‘Lower Back’ Problems in Dogs: The Causes, Symptoms, Long-Term Effects & Treatments
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INTRODUCTION

The FLA Rendezvous 2002 was highly successful, and one of the reasons for its success was the enlightening and revolutionary presentation given by Robert H. Hathaway, D.V.M., on ‘lower back’ problems in dogs.

According to Dr. Hathaway, who is one of only three veterinarians in the country who practices what he calls chirovetpractic, the root of many health-related problems in dogs can be traced back to a subluxation (skeletal dislocation) of the sacrum—which is analogous to a lower back misalignment in humans. (See Figure 1 for a full view of the canine pelvic area.)

Not only did Dr. Hathaway explain that severe problems such as hip dysplasia can be caused by a sub-laxated sacrum, but he went a step further and explained how many other seemingly unrelated problems in dogs and humans alike—can actually be caused by long-term lower back misalignments (Table 1).

In this article, we will discuss the most common causes of a dislocated sacrum in dogs. We will then list the possible symptoms and long-term effects of such a dislocation.

Finally, we will conclude with a discussion of Dr. Hathaway’s cure for sacral subluxation and the numerous associated ailments.

CAUSES

A dog’s sacrum ‘floats’ behind the last lumbar vertebra (Fig. 2) and pivots as it walks (Fig. 3). If the sacrum becomes pushed too far to either side of the pelvis, it can become locked into, or rather out of, place (Fig. 4). Once the sacrum is dislocated, there is nothing the dog can do to relocate it.

A dog’s sacrum can become dislocated in several ways. For example, pups born to a mother with a narrow pelvis are often forced through the birth canal by passing one hip and then the other. If the pressure is too great while the pup is passing through the birth canal, the pup’s sacrum can be dislocated.

Another cause of a dislocated sacrum is a dog falling on a slippery surface, such as linoleum, cement, or a hardwood floor. This can happen when a dog is running, turns sharply, and its rear legs slide out to the side. The pressure of the fall is often enough to dislocate the sacrum.

A third less common way that the sacrum can be dislocated is when a veterinarian prepares a dog for abdominal surgery. When the dog is sedated and placed on the table, its front legs are tied above its head, and then each rear leg, in turn, is pulled down and to the side and tied. As a result of the anesthesia, all of the muscles in the dog’s body are relaxed, and it takes very little pressure to dislocate the sacrum when securing a rear leg.

SYMPTOMS & LONG-TERM EFFECTS

The early symptoms of a dislocated sacrum are many (Table 1), and include pain, difficulty or refusal to run and jump, and appearing unhappy or withdrawn. Long-term effects are even more extensive (Table 1). In this section, we will explain just a few of the possible long-term effects of sacral subluxation in canines.

Hip dysplasia: Dr. Hathaway states: “I have never seen a radiograph of hip dysplasia [in which] the sacrum was not subluxated. The nerves supplying the hip musculature are pinched, allowing the head of the femur to displace.” In simple language, this means that the sacrum has locked out of place and has pinched one or more sacral nerves. These pinched nerves cease supplying neural impulses to the muscles in the hip. Once the hip muscles become relaxed, the ball of the hip can rotate out of place. Some of the typical signs of hip dysplasia are as follows:

Figure 1: Canine pelvic area, dorsal view
The dog refuses to jump;
- The dog drags its toes on one or both hind legs;
- The dog takes uneven or small steps with one or both hind legs;
- The dog bears weight unevenly on hind legs or shifts weight to front legs;
- The dog will not lift his leg or will squat unevenly to urinate or, in some instances, may become incontinent;
- Severe cases can result in paralysis of one or both hind legs and/or the tail, in which case, the muscles will become atrophied.

These are ‘textbook’ symptoms of hip dysplasia. However, a subluxated or misaligned sacrum can cause other problems as well. When the nerves supplying the hip muscles are pinched, the dog suffers pain, much like humans with a pinched sciatic nerve. The pain causes the brain to secrete hormones that activate the adrenal gland, and a constant supply of adrenaline is produced to deal with the pain. The thyroid will initially become hyperactive due to the constant secretion of adrenaline, but will eventually become hypothyroid once it has been exhausted. The constant release of adrenaline will also inhibit neural impulses and reduce blood supply throughout the body, resulting in such problems as a weakened immune system, skin allergies, digestive disorders and food allergies, reproductive disorders, and maladies associated with the mucous membranes.

**Digestion:** A poor blood supply and neural response to the pancreas can result in pancreatic insufficiency—which is the reduction of digestive enzyme production and the reduction (or cessation) of insulin production. When insufficient enzymes are produced to process food, the food can putrefy and ferment in the animal’s stomach. Food allergies can result from the toxins created by this putrefaction. Foul breath is often noticed, and is caused by the gas produced from the fermented food. This excess gas can also trigger bloating.

**Mucous membranes:** The lack of a sufficient blood supply and neural response to the mucous membranes throughout the body causes them to be less moist. Dryer membranes impede the ability of immunoglobulins to cross the membranes and alert the body of invading microbes that can cause disease.

**Skin:** Once the blood supply and neural impulses become inhibited in the skin, oil glands embedded in the skin cease functioning properly. The oil remaining in the glands becomes rancid, and the skin produces a foul odor. Hair will lose its luster, and the skin can become dry and flaky. Unhealthy skin is also more susceptible to external parasites and skin disorders such as hot spots.

**Reproduction:** Low sperm count in males and various reproductive problems in females can also be attributed to the inhibition of blood supply and neural impulses to the testes, ovaries, and uterus as a result of pinched sacral nerves. Females may have constant uterine problems arising from the affected uterine mucous membrane. In intact females, litter size is reduced because the inhibited blood supply is not sufficient to supply nutrients for a large litter. In addition, the pup located the farthest from the blood supply often either dies and becomes resorbed or ends up being the runt of the litter.
**TREATMENT**

Sacral dislocations can happen in a variety of ways and can result in a variety of seemingly unrelated health problems. Unfortunately—but not surprisingly—the problems associated with the dislocation are typically addressed by treating the symptoms rather than the ultimate cause. As you know, treatments for such serious problems as hip dysplasia can be quite costly. However, if symptoms are ‘fixed’ without fixing the ultimate cause, and the same symptoms then continue to recur, not only is this a waste of money, but it is also not healthy for our canine companions.

Dr. Hathaway has developed a seemingly simple, yet highly specialized technique for detecting sacral subluxation and then relocating the sacrum. Once he does this, the nerves in the sacrum begin functioning again, and the plethora of problems and ailments that can result from sacral dislocations are partially or completely alleviated.

On his website (located at www.chirovetpractic.com/history.htm), Dr. Hathaway explains why he first became interested in chirovetpractic1 in horses, also relating the story of how he became involved in treating dogs:

> What created my interest in chirovetpractic was the fact that I, like other racetrack veterinarians, was experiencing great difficulty diagnosing rear leg lameness. I was only treating symptoms about 80% of the time. I was also doing a lot of head scratching. I now know I was treating the symptoms of subluxations (skeletal dislocations) in the lower back.

> One day, while performing a neurological examination on a horse, the owner said, “She has difficulty going uphill, downhill, and jumping.” What popped into my mind was, those are the symptoms of hip dysplasia in the dog. I completed my examination, realigning the third cervical vertebra, three lumbar vertebrae, the sacrum, the left hip, and the right tibia. Driving home, I began thinking about where I could get my hands on a dog to examine.

> Over the next couple of months, I got my hands on every dog that I could. When I returned to check on the first dog that I had adjusted, I was greeted by the stable owner. He asked, “What in hell did you do to my dog?” When I could finally clear my throat by swallowing my heart, I asked in a weak voice what was wrong. He said, “She’s 12 years old and running around, acting like a puppy again.” Then he smiled, knowing that he had scared the hell out of me.

> During his presentation at the FLA Rendezvous, Dr. Hathaway performed a sacral realignment on an FLA member’s dog that was having serious difficulties walking and running. This dog was a previous patient of Dr. Hathaway’s and had been treated for the same problem six months earlier, and was, therefore, due for another adjustment. The next day, several of us visited the member’s house in Ocala and saw the dog running around the yard with greater ease.

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**FOOTNOTE**

1 The definition of chirovetpractic, as modified (by Dr. Hathaway) from Stedman’s Medical Dictionary is as follows: “Chirovetpractic ... is a philosophic system of mechanical therapeutics that attributes disease in quadrupeds to vertebral subluxations; it treats disease with manipulation of the vertebra in order to relieve pressure on the nerves at the intervertebral foramina, so that the neural impulses may flow freely from the brain to the rest of the body.”
### Table 1. Symptoms of subluxated sacrum in dogs

#### Morphological symptoms:

- Roached, weak, or sore back
- Head held lower than normal—lifting the head causes the nerves to be pinched harder in the sacral area; most people believe this is a cervical (neck) problem
- Cow hocked
- Tail dead—some dogs kick the tail with their hocks
- Tail crooked or off center
- Hip dysplasia—the nerves supplying the hip musculature are pinched, allowing the head of the femur to displace
- Partial paralysis of one or both rear legs
- Elbow problems—weight is thrown forward, using the front legs as crutches, and the elbows become hyper-extended; in time, the elbows will turn out and the paws in, like a bulldog
- Panosteitis—the dog throws its weight forward and uses the front legs as crutches, causing inflammation of the bones, periosteum, and marrow
- Muscle atrophy in the rear legs—caused by a lack of neural impulse, blood supply and paralysis
- Spondylosis—caused by the spine being forced to bend laterally (side to side) every other step
- Disc problems—same cause as spondylosis

#### Neuromuscular/motor symptoms (movement):

- Difficulty stacking—pulls rear leg in and/or sits (show dog)
- Pacing—both legs on one side go forward at the same time
- Tail wags poorly if at all
- Difficulty going up or down stairs
- Short-stepping with one or both rear legs
- Bearing weight unevenly on rear legs
- Dragging toes on one or both rear legs
- Not lifting leg to urinate—adult males only
- Squatting unevenly while urinating

#### Diseases and disorders:

- Dry itchy skin and associated diseases—adrenaline reduces the blood supply to the skin, which stops the oil glands from working, causing a dull coat as well
- Foul breath—pain causes the continual secretion of adrenaline, which greatly reduces the neural impulse and blood supply to the skin, mucous membranes, reproductive system, and digestive system; food begins to putrefy and ferment in the intestines, causing the foul breath
- Food allergies—food putrefaction causes this
- Bloat—food fermentation produces the gas that causes bloating
- Foul skin odor—once the oil glands stop working, the oil left in the glands becomes rancid
- Hot spots—on the rear legs of a dog, a continually slightly pinched nerve causes a continual itch to occur; even though the neuron is pinched within at the sacrum, the brain perceives the itch to be at the nerve endings
- Hyperthyroid—caused by continual secretion of adrenaline
- Hypothyroid—the continual secretion of adrenaline eventually exhausts the thyroid gland
- Pancreatic insufficiency—the continual secretion of adrenaline reduces the neural impulse and blood supply to the pancreas, causing a reduction in digestive enzyme production, and a reduction or complete cessation of insulin production, leading to sugar diabetes
- Sugar diabetes—see pancreatic insufficiency
- Addison’s disease (hypoadrenocorticism)—continual secretion of adrenaline eventually exhausts the adrenal cortex
- Reproductive problems—due to pain, paralysis, and the lack of neural impulse and blood supply to the reproductive system
  - Some males refuse to mount a female due to pain and/or paralysis  
  - Some females have difficulty bearing the weight of the male due to pain and/or paralysis
  - Low sperm count
  - Cycling problems in the female
  - Some of the embryos that implant into the wall of the uterus will resorb
  - Some of the fetuses will die and resorb or mummify
  - Last pup in line for nutrients from the mother’s blood (i.e., last one born) will most likely be a runt
  - Failure to carry pups to term
- Weak immune system—adrenaline suppresses the immune system
- Neural myelatrophy—caused by a lack of neural impulse and blood supply
- Degenerative disease (“old dog syndrome”)—caused by the degeneration of muscles and organs, and the buildup of toxins in the body due to putrification of food in the intestinal track

#### Behavioral symptoms:

- Resists or refuses to jump
- Prefers to sit on one side of the rear end
- Incontinence—due to pain, the dog will not voluntarily urinate or defecate
- Guilty look—this is how a dog expresses pain
- Hyper or restless for no apparent reason
- Acting oddly when no other problems are evident
- Unhappy and/or withdrawn