



## A HERBAL SOLUTION TO JOINT RELATED DISORDERS

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### ABSTRACT

Joint disorders affect millions of patients worldwide. 80% of individuals over 50 years of age reportedly have joint concerns of one type or another. Reasons range from obesity to heredity. Improper use of the joints, overexertion, stress, diet and lifestyle contribute to the problem. These are commonly categorized in medicine under Musculoskeletal Disorders as they involve both muscles and bones, and as Locomotive Disorders as they affect flexibility of body and restrict normal movements. Most joint imbalances originate in the digestive tract - and more specifically, in the colon.<sup>[1]</sup> Ayurvedic Treatment can play a significant role if we want to manage Joint Disorders in a natural manner. When we couple Ayurveda with Yoga, the results can truly be nothing less than marvelous. Ayurveda can offer good relief, natural treatment and better alternative management on a mid - term to long term basis. Researchers claimed that Ayurveda treatment outcome is better than or equal to conventional drug for improvement of pain and knee function.<sup>[2]</sup> This review paper is all about common joint disorders, their categorization, etiology, Ayurvedic point of view and its management.

**KEYWORDS:** Joint disorders, types, causes, ayurvedic management.

### Categories

There are many Joint Disorders with which people come to Ayurvedic Herbalist routinely. Some of them are...

1. Osteoarthritis-Chronic vata problems.
2. Sciatica – Acute or Chronic pain radiating from lower back, down the back of leg.
3. Prolapse of Intervertebral Disc or simply Prolapse.
4. Spondylosis or Spondylitis – frequently present in neck and lower back and known as Cervical or Lumbar Spondylosis.
5. Fibromyalgia.
6. Gout or joints pain due to high level of uric acid in blood.
7. Ankylosing Spondylitis and Adhesive Capsulitis of shoulder or Frozen Shoulder.
8. Rheumatoid Arthritis. Incompatible diet, poor digestion, and sedentary habits are the etiological factors in the pathogenesis of Amavata.<sup>[3]</sup>

The first four of above mentioned problems are actually Degenerative disorders. Degenerative disorders are usually related with aging process, wear and tear, physical strain, overuse, abuse and injuries, poor general nutrition, lack of flexibility exercises and sedentary lifestyle.

All of them start with either osteoarthritis or injury. The injury can be sudden or chronic. Chronic injury means

gradual minor damage that simply builds upon over a period of time and then manifests as a disorder. The number Osteoarthritis patients in Ayurveda hospital and clinic of India have been increasing in recent years.<sup>[4]</sup>

Even though, rest of the four above mentioned joints problems do have degenerative changes but there is a good difference there. The first four are not complicated from Ayurvedic and medical point of view. The only complication in these disorders is advanced state of disease where there are structural defects like osteophytes (spike like growth of bones in joint space, visible in simple Xray) or severe damage to intervertebral disc (pad between two back bones, visible in Xray, CT Scan and MRI) and associated symptoms of radiating pain either down the arm or down the leg.

Spondylosis or Spondylitis is osteoarthritis of neck or lumbar region. It is complicated with osteophytes and diminished fluid and can cause radiating pain and disc compression. Sciatica is a common result of injury or coupled with lumbar spondylosis. PIVD or Prolapse of Intervertebral disc also results from sudden injury or chronic and gradual injury.

True joint pain is known as arthralgia and it may or may not go together with joint inflammation or arthritis. Pain that seems to be originating from the joints may

sometimes originate from other bodily structures such as ligaments, tendons or muscles. Bursitis and tendinitis are examples of disorders that originate from structures outside the joints. Different joints are affected by different disorders. This is the reason why doctors would treat pain affecting a single joint differently than pain in more than one joint. When multiple joints are involved, it is quite possible that both joints on either side of the body are affected (for example, either both knees or both shoulders). This is called symmetric arthritis. In other disorders, the pain moves from joint to joint and is known as migratory arthritis.

### The Ayurvedic Perspective

Ayurveda identifies two major types of joint problems. The first type is associated with poorly nourished joints or low bone density and overall weakness in the joints. This kind of problem starts with some discomfort, a cracking sound, and if not taken care of, results in eventual immobilization of the joints. Because the bone is not getting the nourishment it needs, it starts to degenerate. The second kind is associated with a toxic overload in the joints, and is the result of too many toxins in the body. As *ama* (the sticky, toxic waste-product of incomplete digestion) accumulates in the joint, it first creates stiffness and heaviness. If it stays there for a long time, the joint can become swollen and painful. Damp, cold weather can aggravate this type of joint problem.

Diseases of the musculoskeletal system and connective tissues comprise a heterogeneous group of disorders in which musculoskeletal pain and stiffness are prominent. Rheumatic diseases affect people of all ages and ethnic groups. Their frequency increases with age; as many as 40 % of people over the age of 65 years in United Kingdom have had some kind of rheumatic disorder and 20 million people experience a rheumatic complaint each year. The cost to United States economy attributed to musculoskeletal disorders is more than 20 billion dollars per annum.

Connective tissue as their name implies, provide the structural framework for the body and all its organs. Connective tissues are composed of cells of mesenchymal origin that synthesize and secrete an extra cellular matrix consisting of variable amounts of collagens, proteoglycans and elastin as well as glycoproteins such as laminin and fibronectin. Fibronectin, laminin, collagen and some other glycoproteins act as ligands for transmembrane adhesion proteins called integrins, that regulate cell-matrix interactions by linking the extra cellular matrix proteins with the cytoskeleton. Early in embryonic development connective tissues differentiate to form the specialised tissues required for musculoskeletal functions, such as muscles, tendons, ligaments, cartilage and bone.

Bones are joined to each other at joints. These may be fibrous, as in the symphysis pubis; cartilaginous, as in

costochondral joints and intervertebral discs; or synovial, as in the more complex joints of the limbs where greater movement is required.

### Symptoms of Joint Pain

The main symptom of this disease is severe pain in the affected joints. The tissues in and around the joints become inflamed and movement of the joint becomes extremely painful. Untreated arthritis may lead to permanent deformity of the affected joints.

- Fever
- Immense pain and stiffness in affected muscles, especially stiffness and pain (i.e., fingers, wrists, elbows, knees, ankles) in the morning
- Excruciating pain and stiffness in the joints
- Redness of joints, tiny red spots on skin
- Loss of range of motion
- Locking or popping of the joint
- Weakness and fatigue
- Limping
- Cramps and tics in muscles
- Warm or hot joints
- Pain or discomfort worsened by prolonged sitting or standing
- Bruising or discoloration
- Inability to bear weight

### Root Causes of Joint Pain

Usually, the pain originating from multiple joints can be attributed to arthritis. Disorders that are at the root of arthritis may show different tendencies, such as:

- The number of joints involved
- The specific part of the central skeleton involved, such as the spine or pelvis
- Whether the condition is acute or chronic

The following medical conditions are some of the possible causes of joint pain as a symptom. There are likely to be other possible causes.

- Various forms of arthritis
- Joint injury
- Joint strain
- Joint sprain
- Previous joint injury
- Infections – many infections cause aching joints and muscular pain
- Lupus
- Osteonecrosis
- Sickle cell anemia
- Anxiety (causes muscle tension and joint inflammation)
- Gout
- Lyme disease
- Gonorrhoea
- Hypothyroidism.

### Vata- Related Joint Problem

When Vyana Vata, which is the aspect of Vata that governs the circulation and nerve impulses, is

aggravated, the first type of joint problem can occur. The person's circulation, metabolism, and ability to absorb food are weakened; as a result, the bone tissue does not receive enough nourishment and eventually starts to degenerate. The imbalance in Vyana Vata and the weakened circulation, metabolism and absorption create a drying effect on Shleshaka Kapha, the subdosha of Kapha that governs lubrication of the joints. When this happens, the joints are not lubricated properly and this creates the discomfort, cracking sound, and diminished flexibility.

#### **Foods and Lifestyle Habits to Pacify Vata**

Include all six tastes (sweet, sour, salty, bitter, astringent, and pungent) in your diet. Favor the sweet, sour, and salty tastes, as these help pacify Vata dosha, and eat less of the bitter, astringent and pungent foods. Other healthy foods to include in the Vata pacifying diet are grains such as quinoa, rye and amaranth, cooked in water to which a little Ghee has been added; freshly cooked organic vegetables; split mung dhal soup; and sweet, organic, juicy fruits. It's important to eat a diet rich in calcium, including high-quality organic milk and vegetables such as spinach, kale, asparagus, and root vegetables cooked with Vata Churna.

Follow a Vata-pacifying daily routine. Go to bed before ten o'clock at night, and rise before six a.m. Avoid too much stimulating activity at night, such as watching television right before bed. Eat your main meal at noon, and eat a light, nourishing dinner early in the evening. Engage in some mild exercise such as walking for half an hour a day. Practice Transcendental Meditation® on a regular basis to dissolve stress and calm your mind. All of these things together will soothe Vata dosha and prevent and correct Vata-based joint problems. A daily ayurvedic Oil massage is recommended to prevent these kinds of joint problems, because it helps settle Vata dosha.

#### **Herbs that Heal**

The herbal formula for this type of joint problem has a special name in ayurveda, called santarpana, which means nurturing. Based on this nurturing theory of santarpana, Asmi Ayurveda Consultancy & Herbals has developed a precise combination of nourishing herbs that provides nourishment to bones and joints and supports the bone tissue and Shleshaka Kapha.

This program is most effective in restoring balance to the joints when there is a small amount of malnutrition of the bone and drying of Shleshaka Kapha. If the problem is more severe than that, it is important to consult a physician. The primary outcome of Ayurvedic medicinal plants have analgesic, anti-inflammatory, chondroprotection, soft tissue healing, antiosteoporosis, immune-modulation, anti-lipogenesis, anabolic effect, and anti-oxidative stress. The secondary outcome of Ayurvedic antiarthritis drugs and regimen are to improve

digestion and metabolism, normalize the gut function and clear bowel movement.<sup>[5-8]</sup>

#### **Ama-Related Joint Problem**

This second type of joint problem is really a problem of *ama* (digestive toxins) in the joints, and is characterized by a heavy, stiff feeling. Sometimes a bout of cold, humid weather can trigger these symptoms. That is the first stage. If nothing is done to dissolve the *ama* and it sits in the joints for a long time, eventually the *ama* converts to amavisha, an even more toxic form of *ama* that is more irritating and reactive in nature. Amavisha causes the joint to become inflamed, swollen, and painful. In this kind of environment, *ama* also mixes with the natural lubricating fluids in the joint governed by Shleshaka Kapha, forming an extremely sticky, toxic substance known as Shleshma. Shleshma restricts mobility and disturbs circulation in the joint. If the *ama*, amavisha and Shleshma stay in the joints unattended to for a long time, eventually the structure of the joints and the bone itself becomes damaged. Once these morphological changes happen to the joint and bone, it becomes extremely difficult to correct.

#### **Foods and Lifestyle Habits to Reduce Ama**

An *ama*-reducing diet is made up of warm, light, dryer foods that are easy to digest. Nourishing soups and warm, freshly cooked grains and vegetables prepared with Kapha Churna and spices to stimulate digestion are the mainstays of the *ama*-reducing diet. To keep your digestion working properly, avoid day sleep, and go to bed early so you can rise before 6:00 a.m. Exercise for half an hour every day, and choose a type of exercise that you enjoy. A brisk walk is ideal for most people, along with yogasana stretches, although if you have more Kapha dosha you may need more vigorous exercise to stay in balance. You'll feel lighter and more energetic just by making these simple changes in your routine.

A very effective way to purify the joint is to drink lots of *ama* pachana water (water infused with *ama*-reducing spices). To make the water, boil two quarts of water and put it in a thermos flask. Then add two to three thin slices of fresh ginger, 1/4 tsp. cumin, 1/4 tsp. fennel, 2 black peppercorns, and 2 leaves of mint. Let it steep. Drink this water throughout the day for a very purifying effect. It also helps to eat an apple cooked with prunes and figs each morning for breakfast. You can also cook your foods with an *amapachana* spice mixture. To prepare this, mix 2 parts turmeric, 6 parts cumin, one part ajowan, 2 parts fenugreek, 1 part black pepper, and 6 parts fennel. Kapha Churna is also a good spice mixture for reducing *ama*. Castor oil is extracted from the attractive and ornamental Castor seeds by cold press method. It is one among the most commonly used oil since the prehistoric times for cleansing the colon, reproductive system and as a powerful detoxifying agent.<sup>[9]</sup> Eranda Taila have valuable therapeutic properties such as Anti-inflammatory, emmenagogue,

anti-infectious, anti-rheumatic, fungicidal, laxative, immune stimulant, insecticidal, anti-viral, labor inducing, anti-allergic, anthelmintic, rejuvenative, anti-aging, germicidal, disinfectant, and analgesic are the major remedial attributes.<sup>[10,11]</sup>

#### Diet

- Avoid curd and all sour items, pulses (except moong dal), rice, meat, fish, white bread, sugar, refined cereals, fried foods, tea or coffee.
- Potato, lemon, celery seeds and bitter gourd are highly beneficial.
- Favor a Vata pacifying diet.
- Steep ginger into hot water and sip on this water regularly.

#### Lifestyle

- Bowels should be cleansed daily.
- Avoid damp place and exposure to cold weather.
- Don't indulge in day-time sleeping.
- Limit yourself to restricted exercise.
- Lubricate your joints by massaging with a medicated oil or some castor oil. Then, follow with a heating pad to comfort the joint and flush out ama.
- Live a life that's balanced by structure and routine. For example, eating and sleeping at the same times every day can be very helpful in balancing Vata dosha.

#### Yoga

- Breath of Victory (Ujjayi).
- Alternate Nostril Breathing (Nadi Shodana).
- Cow Pose (Bitalasana).
- Cat Pose (Marjariasana).
- Standing Warrior Pose (Virbhadrasana).

#### DISCUSSION

Ayurveda is a very individualized approach to health and healing. Not only are we each completely unique, but Ayurveda aims to meet each of us exactly where we are. Therefore, it is important to honor your own process and your own sense of timing. If the condition of your joints is interfering with your quality of life, you may be highly motivated to address the root cause of your imbalances as quickly as possible. If your joints are not actively troubled, but you want to protect them long into the future, you may choose a more measured, gradual approach to change. Trust that whatever works for you is right for you. Keep in mind that working with an Ayurvedic practitioner can help you to tailor your strategies to more directly support your particular situation. Whatever your path, we hope that we can continue to support you in cultivating and celebrating a deep sense of comfort in your body (including those miraculous joint spaces), as well as vibrant overall health.

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