

**YOGA THERAPY
FOR BACK PAIN:
Living with Degenerative Disc
Disease**

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I. Disease, Condition or Ailment:

Degenerative Disc Disease (DDD)

The majority of low back pain is a result of degenerations in the spine, or a narrowing of the discs, which sometimes can be referred to as spondylosis. The wear and tear, often due to stress or trauma, can happen anywhere in the spine but is generally located in the lumbar and cervical regions.

The spine is made up of three main segments: the cervical, thoracic and lumbar spine. The cervical is the upper part of the spine made up of 7 vertebrae (bones). The thoracic is the center consisting of 12 vertebrae. The lower portion of the spine is the lumbar. It is normally made up of 5 vertebrae; however, some people may have six (those who appear to have long torsos) which isn't of any concern.

The normal spine has an "S"-like curve when looking at it from the side which allows for an even distribution of weight. The "S" curve helps a healthy spine withstand all kinds of stress. The cervical spine curves slightly inward, the thoracic curves outward, and the lumbar curves inward. Even though the lower portion of your spine holds most of the body's weight, each segment relies upon the strength of the others to function properly. (Spineuniversity.com)

Within the three major functions of the body: metabolism (pitta dosha), anabolism (kapha dosha) , and catabolism (vata dosha), the Ayurvedic goal is to balance the three. “Catabolism is a process of decay and destruction and necessary to break down larger molecules into smaller molecules and eliminate the waste products of the body. If catabolic processes are greater than anabolic processes, there is deterioration and amaciation of the body.” Therefore, Degenerative Disc Disease is primarily a vata imbalance. (ASYT notes – Ayurveda section pg. 37)

II. Description of Topic (causes from western and eastern modalities):

The degeneration of the discs is caused by Vata, and the inflammation or pain that is sometimes caused by this condition (i.e. sciatic pain) is a Pitta imbalance. The fibrous tissue in between the discs loses their shock absorbancies due to a lack of hydration and thus become dry and brittle and more prone to crack or break. The Yoga Sutras of Patanjali, page 89 sutra 34 states: *Or, by expulsion and retention of breath (the mind may also be calmed)* “The mind, body, and senses become active and restless because of the movement of prana.” Therefore one’s prana (especially the exhalation

because the mind remains in a thoughtless state) is a vital tool to healing. Prana is located in the hypothalamus of the brain and there is a direct connection between prana and emotional stagnation. Therefore, the mind may have thoughts or feelings of not having the support that one needs or anybody “by their side.” If you think about it, our spine is our backbone, and without one we may not be able to “stand on our own two feet,” literally and metaphorically speaking.

In Ayurveda, “Majja dha’tu is also present in the brain, hypothalamus, spinal cord, and all inter-spinal nerves and cranial nerves including subcutaneous nerves.” Related disorders such as sciatica, osteoporosis, and multiple sclerosis, involving space between the bones and innermost tissues of the body allows the nerves and blood vessels to enter the bone tissue. (ASYT notes – Ayurveda section pg. 22) “Our belief system plays a big role and can derail the mind in unhealthy behaviors that lead to the reduction or loss of sattva in the mind.” According to Ayurveda, mis-utilisation of intellect called Pragma Aparadha is the main cause of illness. “Sattva gets diminished and creates doshic imbalances that lead to the production of ama.” There is a misuse, overuse, and underuse of our senses. “This brings pressure upon the primary agni in the digestive tract and impairs the proper conversion of food into nutrients. That leads to dhatu disorders, setting conditions for infections or other degenerative disorders.” (ASYT notes – Ayurveda section pg. 35-36)

According to western modalities, the effects of aging are generally the main causes of this disease. Physical injury and obesity are also common causes of this type of back pain. The vertebrae, discs, and facet joints all suffer under the constant compression forces. Compression prevents the discs from hydrating (absorbing water) properly. Nutrients cannot enter the disc easily while under this compressive stress as a result of excess weight in the area as well as the onset of an injury. Therefore lifestyle and dietary habits play a factor. Smoking greatly contributes to the lack of water in the discs. Eliminating protein from the diet and consuming foods high in carbohydrates, sugar, fruit, and fructose creates a feeling of “eating the body from the inside out” as a method of survival if the body isn’t receiving enough amino acids. This is especially the case for marathon runners or highly active people whose bodies are in a constant “fight or flight” (adrenaline) mode; meaning that their sympathetic nervous system is never shut off. Even body postures play a roll. For example, a "body forward" position is one of the most common contributing factors. The weight of the body is carried by the discs and facet joints when in the balanced position. A body-forward position transfers the load from the facet joints to the discs.

The muscles at the posterior of the back go into tension to prevent the body from tilting farther forward. This muscle tension can also be an added load on the discs.

III. Signs and Symptoms:

Common symptoms include low back pain generally made worse with sitting, lifting heavy objects, bending, and twisting. The body typically will react to this pain with muscle spasms and tingling or numbness. The spine and surrounding muscles will generally feel stiff. A weakness in the leg muscles can be an indicator that there is some nerve damage due to pressure of the nerve from a disc. Even more subtle signs can occur such as loss of balance or feelings of thirst.

In Ayurvedic terms, the mala of majja dha'tu is oily secretion from the eyes where a discharge of emotions come in the form of tears. When a disease is considered a vata, pitta imbalance, then there is often times a depletion of ojas within the individual. Ojas is vital for the immune system and is considered the pure essence of the kapha dosha. "Some signs of depleted ojas are chest pain, palpitations, breathlessness, fear, dehydration, muscle wasting, and osteoporosis."

IV. Chakra Focal Point:

The second and fifth chakras are the main focal points for this condition considering that DDD appears most common in the lumbar and cervical spine (rather than the thoracic).

Pain in the low back and hips, arthritis, and prostate or ovarian cancer are all illnesses derived from the second chakra. "This chakra resonates to our need for relationships with other people and our need to control to some extent the dynamics of our physical environment. The illnesses that originate in this energy center are activated by the fear of losing control." Integrity and morals need not to remain in tact for a healthy physical ego. Conditions such as addiction, rape, betrayal, impotence, financial loss, and abandonment are common incidences where one may feel stripped from the soul and therefore search or steal energies in others in an attempt to replenish what feels lost. For example, when a parent applies strict rules onto their children as an attempt to "show authority" or "who's boss", the child is effected just as much by that depletion of energy of perceived emotional abuse (of not doing anything right) as one might feel with actual physical abuse. It is important to establish a certain level of independence so that one is able to regain their personal energies from themselves or the source directly. "Through these childhood exercises we discover whether we have

what it takes to draw power to ourselves. If we decide that we are unable to attract the life-force, however, we begin living in a type of *power debt*. We imagine ourselves surviving only through the energies of other people, but not on our own.” Meaning being dependent on others for one’s physical, emotional, and spiritual state. “Managing the power of choice, with its creative and spiritual implications, is the essence of the human experience. All spiritual teachings are directed toward inspiring us to recognize that the power to make choices is the dynamic that converts our spirits into matter, our words into flesh. The dynamic of choice guarantees that we cannot run away from ourselves or our decisions.” Energy in the second chakra seeks to create and explore conflicts within relationships. “Relationships generate conflict, conflict generates choice, choice generates movement, and movement generates more conflict.” We need relationships for spiritual growth and maturity and part of the choices that we are confronted with helps to transcend dualism in the actual decision itself. The saying that “opposites attract” is a resemblance of how two differentiating energies are compelled to each other in order to learn from one another, if we let it. Conflict is constricted, on the other hand, if we refuse to also see that sometimes another person is merely reflecting back to us what we are too afraid to see within ourselves. The constriction of the energy in this center can invariably lead to health problems dealing with the sexual organs, large intestine, lower vertebrae, pelvis, hip area, appendix, and bladder. (**Anatomy of the Spirit, ch.2**)

The fifth chakra, or the power of will, is related to the physical body in the throat, thyroid, trachea, esophagus, parathyroid, hypothalamus, neck vertebrae, mouth, jaw, and teeth area. Interesting enough, “All illness has a connection to the fifth chakra because choice is involved in every detail of our lives and therefore in every illness.” Freedom may come in the belief that true authority comes from being aligned with God’s will, or following ones dharma, if you will ☺ “We all do live, at least periodically, within the illusion that we are in charge of our lives.” “Our faith and our power of choice are, in fact, the power of creation itself. Some unplanned event or relationship or illness will show us that our personal power is insufficient to get us through a crisis. We are meant to wonder if some other force is acting in our lives, and to ask, Why is this happening? What is my purpose” Before long, new choices boil to the surface, sometimes beyond what the mind was able to perceive (Jnani Chapman referred to that as a miracle). Then we end up doing things that we never thought that we would be doing. The energies of the fifth chakra help guide us to the point of surrender. “Developing the discipline of will allows us to refrain from releasing

negative thoughts towards others or ourselves. By being nonjudgmental, we attain wisdom and defeat our fears.” Genuine healing consists of honesty and forgiveness within the self and a sacrifice of faith. It is the fifth chakra that illnesses in the cervical and neck area are addressed. (**Anatomy of the Spirit, ch.5**)

Body Reading Chart for common findings in DDD:

Postural Change	Tight Muscles	Weak Muscles
1. Feet Turned Outward	Psoas, Ext. Hip Rotators, Sartorius, Gluteus Maximus	TFL, Gluteus Minimus
2. Feet Turned Inward		TFL, Gluteus Minimus
3. Hip Elevated	Quadratus lumborum, psoas	Same as opposing side
4. Hip Twisted	Abdominus oblique, psoas, tensor fascia lata, sartorius	Same as opposing side
5. Hyperextended Knee	Hamstrings, gastrocnemius	Lower quadriceps, popliteus
6. Body leans forward	Tibialis anterior, psoas, rectus abdominis	Gluteus Maximus, thoracic erector spinae

(Structural Yoga Therapy Page 103)

V. Common Medical Treatments:

Osteopathy, a system of diagnosis and treatment that involves mobilization, joint manipulation and massage, can help the muscles relax and increase flexibility. Some have reported that Acupuncture provided relief from back pain and helped promote healing. A chiropractor may be able to relieve pressure on the spinal nerves and restore joint mobility. Surgery may be recommended with no improvement after alternative courses of conservative treatment (depending on the severity of the degeneration). Most people should get better without surgery. The two procedures involving surgery are Discectomy (surgical removal of part or the entire offending intervertebral disc) and Microdiscectomy (a microscope magnifies the surgical field during removal of the disc). Physical Therapy will usually follow both procedures.

Stability before mobility!!! Work on stabilizing the pelvis and spine and then add dynamic movement later. Core Stability and Hip Differentiation are the focus in Physical Therapy, Pilates, and Yoga Therapy. That helps strengthen the piriformis and stretch the psoas and quadratus lumborum. During stability exercises the client should remember to keep the rib cage low, lower back and neck relaxed, expand from the sides, and the abdominals contracted (a coughing feeling). A “whole picture” view and approach would be towards decompression of the entire spine, and not just the area that is affected. The goal is to balance pitta

through abdominal exercises and vata through pranayamas. (*Yoga and Ayurveda: Self-Healing and Self-Realization*)

VI. Yogic Remedies:

a. Meditations or Visualizations

Visualizing space between the discs is helpful, as well as focusing on the muscles close to the vertebra right above and below the injured area, emphasizing length throughout the entire spine. “With gentle guidance from the mind, we use the breath deliberately to infuse the cells with vital energy and invite the tension and discomfort in the body to melt away. In our mind’s eye, when we breathe, relaxing energy into the toes, it replaces and releases tension, creating more space.” Such as the toothpaste effect or the act of squeezing toothpaste out of the tube - vital energy is sent between the cells and the tension that was there gets pushed out. “As the breath is directed down through the legs and out through the tips of the toes it has the ability to release tension in the muscles, bones, ligaments, and nerves in the legs and feet.” The kosha involved with this is the Prana Maya Kosha, sometimes referred to as chi or qi. This energy, acting as the physical body’s aura or force field, ultimately enables the body to function and move. (*The Healing Path of Yoga, pg. 73-74*)

b. Asanas, Mudras, Bhandas, Relaxation

People with Degenerative Disc Disease benefit from doing yoga poses that balance vata, enhance Kapha as well as decrease Pitta. Some examples of poses/asanas that are good with reducing pitta are Chandra namaskar (moon salutation), paschimottanasana (seated forward bend) and prasarita padottanasana (spread-leg forward bend), which is especially therapeutic for back pain. Uddiyana Bandha (stomack lock) is also recommended.

Other suggested asanas include: supported down dog pose using a yoga strap placed in front of hips and then tied to a door knob or something stable; supported half dog pose gently stretches the erector spinae muscles of the back by placing the lower back in traction; simple supported backbend; elevated twist on a bolster is a great way to stretch the external rotator muscles and also stretch the latissimus dorsi muscles (here the function of the lumbo-sacral spine is enhanced); supported child’s pose; and a basic relaxation pose with Legs on a Chair.

The Joint Freeing Series Nos. 6 & 7 would work well here in addition to the Side of Hip Stretch, Warrior II and Triangle from the Structural Yoga Therapy Kinesiology Chart. Yoga poses incorporating both static and dynamic movements. Balance poses are also very important for this

population. A general cue of elongating the front and side of the body is important. Other functional and proprioceptive exercises can be used utilizing discs, foam rollers, stability balls as well as standing poses to challenge the client further. Cross-training exercises such as weight training and low-impact cardiovascular exercise should be emphasized as long as they are under the supervision of an expert in the field. If cardio is being done, care should be taken to maintain a neutral spine. Walking, bicycling, and swimming are excellent forms of aerobic exercise.

It is crucial for vatas to focus on breath during all poses and to hold the asanas longer than they are inclined to. “Ojas is influenced by the power of agni and its quality depends on lifestyle, stress, and the quality of relationships.” So asanas in which help increase ojas are very beneficial. Most inversion poses help do that, except headstands which are considered contraindicated. As Jack Johnson put it “You don’t always have to hold your head higher than your heart” is the goal of inversions as we place ourselves in a position in which we can view the world differently (or simply put - upside down).

c. Optimal Yogic Diet Recommendations

A vata-balancing diet, is one of the goals for this condition. Meaning warm and soothing foods such as creams, butter, warm soups, hot cereals, and fresh-baked breads; soft thoroughly cooked food that is easy to digest. Vata types benefit from salty, sour, and sweet tastes. Any cold, light, low calorie food as well as dry, salty snacks should be avoided. Even nuts and seeds need to be taken in small quantities. Lots of warm water (not ice water) is crucial for this population, as well as a diet using both oils and herbs (vata churna in particular) to increase both circulation and movement in the joints.

d. Lifestyle and other tools (pranayamas, oilings, karma yoga practices, bhakti yoga practices, herbs, spices, teas, water therapies, sun baths, etc)

It is very important to work with the breath with this population to free energy and space within the body and increase awareness. Shitali and Sitkhari are recommended pranayama practices and Uddiyana Bandha (stomach lock). An oil treatment called shirodhara relaxes the nervous system and balances prana vata (the subdosha that exerts control over the brain). Laxative (virechana) lowers pitta and brings down agni by flushing out the intestinal tract. Aromatherapy that incorporates basil, orange, geranium, clove, and other spices is helpful in balancing vata in Maharishi Ayurveda. A traditional Indian drink (lassi) made with ginger, salt, cumin, yogurt and mango is good for riding the body of vata.

A good karma yoga practice would be tending to the garden or allowing creativity to flow through one's actions. Planting of flowers, for instance, can be symbolic to planting or creating a new life for oneself; to make the decision to start over or start something new. Pulling of weeds can have the same therapeutic effect as one feels as though they are being of service by pulling out the energies that don't best serve the body or garden creating space for new life to grow. Being devoted to oneself and one another is sought through bhakti yoga. Again, genuine healing consists of honesty, forgiveness, and a sacrifice of faith.

By the time one might reach a Yoga Therapist, they often times have a feeling of complacency after having tried many modes of medical intervention which may not have worked entirely to their satisfaction. For that reason, svadyaya (self-study) as well as Ishvara Pranidhana (surrender) are vital components of adherence to the therapy. A Yoga Therapist can gently guide the client to that self-discovery as they begin to look and work from the inside out.

“Sometimes you have to go within in order to go without”

REFERENCES

1. Chopra, Deepak, **Perfect Health – The Complete Mind/Body Guide**, New York, Crown Publisher, 1990
2. Devi, Nischala Joy, **The Healing Path of Yoga: Alleviate Stress, Open Your Heart, and Enrich Your Life**, New York, Three Rivers Press, 2000
3. Frawley, David, **Yoga and Ayurveda: Self-Healing and Self-Realization**, *Twin Lakes, Lotus Press, 1991*
4. Myss, Caroline, **Anatomy of the Spirit: The Seven Stages of Power and Healing**, New York, Crown Publishers, 1996
5. Stiles, Mukunda, **Structural Yoga Therapy-Adapting to the Individual**, San Francisco, CA: Red Wheel/Weiser, 2001
6. Stiles, Mukunda, **Yoga Sutras of Patanjali** as interpreted by Mukunda Stiles, Santa Cruz, CA: Sri Rama Publishing, 1999
7. **Ananda Seva Yoga Therapy Class Notes**, June 2010
8. <http://www.spineuniverse.com>
9. <http://www.spine-health.com>