

# **Panosteitis or PANO**

**A treatment that has been  
successful with our own dogs**





Leerburg

## Foreword

When you view this eBook in PDF format; click on **BOOKMARKS** on the top left side of your PDF reader; these bookmarks are eBook chapters.

[Leerburg Enterprises, Inc.](#) is owned by Ed Frawley.

Ed has owned German Shepherds (GSD) for over 45 years. Since 1978 he has bred over 350 litters of German working bloodline GSDs. His dogs work in law enforcement, as S&R dogs, as competition Schutzhund dogs, and as family companions and protectors.

Since 1980 Ed has produced over 120 dog training videos and DVDs. He was a police K9 handler for 10 years and competed in several dog sports, including AKC obedience and Schutzhund. In addition he has built one of the top dog training supply businesses in the world.

If you go to the web site **Leerburg.com** you will see that it has over 10,000 printed pages. The Leerburg Web Discussion board has over 12,000 registered members and over 202,000 posts in the archives. Learn to use our site search function.

# Panosteitis or PANO

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Panosteitis is the long form for what breeders call “Pano.” Pano is a growth disease which is more common in large, big boned dogs. It can show up as young as 5 to 9 months and usually does not occur after a dog is 18 to 20 months. It is more of a growth disorder than a disease, but it is very painful to young dogs.

In laymen’s terms, the pain comes at the growth plates when they grow at different rates. When a dog is finished growing there is no longer a conflict with growth plates and therefore there is no more pain.

Over the years I found it is more common in fast growing dogs that were over weight. A dog does not have to be

obese to be considered over weight. I currently have a 5 month old Mal, Bart, that came up limping during a training session. The moment he started to limp happened right in front of me. He was only a couple of pounds over weight but he is a very large dog for his age.

Pano can show up in one leg and go away only to appear in another at a later date. At one point Bart had it in 3 legs at one time. I felt so sorry for the little guy.

This was the first case of pano I have had since we started feeding a raw diet many years ago. I originally thought the raw diet eliminated the problem - I was wrong. Bart's father is an 85 pound Mal - large for the breed. At 5 months, Bart was as large as our 5 year old female and almost as tall as our 3 year old male. While he was not fat - there was not much of a definition between his ribs and his loin.

Dogs that have pano need to be very thin. The correct weight on a dog is not a number but rather a look. You should see a definition between the rib cage and the loins of your dog. Seeing a few ribs is also not a bad thing. My recommendation at the first signs of pano is to cut the dogs volume of food by 1/3 to 1/2 . A puppy's weight can change quickly so it requires daily monitoring.

## The Treatment for Pano

I had to go on a business trip to film so Cindy solved the problem on Bart within 5 days. She began by cutting his food consumption by 1/3 which took weight off - he lost weight quickly.

She also adds the following to his two daily meals:

### MSN

- directions are on the bottle for the size of the dog. We open the capsule and sprinkle the powder on the food.



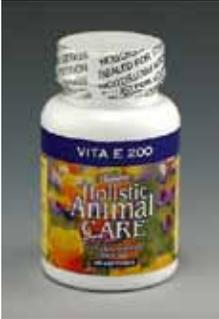
### Herbsmith Comfort Aches

- available in a tablet and a powder.

Yucca Intensive - 10 drops in food. This is bitter, so mix it into the food (shake the bottle well).



## Vitamin E



## Vitamin C

- can also be helpful.



If you are feeding a raw diet you should reduce the bone content. Don't eliminate it just reduce it.

Within a couple of days Bart improved greatly and within 4 to 5 days it was gone completely and he didn't show any signs again.

Bottom line is I allowed him to get slightly over weight - my bad!

Some years ago the reason I originally started writing about Pano was because I had received a call from a customer whose dog had pano which lasted for some time, disappeared and then had just returned.

These people chose to not follow our instructions. They don't feed a raw diet, their dog was over weight (they sent a photo). They had spent over \$350.00 on Vet bills

and were concerned. The Vet confirmed pano but had not solved the problem. They has just gone back to the Vet a second time and didn't have the second set of bills yet.

Their Vet confirmed what I said about Pano, the dog was growing too fast. The difference was he prescribed steroid pain killers, Rimadyl, which is very dangerous and stupid!

If your puppy gets pano it's important to take them off of puppy food. You must slow the growth down. Feed an [all-natural diet](#) and not commercial food. Commercial food, especially puppy food, causes dogs to grow way too fast (that's what PANO is, growing too fast).

The extreme pain of this affliction causes people to describe their dogs as being depressed and I am sure they probably are. To deal with the pain the dog should be crated as much as possible and put them on the ingredients listed above.

We do not take our dogs to a vet for Pano. There is nothing a Vet can do and very few Vets are qualified to even read x-rays to recognize Pano. In the end they almost all recommend steroids, which we feel should never be given for Pano.

If you feel like you must see a Vet, you are best advised to take your dog to a vet that specializes in canine orthopedics. Pano can only be diagnosed with x-rays. Reading those x-rays is not a simple matter. Most local vets lack the experience to correctly diagnose pano from an x-ray.

The prescription medication that Vets often prescribe for Pano is Rimadyl. This is a terrible drug and it kills many dogs. **DO NOT GIVE YOUR DOG RIMADYL!!!**

Keep in mind that this problem does go away.

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# Leerburg & A

## on Pano

### Question:

I have a six month old German Shepherd. I just started running him. This is his third run. Up until now we have been walking up to 2-3 miles, four times a week. My problem is he came back from running with no physical signs of injury but he started limping only slightly two days later. Six days after his last run his limp became worse and I took him to the vet. They did not find any structural problem, with no x-rays. They gave him Metacam. I have heard of problems with Rimadyl. Has anybody heard of problems with Metacam?

Steve

### Answer:

Steve,

First things first.

1 - Six months is way, way, way too young to be jogging with a dog. This is not a small mistake it is a HUGE mistake. Read the article I wrote on correct positioning of hip x-rays. Over exercising a young dog is one of the leading causes of hip dysplasia.

2 - A vet cannot determine if a dog has structural problems unless he has taken an x-ray. It's simply not possible.

They don't have x-ray hands and eyes. I have bred close to 400 liters of GSD's in my life and I can't tell if most dogs have bad hips by just looking.

3 - Rimadyl is a terrible drug for dogs. I would never give it to a dog. I have not done the research on Metacam so I can't comment.

4 - Give your dog an aspirin every day and crate him until he stops limping. Read the article I have written on PANO – it's in the list of training articles. With luck that's all your dog has – either that or a pulled muscle.

I would be careful of this Vet. Not all vets deserve our respect. Just because they have a DVM behind their name is not a good enough reason to respect the way they treat dogs. We only have to look at most Vets position on vaccinations to figure that out.

Kind Regards,  
Ed Frawley

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**Question:**

Mr. Frawley:

I wrote to Cindy, and wanted to copy you on the same request for comment. I was referred to your site by a friend who thinks my 11 month old Mastiff's diet might be contributory to a 6 week limp on his front right paw. A round of x-rays of his entire front yesterday under anesthesia and a lime test, were negative. Yet, the limp is pronounced. The examination yesterday followed two 2 week rest periods with anti-inflammatories. I suppose I am next looking at a specialist and an MRI to rule out a

soft tissue derangement. My friend thinks that the IAMS food that I have him on (with garlic supplement from springtime) is not doing him justice. I am told to go raw (as per your web site) and supplement with longevity from springtime. Do you think the advice is sound for the problem?

Best regards to you.  
"Oz" and Charles.

**Ed's Answer:**

The odds are the dog has pano. I have an article on my web site. Its in the list of training articles.

I would not do any MRIs or anything like this. Do what I say in the article.

Kind Regards,  
Ed Frawley

**Cindy's Answer:**

Diet most definitely plays a role in skeletal development and growth, especially for giant breeds.

Ed recommended you read about Pano (which I am guessing is the problem with your dog). Pano is basically an inflammation of the long bones and it is self limiting. It will go away eventually so pain and exercise management along with feeding an appropriate diet are key. Most vets can't see Pano on an x-ray, because they have to know what they are looking for and most don't. In my experience, grains of any type aggravate Pano. This includes normal dog biscuits and treats, and most commercial kibbles (unless labeled grain free). If you use treats or commercial dog food you are going to have to become a

label reader, because many products have hidden grain products in the ingredient list. Read this article on [feeding a raw diet](#). It's a work in progress but there is a lot of good information there.

I would also recommend these books, [Natural Nutrition for Dogs & Cats](#) & [Raw Dog Food](#).

You can also go to our [Feeding Dogs Page](#) for a list of articles and books that will be helpful to you.

I hope this helps.

Cindy

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