

## WINTERSET VETERINARY CENTER P.C.

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The following is a synopsis of medical history and treatments for Ben, a white german shepherd born 9-1-05 and owned by Michael Wright of Winterset, Iowa.

On May 15, 2008, Ben presented for hunched up back, listless, not eating, and painful abdomen. Radiographs and bloodwork suggested GI torsion or intususception. Surgery was performed to repair an omental tear and torsion that trapped all small intestines under the liver at the cranial mesenteric stalk. Routine recovery, and Ben was sent home. He quickly returned to active and healthy status.

On June 17, 2008, Ben presented listless and gaunt. Bloodwork and radiographs revealed a diaphragmatic hernia trapping all of the small intestine and transverse colon in the chest cavity. Successful repair of the hernia and post op recovery was uneventful. Again Ben regained his normal healthy status.

On November 24, 2008, Ben presented with lethargy and vomiting after consuming large volumes of food or water. After discussion with the owners, no more surgeries were planned. Sadly, Ben passed away Dec.1. Necropsy revealed a rent in the mesentery at the ileocecal junction with about 2 1/2 feet of small intestine through the hole and strangulated.

Much discussion surrounding details of the cause of Ben's condition has occurred. No trauma or injury at early age was evident. Ben rough-housed as a normal healthy German shepherd would, but not to an extent to solely cause internal herniations of mesentery or fascia. A genetic link or predisposition, although not researched or printed in public, seems likely. A database of ancestors and linked relatives of Ben with hernia related problems is important to establish.

I would be open to discussion of this case as an example of a familial trait occurrence.

Respectfully,  
Jim Pottebaum DVM

## DIAPHRAGMATIC HERNIA

### HOFFMAN'S BEN 09/01/05—12/01/08

By Dr. Jim Pottibaum and Judy Huston

Ben, owned by Michael Wright, was three years old when he died on December 1, 2008. He had a mesenteric tear—for the third time in one year. The comments on his necropsy report read: “Mesenteric tear, near ileocecal junction causing approximately 2 feet of intestine to be trapped and necrotic.” See Dr. Jim Pottibaum’s report following this short article.

Some of what Michael learned in his many conversations with veterinarians and specialists include: “Diaphragmatic Hernias can occur in three different ways, by an accident or severe trauma, a freak of nature, or inheritance. In Ben’s case the hernia looks like it may be inherited because he never had a severe trauma to cause this condition and the edges of the hernia were calm and smooth, not showing any tears or acute trauma. This indicates a long-standing condition. More evidence in support of this being a genetic condition surface when the database showed a puppy that died of one at 5 weeks of age. Ben and this pup shared the same grandfather. Dr. Larry Evans, a theriogenologist at Iowa State University came to the conclusion that this could not be a freak of nature due to the common ancestral link between the dogs.

The condition has been referred to as a “ticking time bomb just waiting to go off.”

Once this disease manifests itself, there is about a 72 hour window before the dog dies. The symptoms could include vomiting, hunching up, whimpering, and being in general distress. As it progresses without treatment, eating stops, and even water won’t go down.

What can be done? Check to see if you have a relative of this dog and if so consider having a simple x-ray to rule it out. Michael had a second dog related to Ben, did the x-ray and he came up clean. This is quite an easy way to prevent what could be a heart-breaking catastrophe. One of the ways we might know for sure if there have been other problems in this line is to call puppy owners to find out if they are still living and if not, to find out age and symptoms at death.

We don’t have too many conditions that have such a simple method of evaluation which means we have the opportunity to prevent other needless deaths.

*Hello Everyone,*

*As all of you are aware I have had one sick boy on my hands. He has had two major surgeries just a few weeks apart. He bounced right back after the first surgery, even though it took a lot out of him. After this last surgery things are going a lot slower he has lost a lot of weight. I just thank God he was so healthy when this all started, I called him my side of beef because he was so big and solid and now he is so frail.*

*He is getting back to being his ornery self, he gets up and going for about 15-20 minutes then it time to lay down and rest for a couple of hours. He still has me worried because of the amount of weight that he has lost, and his reluctance to eat his dry dog food (even after soaked in water), and his occasional vomiting after he drinks too much water. His stomach and intestines are going to be sore for a while after all what they have been through in the last month. Ben has a long road to haul but I know he can do it.*

*I have had several conversations with different veterinarians and theriogenologists on Ben's condition and not a lot is known about Diaphragmatic Hernias in dogs, however there has been extensive research in the swine species. Diaphragmatic Hernias can occur in 3 different ways, by an accident or sever trauma, freak of nature, or inheritance. In Ben's case the diaphragmatic hernia looks like it may be inherited, because he has never had a sever trauma to cause this condition and the edges of the hernia were calm and smooth, not showing any tears or acute trauma, indicating this was a long standing condition. And a freak of nature accident is looking less likely since a search of the Genetics List Data Base has turned up a puppy that died from a diaphragmatic hernia at 5 weeks of age. This puppy and Ben share the same grandfather leading us to believe this may be inherited. I visited with Dr. Larry Evans a theriogenologist at Iowa State University he came to the conclusion that this could not be a freak of nature due to the common ancestral link between the dogs. After talking with Doctor Jim Pottebaum we both feel that if Ben had not been such an active, do everything full bore type of a dog he might not ever had found out that he had this problem. This affliction is simply a ticking time bomb just waiting to go off.*

*After more conversations with Dr. Larry Evans, he said signs to look for are respiratory and g.i. problems. This affliction moves very fast after its onset. Within 72 hours the dog may expire. He also suggested having an Ultra Sound done on dogs that have the common link in **their** heritage to check for a hernia. This would eliminate the chances that **the dog had this defect at birth** and could very well save the dogs life. He suggested that if a dog has a hernia they should be spayed or neutered. He further suggested that if a dog is passing this affliction on to **their** puppies they should no longer be bred. He also added that we can breed this **affliction** out of our dogs, but we must be very selective in our breeding practices.*

*Dr. Jim Pottebaum of the Winterset Veterinary Center has stated that he may be contacted for questions at 515-462-2650. Dr. Larry Davis of Iowa State University has also stated that he may be contacted with questions at 515-294-1500.*

*I'm currently waiting for return phone calls from Dr. Threlfall at Ohio State University, and the Genetic Research Dept. at U C Davis.*

*With Ben, he came in the house one night hunched up and looking to be in some discomfort, after looking him over for an injury I thought he might have just pulled a muscle playing and would wait till morning to see how he was. Next morning he was really hunched up and in a lot of distress so he was taken to the vet, he still had a little bit of an appetite and was still eliminating, he was sent home with some rymidil for the pain thinking he was just constipated and was kept under close observation. Ben slept with me this night, it was so hard to have him lean up against me and whine and whimper in pain and look up to me for comfort and there was nothing I could do but hold him close to me and gentle caress him and love him. The next morning he had no appetite but would drink water but soon began vomiting the water he just drank, shortly thereafter he started vomiting green bile and at this point he was rushed into the vets office and a Barium X-rays were taken and a blockage was discovered. Emergency surgery was performed and this is when the **omentum** was found to be wrapped around his small intestines. This condition was fixed and after 2 day stay at the vets office he was sent home, Dr. Pottebaum explained that it*

*was a good thing we brought him in when I did for he would had died by nightfall. After roughly a month had went by Ben came walking into my bedroom at the end of the day, Ben does not greet me by walking he is running and jumping. I thought he must have just over done it, But still keeping in mind the symptoms from our last experience with Ben not feeling good. I called Dr. Pottebaum at home and expressed my concerns and we decided to make an appointment for the next day if Ben was not better by morning. Ben again slept with me this night and I spent all night holding and loving him doing my best to make him feel better. By the next morning Ben had a look of distress about him, even though he was not vomiting but had no appetite so he was taken to the vets office and during the exam no blockages were felt and it was determined that he had simply over done it. Upon arriving back at home Ben started vomiting the water that he drank and within an hour he was vomiting green bile. He was rushed back to the vets office and another Barium X-ray was taken showing his large intestines being pinched off. During surgery Dr. Pottebaun discovered the diaphragmatic hernia. Ben's intestines had worked their way into his chest cavity. To fix this problem all of Ben's intestines had to be removed from his body and placed on the operating table so the hernia could be fixed and the intestines be checked for damages.*

*The hernia was not discovered during the first surgery due to being hid behind the stomach and liver. After 2 days at the vets office Ben was released to come home. He is improving each and every day.*

*After conversing with 2 other vets we have all came to the conclusion that it is best that Ben be neutered as soon as he is healthy enough, as this is no trait I want to pass on.*

*Since all this has conspired I have discovered that a dog I just acquired has the common link in his background, so he is going into the hospital today to have an ultra sound done to see what his condition is. When I find out the results from the test I will post them.*

*Thank You For Your Time*

*Michael Wright*