could really tell a difference. Then in they introduced a trio of pain-related products that have since proven to be life-savers for treating our arthritis symptoms. The result was nearly as effective as the COX-2 selective inhibitors are the prescription drugs used to treat the pain and inflammation of most arthritis types. Celebrex was originally approved by the FDA on December 31, Two other Cox-2s, Bextra withdrawn and Vioxx recalled , have both been taken off the market for side effects. The FDA issued an alert on Celebrex April 7, based on studies showing an increased risk of serious adverse cardiovascular CV events, but did not recall the drug. Presently, those drugs contain aspirin , ibuprofen , and naproxen. Consumers should also know that there is a potential for gastrointestinal bleeding with the use of aspirin Bayer, St. There are generic versions available for all of these products as well. The risk for bleeding is low for those who take these products intermittently. For those who take the products on a daily or regular basis, the risk is increased. My question to you: Are you taking NSAIDs frequently and in higher doses than the warning label allows to get rid of pain or discomfort? On the contrary, natural supplements can strengthen cartilage and improve joint health and protect the metabolism while reducing pain with minimal or no side effects whatsoever. Helpful natural dietary arthritis supplements Unlike synthetic drugs, natural supplements consist of plant botanical and herbal extract formulations that are readily assimilated by the human body as nutrients. Many have been used successfully worldwide for centuries for their therapeutic and anti-inflammatory properties.

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Chapter 5 : Arthritis Drugs: Safe Alternatives To Harmful Drugs - The Daily Health

Millions of people take non-steroidal anti-inflammatory drugs (NSAIDs) to treat their arthritis and other inflammatory conditions. There is a need to increase awareness of available natural remedies that are possibly safer, at least as effective, easily accessible, and inexpensive.

Print Diagnosis During the physical exam, your doctor will closely examine your affected joint, checking for tenderness, swelling or redness, and for range of motion in the joint. Your doctor may also recommend imaging and lab tests. **Imaging tests** Pictures of the affected joint can be obtained during imaging tests. An X-ray may also show bone spurs around a joint. Some people may have X-ray evidence of osteoarthritis before they experience any symptoms. **Magnetic resonance imaging MRI.** An MRI uses radio waves and a strong magnetic field to produce detailed images of bone and soft tissues, including cartilage. **Lab tests** Analyzing your blood or joint fluid can help confirm the diagnosis. Although there is no blood test for osteoarthritis, certain tests may help rule out other causes of joint pain, such as rheumatoid arthritis. Your doctor may use a needle to draw fluid out of the affected joint. **Treatment** Currently, the process underlying osteoarthritis cannot be reversed, but symptoms can usually be effectively managed with lifestyle changes, physical and other therapies, medications, and surgery. Exercising and achieving a healthy weight are generally the most important ways to treat osteoarthritis. Your doctor may also suggest: **Medications** Osteoarthritis symptoms, primarily pain, may be helped by certain medications, including: Acetaminophen Tylenol, others has been shown to be effective for people with osteoarthritis who have mild to moderate pain. Taking more than the recommended dosage of acetaminophen can cause liver damage. Stronger NSAIDs, available by prescription, may also slightly reduce inflammation along with relieving pain. NSAIDs can cause stomach upset, cardiovascular problems, bleeding problems, and liver and kidney damage. Normally used as an antidepressant, this medication is also approved to treat chronic pain, including osteoarthritis pain. A physical therapist can work with you to create an individualized exercise program that will strengthen the muscles around your joint, increase your range of motion and reduce pain. Regular gentle exercise that you do on your own, such as swimming or walking, can be equally effective. An occupational therapist can help you discover ways to do everyday tasks or do your job without putting extra stress on your already painful joint. For instance, a toothbrush with a large grip could make brushing your teeth easier if you have finger osteoarthritis. A bench in your shower could help relieve the pain of standing if you have knee osteoarthritis. **Tai chi and yoga.** These movement therapies involve gentle exercises and stretches combined with deep breathing. Many people use these therapies to reduce stress in their lives, and research suggests that tai chi and yoga may reduce osteoarthritis pain and improve movement. When led by a knowledgeable instructor, these therapies are safe. Avoid moves that cause pain in your joints. **Surgical and other procedures** **Knee osteotomy** **Knee osteotomy** For some people, arthritis damages one side of the knee more than the other side. This can cause your knee to bow inward or outward. Removing or adding a wedge of bone in your upper shinbone or lower thighbone can help straighten out this bowing and shift your weight to the undamaged part of your knee joint. **Artificial hip** **Artificial hip** Hip prostheses are designed to mimic the ball-and-socket action of your hip joint. During hip replacement surgery, your surgeon removes the diseased or damaged parts of your hip joint and inserts the artificial joint. **Knee comparisons** **Knee comparisons** One of the most common reasons for knee replacement surgery is severe pain from joint damage caused by wear-and-tear arthritis osteoarthritis. Osteoarthritis can erode the slick cartilage that helps your knee joint move smoothly. An artificial knee joint has metal alloy caps for your thighbone and shinbone, and high-density plastic to replace damaged cartilage. **Injections of corticosteroid medications** may relieve pain in your joint. During this procedure your doctor numbs the area around your joint, then places a needle into the space within your joint and injects medication. The number of cortisone injections you can receive each year is generally limited to three or four injections, because the medication can worsen joint damage over time. **Injections of hyaluronic acid** may offer pain relief

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by providing some cushioning in your knee, though some research suggests these injections offer no more relief than a placebo. Hyaluronic acid is similar to a component normally found in your joint fluid. If osteoarthritis has damaged one side of your knee more than the other, an osteotomy might be helpful. In a knee osteotomy, a surgeon cuts across the bone either above or below the knee, and then removes or adds a wedge of bone. This shifts your body weight away from the worn-out part of your knee. In joint replacement surgery arthroplasty, your surgeon removes your damaged joint surfaces and replaces them with plastic and metal parts. Surgical risks include infections and blood clots. Artificial joints can wear out or come loose and may need to eventually be replaced. Request an Appointment at Mayo Clinic Clinical trials Explore Mayo Clinic studies testing new treatments, interventions and tests as a means to prevent, detect, treat or manage this disease. Lifestyle and home remedies Lifestyle changes can make a significant difference in osteoarthritis symptoms. Other home treatments also might help. Some things to try include: Exercise can increase your endurance and strengthen the muscles around your joint, making your joint more stable. Try walking, biking or swimming. If you feel new joint pain, stop. Simply resume a day or two later at a slightly lower level of intensity. Obesity or even being somewhat overweight increases the stress on your weight-bearing joints, such as your knees and your hips. Even a small amount of weight loss can relieve some pressure and reduce your pain. Talk to a dietitian about healthy ways to lose weight. Most people combine changes in their diets with increased exercise. Use heat and cold to manage pain. Both heat and cold can relieve pain in your joint. Heat also relieves stiffness, and cold can relieve muscle spasms and pain. It may not be noticeably helpful unless consistently applied three to four times a day for several weeks. Be sure to wash your hands well after applying capsaicin cream. Apply over-the-counter pain creams. Creams and gels available at drugstores may provide temporary relief from osteoarthritis pain. Some creams numb the pain by creating a hot or cool sensation. Other creams contain medications, such as aspirin-like compounds, that are absorbed into your skin. Pain creams work best on joints that are close to the surface of your skin, such as your knees and fingers. Braces or shoe inserts. Your doctor may recommend shoe inserts or other devices that can help reduce pain when you stand or walk. These devices can immobilize or support your joint to help take pressure off it. Strapping tape may help ease the pain of knee osteoarthritis. Ask a doctor or physical therapist to demonstrate how best to place the tape. Assistive devices can make it easier to go about your day without stressing your painful joint. A cane may take weight off your knee or hip as you walk. Carry the cane in the hand opposite the leg that hurts. Gripping and grabbing tools may make it easier to work in the kitchen if you have osteoarthritis in your fingers. Your doctor or occupational therapist may have ideas about what sorts of assistive devices may be helpful to you. Catalogs and medical supply stores also may be places to look for ideas. Alternative medicine Various complementary and alternative medicine may help with osteoarthritis symptoms. Treatments that have shown promise for osteoarthritis include: Some studies indicate that acupuncture can relieve pain and improve function in people who have knee osteoarthritis. During acupuncture, hair-thin needles are inserted into your skin at precise spots on your body. Studies have been mixed on these nutritional supplements. A few have found benefits for people with osteoarthritis, while most indicate that these supplements work no better than a placebo. Glucosamine and chondroitin may interact with blood thinners such as warfarin and cause bleeding problems. This nutritional supplement "a mixture of avocado and soybean oils" is widely used in Europe to treat knee and hip osteoarthritis. It acts as an anti-inflammatory, and some studies have shown it may slow down or even prevent joint damage. Coping and support Lifestyle changes and certain treatments are key to managing pain and disability, but another major component to treatment is your own outlook on life. Your ability to cope despite pain and disability caused by osteoarthritis often determines how much of an impact osteoarthritis will have on your everyday life. Preparing for your appointment Although you may initially bring your concerns to your primary care doctor, he or she may refer you to a doctor who specializes in joint disorders rheumatologist or orthopedic surgery. What you can do You may want to write a list that includes: When did your joint pain begin? Is the pain continuous, or does it come and go? Do any particular activities make the pain better or worse? Have you ever

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injured this joint?

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Chapter 6 : Osteoarthritis Treatment & Symptoms | Andrew Weil, M.D.

Alternative treatments for Osteoarthritis The following products are considered to be alternative treatments or natural remedies for Osteoarthritis. Their efficacy may not have been scientifically tested to the same degree as the drugs listed in the table above.

Are you at risk for osteoarthritis? Check out the following risk factors: Abnormal joint positions Age risk increases with age Athletics wear and tear and injuries Changing forces putting weight on one knee or hip Gender osteoarthritis is more common in women Heavy, constant joint use Joint injury by other types of arthritis Knee surgery Being overweight Osteoarthritis is diagnosed using blood tests that eliminate other more serious inflammatory types of arthritis and other medical problems. A sample of the joint fluid may show the typical changes of osteoarthritis. Usually by the time a patient gets treatment for osteoarthritis, there are visible changes on an X-ray of the joint. A narrowing of the cartilage may show on the X-ray but no destruction as with inflammatory rheumatoid arthritis. Remember to consult with your doctor first before taking over-the-counter OTC natural supplements for osteoarthritis. Kaeley, MD , professor of medicine and chief of the division of rheumatology and clinical immunology at the University of Florida College of Medicine in Jacksonville. Aim to eat a balanced diet, count calories, and exercise regularly. Thinkstock Consider Supplements for a Natural Treatment of Arthritis The combination of glucosamine and chondroitin may help with osteoarthritis treatment. In a study published in April in the journal *Aging Clinical and Experimental Research* , taking glucosamine and chondroitin for 12 weeks or longer appeared to give participants more ease of movement. And according to a study published in May in the journal *Annals of the Rheumatic Diseases* , taking the combination over the course of a year led to less joint pain, and taking it for two years led to less joint space narrowing than a placebo. Corbis Turn to Acupuncture for Relief of Osteoarthritis The ancient Chinese practice of acupuncture may be treatment for osteoarthritis. Research into acupuncture is still ongoing, with some studies showing that acupuncture is better for osteoarthritis treatment than doing nothing, but perhaps not as good as other options. Muscles that spasm around the joints in osteoarthritis can be soothed using massage therapy, Altman says. The massage therapist lightly strokes or kneads the sore muscles, which can stimulate blood flow and make a stressed area become more warm and relaxed. Be sure to see only massage therapists who have experience treating people with osteoarthritis, because arthritic joints are very sensitive and must be handled with care. Ask your doctor for a referral for this natural treatment for arthritis. The researchers report that hydrotherapy, which involves soaking in very warm water or water containing minerals, can help relieve joint pain. But the mechanisms by which spa therapy works as treatment for osteoarthritis are not entirely clear. A brace placed on an inflamed joint can provide pain relief by supporting the joint and relieving some of the stress caused by body weight or daily use. Braces can also help realign joints that are being distorted by arthritis. Shoes are another form of orthotics that are used in osteoarthritis treatment; soles that absorb some of the shock of walking can be very beneficial. Altman notes that one of the most common orthotics “ a cane ” is often used incorrectly. He suggests getting properly measured for the correct length of cane for your height and learning how to use it to your best advantage. Getty Images How to Treat Osteoarthritis With Mind-Body Medicine Certain practices that focus on the interaction between mind and body can be a natural treatment for arthritis as people relax and stretch muscles while allowing the mind to focus itself away from the pain.

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Chapter 7 : List of Osteoarthritis Medications (Compared) Page 3 - theinnatdunvilla.com

For research relevant to natural alternatives to statin drugs, use our health guide: statin drugs. For research on natural alternatives for osteoarthritis of the knee view our page on the topic: knee osteoarthritis.

Arthritis pain Arthritis is a group of painful and degenerative conditions marked by inflammation in the joints that causes stiffness and pain. Osteoarthritis, the most common type of arthritis, gets worse with age and is caused by wear and tear over the years. Rheumatoid arthritis is caused by the immune system attacking the joints as if they were foreign tissues. Because of this, rheumatoid arthritis is classified as an autoimmune disease. Doctors traditionally treat arthritis with anti-inflammatory medications and painkillers. However, some medications cause side effects, and a natural approach to pain relief is becoming more popular. Remember to consult your doctor before trying these natural remedies.

Lose weight Your weight can make a big impact on the amount of pain you experience from arthritis. Extra weight puts more pressure on your joints especially your knees, hips, and feet. Reducing the stress on your joints by losing weight will improve your mobility, decrease pain, and prevent future damage to your joints.

Get more exercise There are more benefits to exercise than just weight loss. Regular movement helps to maintain flexibility in your joints. Weight-bearing exercises such as running and walking can be damaging. Instead, try low-impact exercises such as water aerobics or swimming to flex your joints without adding further stress.

Use hot and cold therapy Simple hot and cold treatments can make a world of difference when it comes to arthritis pain. Long, warm showers or baths especially in the morning help ease stiffness in your joints. Use an electric blanket or moist heating pad at night to keep your joints loose. Cold treatments are best for relieving joint pain, swelling, and inflammation. Wrap a gel ice pack or a bag of frozen vegetables in a towel and apply it to painful joints for quick relief.

Try acupuncture Acupuncture is an ancient Chinese medical treatment that involves inserting thin needles into specific points on your body. This is supposed to reroute energies and restore balance in your body. Acupuncture is the most researched complementary therapy and is recommended by the World Health Organization for treatment of over different conditions. It is thought that acupuncture has the ability to reduce arthritis pain. If you want to explore this treatment method, be sure to find a licensed and certified acupuncturist in your state.

Use meditation to cope with pain Meditation and relaxation techniques may be able to help you reduce pain from arthritis by reducing stress and enabling you to cope with it better. According to the National Institutes of Health NIH, studies have found that the practice of mindfulness meditation is helpful for some people with painful joints. Researchers also found that those with depression and arthritis benefitted the most from meditation. When stress is reduced, inflammation and thus swelling and pain drop.

Include the right fatty acids in your diet Everyone needs omega-3 fatty acids in their diet for optimum health. These fats also help your arthritis. Fish oil supplements, which are high in omega-3s, have been shown to reduce joint stiffness and pain. Another fatty acid that can help is gamma-linolenic acid, or GLA. You can also buy the oils of the seeds as a supplement. However, be sure to check with your doctor before taking them.

Add turmeric to dishes Turmeric, the yellow spice common in Indian dishes, contains a chemical called curcumin that may help to reduce arthritis pain. The secret is its anti-inflammatory properties. The NIH reports that turmeric given to lab rats reduced inflammation in their joints. Spice up your life by grabbing some online today.

DOWNLOAD PDF OSTEOARTHRITIS DRUGS AND THEIR NATURAL ALTERNATIVES

Chapter 8 : Arthritis: Medication & Natural Alternatives | Dr. Colin MacLeod ND

In osteoarthritis several non-drug treatments can have powerful effects including weight loss, specific exercises, acupuncture, specific herbs and supplements. Each person is unique in which joints are affected and the level of severity and for this reason treatment recommendations differ from person to person.

Over the past 3 years I have introduced new treatment options for arthritis into my practice. Above all else, prolozone injections and ozone therapy have made the biggest difference for my patients with osteoarthritis. A prolozone injection introduces ozone gas into the affected joint space, increasing tissue oxygenation, oxygen utilization and healing. More information is available on prolozone injections here. The most commonly affected joints, from most to least are knees, hands, hips and feet and there is a strong association with increasing age and wear and tear on joints. Symptoms of arthritis include joint pain, stiffness, joint enlargement, pain at end of range of motion and reduced range of motion. These adverse effects include digestive tract irritation and stomach bleeding², kidney toxicity³, and most importantly in the case of osteoarthritis, accelerated joint destruction⁴. Several high-quality studies^{5, 6, 7} have now shown NSAID usage to be associated with an increased rate of destruction of joints in patients with arthritis, however this association is still relatively unknown to the medical community. It is thought that the increased joint destruction is due to either excessive joint usage due to decreased pain sensation or a direct destructive effect of these drugs on the cartilage and bone of the affected joints. Regardless of the mechanism, worsening joint erosion is a very detrimental adverse effect since it causes actual progression of the condition that is being treated. Although pain management is important in osteoarthritis there are other, more natural treatments with similar efficacy⁸ and less adverse effects. Natural Treatments For Arthritis In osteoarthritis-induced pain there are several treatments which help to reduce joint pain and in some cases even improve the integrity of the joint and strength of surrounding bone. As a naturopathic doctor and a research-based practitioner I prefer to use treatments which have minimal adverse effects and optimal treatment efficacy. In osteoarthritis several non-drug treatments can have powerful effects including weight loss, specific exercises, acupuncture, specific herbs and supplements. Each person is unique in which joints are affected and the level of severity and for this reason treatment recommendations differ from person to person. In my practice I have seen encouraging results with natural treatment combinations targeting weight loss, restoring muscle strength and restoring joint integrity. If you suffer from arthritis and are interested in natural treatment options you can call MacLeod Naturopathic at to book an initial consultation. Estimates of the prevalence of arthritis and other rheumatic conditions in the United States. Major upper gastrointestinal tract bleeding. Relation to the use of aspirin and other nonnarcotic analgesics. J Assoc Physicians India. Is there an association between the use of different types of nonsteroidal antiinflammatory drugs and radiologic progression of osteoarthritis? Effects of antiinflammatory drugs on the progression of osteoarthritis of the knee. Quantitative microfocal radiography detects changes in OA knee joint space width in patients in placebo controlled trial of NSAID therapy. Effect of non-steroidal anti-inflammatory drugs on the course of osteoarthritis. Double-blind clinical trial of S-adenosylmethionine versus ibuprofen in the treatment of osteoarthritis.

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Chapter 9 : List of Osteoarthritis Medications (Compared) Page 2 - theinnatdunvilla.com

Osteoarthritis (OA) is the most common form of arthritis. It's marked by joint wear and tear and cartilage loss that causes bones to rub against one another.

There is a need to increase awareness of available natural remedies that are possibly safer, at least as effective, easily accessible, and inexpensive. For one, despite decades of research and thousands of preclinical studies indicating the therapeutic value of turmeric, not many people are aware that the common kitchen spice can serve as a valuable alternative for a number of health conditions. One group was assigned to take 25 mg of diclofenac sodium three times a day for four weeks. The other group was asked to take 30 mg of the turmeric extract curcuminoid three times daily for the same period of time. It reduces friction between the articular cartilages during movement. People who suffer from knee osteoarthritis are known to have increased secretion of the inflammatory COX-2 enzyme in their synovial fluid. The two alternatives displayed nearly identical potency. The exact results were as follows: In curcuminoid group the average scores were 1. A study published in the Journal of Alternative and Complementary Medicine in revealed that 2, mg of turmeric extract works as effectively as mg of ibuprofen in treating symptoms of inflammation and pain. There are hundreds more of studies that confirm the COX-2 reducing and anti-inflammatory effects of turmeric. What makes the more recent study stand out is what it reveals about the safety of choosing turmeric over pharmaceutical anti-inflammatory drugs, which have been linked to adverse health effects, including seizure, miscarriage, and mortality. Results reveal that there are considerably higher chances of experiencing adverse health effects from diclofenac sodium compared to turmeric. Considering that there are adverse health effects linked to the NSAID drug " and beneficial effects linked to turmeric , this is not a hard choice to make in terms of risk-benefit analysis. Over the past year, our friends at PaleoHacks have been working on a secret cookbook with world-renowned Le Cordon Bleu chef Peter Servold. Grab this today, because we only ordered a small batch of these cookbooks for this freebie promotion, and they will sell out FAST! One of the smartest guys I ever had the pleasure of meeting, Claude set-up a unique system that changed his life forever. I already tried it myself and let me tell His surprising tactics could make your life easier and give you the peace of mind you deserve. Watch the video here: In just 28 days Rocco completely reversed his type 2 diabetes, got rid of his hypertension, acid reflux, successfully reduced the plaque on his arteries" came off his cholesterol and diabetes medication completely" and did all this just by changing his diet in a specific way" Watch the video to learn how he did it. Michael Roizen, the chief medical consultant for the Dr. Your diet is literally killing you. This is no exaggeration: Scientists have established firmly that chronic low-grade inflammation related to diet is responsible for the decrease of insulin sensitivity aka insulin resistance and high blood sugar leading to diabetes - as well as many other serious health problems. Doctors at the International Council for Truth in Medicine are now revealing the truth about diabetes that has been suppressed for over 21 years. This is especially important if you spend a significant amount of time sitting every day I do, and this really affects me in a big way! Working this "hidden survival muscle" that most people are simply not training because no-one ever taught them how will boost your body shape, energy levels, immune system, sexual function, strength and athletic performance when unlocked. If this "hidden" most powerful primal muscle is healthy, we are healthy.