What is Osteopathy/Animal Normalization Therapy?

Patricia Kortekaas, PT and Karen Dvornich, NTP

Osteopathy is a non-pharmaceutical, "hands-on" approach aimed at strengthening the body's own defense mechanisms. Osteopathy – derived from the Greek words "osteon" (tissue) and "pathos" (feeling) is essentially "feeling the motion of tissues".

There is a direct relationship between the *musculoskeletal system* and the function of the rest of the body. This relationship is dependent on the circulatory, nervous, and the unifying system, the fascia. Fascia is everywhere in the body, and surrounds blood vessels, nerves, organs, and muscles. All three systems organize the body into a "unified" continuous whole; any inappropriate alteration in the structure and fluid flow can trigger dysfunction in other parts of the body.

Osteopathy may be divided into two techniques; direct – the practitioner (chiropractic) thrusts through the restrictive barrier, and indirect – the practitioner sets up the tissues to "unwind" and move through the restrictive barrier on their own.

Categories of indirect techniques include: cranio-sacral, myo-fascial release, functional indirect, nerve release, and vascular manipulation. These indirect techniques are well known to physical and manual therapists, but are not widely utilized in veterinary medicine. The emerging field of osteopathy or *animal normalization therapy* in animal rehabilitation has tremendous potential to help treat all animals with a variety of back, neck, and shoulder problems. It may be particularly useful for agility dogs, geriatric animals, and service dogs. A regimen of animal normalization treatments commonly helps to restore an animal's normal function more quickly and permanently than by using stretching and strengthening exercises alone.

The body protects itself in the following order:

1. Vascular system, lymphatic system, and unifying fascia
2. Central, peripheral and autonomic nervous system
3. Organs
4. Endocrine system
5. Musculoskeletal system

Therefore, treatment does not begin by focusing on the most painful areas, rather to resolve the *core* problem, layer by layer. First, locate and treat the **area of greatest restriction** (i.e., the part of the body with the greatest dysfunction that also has the most influence on the other systems).

If the vascular system is affected in a gluten sensitive animal, the body will first protect around the blood supply. Areas with vascular damage or diminished blood flow might cause restrictions in fascia, tendons, muscles, joint capsules, and neurological tissues. The musculoskeletal system, the lowest in the hierarchy, can show multiple, but consistent patterns of restriction on right side of the body, as listed below.

As a human and pet nutritionist, Karen is interested in the quality of the blood, the highest in the hierarchy. *"The blood vessel has an infinite number of insults, but only three finite responses to the insults. The three finite responses are* ***inflammation, oxidative stress,*** *and* ***vascular autoimmune dysfunction."*** *Dr. Mark Houston, cardiologist*

Inflammation can be lowered with essential fatty acids for the synthesis of prostaglandins. Anti-oxidants can relieve **the oxidative stress** that reduces the functionality of nutrients and organs. The **vascular autoimmune dysfunction** may be caused by intestinal permeability, a "leaky gut", which is the result from environmental toxins, such as gluten. Removing gluten from the diet will allow healing to occur, and animal normalization therapy can provide relief to the vascular tension observed in the musculo-skeletal patterns.

Muscles are movers, or muscles are protectors. Their primary function is to contract and move two or multiple bones, and then relax. But, if a muscle is contracted and in a spasm, the muscle is protecting something. As a result, there will be a ***three dimensional vascular hemostasis*** that develops in the affected arteries, capillaries and veins. The fluid or pressure dynamics in that area will be altered, and tension on the surrounding tissues will build up. The rhythms of the involved tissues will be altered as well, and the body will to start to compensate for the altered pressures and restricted fluid flow. These alterations of flow may occur in the cerebrospinal, lymphatic, vascular, and/or interstitial fluid systems of the body. These alterations of flow, in this case caused by gluten, can be seen via musculo-skeletal patterns, felt via heat and tension, and corrected by releasing the tension in the kidneys, ureters, and bladder.

Common gluten sensitivity problems in cats and dogs are in the urinary tract system such as bladder infections, kidney or bladder stones, frequent urinating or not able to urinate easily, and/or kidney failure.

Some characteristics of a gluten sensitive dog:

1. Right diaphragm is flat and restrictive
2. Right kidney is tight and motility is severely reduced
3. Soreness and heat over the right kidney
4. Lumbo-pelvis twist: right ventral/left dorsal ilium
5. Right descended sacrum "out of pattern"
6. Right temporal bone descended
7. Right hip restricted for internal rotation
8. Musculo-skeletal symptoms: Right rear limping and/or front right limping

Sensitivity to gluten is not a "fad" for people or pets. The week-long online "Gluten Summit" in 2013 was attended by 110,000 human practitioners worldwide. As far back as 1992, a study by veterinarians, E.J. Hall, and R. M. Batt concluded that gluten sensitive Irish Setters, reared on a normal diet containing wheat, exhibited partial villous atrophy, intraepithelial lymphocyte infiltration, and increased intestinal permeability. Gluten sensitivity is no longer breed-specific; it can and does affect grain-fed animals manifesting itself as skin irritations, thyroid disease, vascular, and autoimmune diseases.

Karen has non-celiac gluten sensitivity, and one of her dogs has celiac disease. She spent a year working with western and holistic veterinarians, breeders, and trainers trying to figure out why her Siberian husky pup would skip meals for 3-4 days at a time. Karen met Patricia, the osteopathic physical therapist who identified the musculo-skeletal patterns in gluten-sensitive dogs. On the first visit, Patricia released his restrictions, and he began to eat. For more information about Karen's dog, Koyuk, and other canine case studies, http://www.fullspectrumcanine therapy.com/case_koyuk.html