

Phantom Limb Pain in Dogs?

Written By TC Wait, Calpurnia's Human

Shortly after Calpurnia had her front leg amputated as a result of an aggressive soft tissue sarcoma, we noticed that she would stare at the place where her leg should be, and sometimes she would lick or chew at the floor where the leg (and specifically the tumor) was located. I started wondering if maybe she was having phantom limb sensations similar to those reported in human amputees. Operating under this assumption, I did some research and consulted a human physical therapist for ideas.

About 80% of human amputees report having pain and sensations in their missing limb. Sensations are often described as burning, aching, tingling, or feeling the missing limb is “crushed” or somehow sitting at an uncomfortable position. There are many theories as to why this occurs, but the bottom line is the pain is real. The most current theory (as I understand it, and I do not have a medical background) is that the brain has an idea of what the body looks like, a “map” that it refers to. After amputation, the map in the brain is still a whole body, as it takes time for the brain to re-map to the new body configuration. Because the brain is expecting input from the missing limb and not getting any, it sends sort of a panic signal that is interpreted as pain.

One way that we might be able to help the brain re-map itself is to *increase circulation* and provide *gentle stimulus*. Check with your vet, of course, and I wouldn't use these techniques until the incision is healed.

Some things you could try are:

- Wrap the stump in a soft, warm fabric (like a towel)
- Gentle massage (such as the TTouch)
- Warm soaks or heating pads
- Mild exercise – just to increase circulation and provide mental entertainment
- Wrap in a snug, but not confining bandage (like an ace bandage, shrinker sock, or spandex material)

We have been using massage on Calpurnia, and recently found a snug vest (modified from a sled dog harness rub t-shirt) to provide warmth and compression to her shoulder. We have been using this combination for a couple of days now, and so far we have not noticed her licking or chewing the missing limb.

This shirt is a chest protector from Howling Dog Mushing supplies near Fairbanks, AK (www.howlingdogalaska.com) for \$34, but you can get similar shirts from most mushing suppliers. We sewed up the extra arm hole.



We also had some luck using a “buff” band (like on Survivor) sort of like a tube-top to put some gentle compression on her shoulder. Calpurnia was too embarrassed for me to take her photo, but it did work.

Additionally, we found a wonderful pulling harness for Calpurnia to wear so that she can enjoy hiking and skjoring this winter. She may even be able to run in a small, gentle team to train puppies or with the retired crew. This harness is from Frank and Claudia Sihler of Wasilla, Alaska (www.bettercompanion.com – you will have to contact them directly for info on the harnesses and proper fitting). It is a Swedish design called a Buggy Harness and costs around \$25. I particularly like that it has reflective stripes for night visibility.

