# **Maise Case Study**

MAISE - Case Study

Date of Birth: 04-27-2003 Deceased: 09-25-2006

Maise was a healthy sow with a wonderful disposition and no history of medical problems. She had farrowed and raised two litters of piglets. She had excellent maternal qualities. While difficult and heartbreaking, this is a conscientious history of a medical incident from a breeder and caregiver of potbellied pigs.





### **DATE SYMPTOMS**

#### Wed. 9-20-2006

pm 1 hour w/3 contemporaries for yard time. All had access to acorns, grass --

the farm. She ate dinner.

#### Thurs. 9-21 2006

am Ate most of breakfast but I could tell she was not feeling well. I isolated her.

mid-morn Lots of very stinky vomit that looked like digested food.

pm Did not eat dinner.

#### Fri. 9-22-2006

am Found more vomit. She ate breakfast (regular ration). Found poop in her

outside pen.

1:00ish Noticed blood around right nostril. Took temp. 100.25. Noticed no muscle tone

in anus. Called the vet school. Dr. Cowart not available. Dr. Dawes would call me back. After checking Maise again, I noticed that on her right side, each teat was purple (only on the right side). She also had purple splotches on right front upper leg and back leg groin area. While waiting for Dr. Dawes to call back, I contacted Dr. Sczepanski who called this condition dependent blood, indicating that Maise's blood was not clotting properly. Dr. Dawes told me to check her mucous membranes (vaginal tissue and gums) for pinpoint red spots and if she had this condition, I would need to bring her in immediately. Maise did indeed have this condition, so I was quick to get her kenneled and off to the vet as it was Friday afternoon.

3:45 pm

Large Animal UMC: Dr. John Middleton and his students examined Maise: All vitals were normal, but they noted the blood condition. He suspected poisoning (acorns or rat poison) and a blood test would be required. He was ready to treat w/vitamin K for poisoning, but blood test results indicated: high creatinine (10.5 w/normal being 2). Other high levels included: Urea nitrogen, sodium, potassium, phosphorus, and magnesium. A major finding was that Maise had no platelets. Dr. Middleton told me the normal treatment would be to give her a blood transfusion that would require us to procure blood from a donor pig. Also supplying IV fluids would be indicated, but he felt this was not practical and could cause additional problems. He used the term DIC to describe her condition with a dismal prognosis. We discussed euthanasia, but I was not ready for this.

## Mon. Sept. 25, 2006

I had a vet visit scheduled for herd accreditation with Dr. Dawes and if Maise survived the weekend, she could be checked then.

6pm She ate her dinner and a can of sardines and drank. She fussed with her blankets and seemed very content.

## Sat. 9-23-2006

am

Maise had urinated a large amount. She was more particular about breakfast, not wanting her usual ration or sardines, but was happy to eat sow pellets. I called Dr. Middleton to report she had urinated, and her general condition and he suggested starting her on 5cc of Pen G daily to treat pyelonephritis. He also wanted me to try to get a urine sample so that we could see if she was concentrating her urine. He said the reason he had not tried to extract urine directly from her bladder on Friday was due to the possibility of bleeding since her blood was not clotting.

9:30 am 5 cc Pen G with no bleeding.

mid-morn

Maise pooped twice before noon. She was not interested in the cranberry/honey water I offered her but was busy digging into the lime waste\* in her outside pen and appeared to be ingesting it. She was happy to be outside and enjoyed sunbathing.

2pm I noted blood dripping from Maise's nostrils, mostly right and not a large volume, nonetheless very troublesome.

5pm She ate sow pellets.

#### Sun. 9-24-2006

am

Drank good amount of water. There was poop in her run and she had urinated. Still blood at nostril. Gave her choice of regular wet ration or sow pellets – she gobbled down the wet.

9:30 am 5cc Pen G, with just a little blood. Pooped and urinated around this time, but I was unable to catch a urine sample. Her poop was small, hard and darker than usual pellets.

3pm There was a small amount of poop in her inside area. She was resting inside

instead of sunning outside.

6pm She did not eat dinner. Blood still in nostril.

#### Mon. 9-25-2006

am

I called the vet school to suggest that Dr. Dawes bring the blood work results with her so that we could discuss. There was new poop and urine in the outside run. Maise still had not eaten Sun. dinner. Offered her both wet and dry food and sardines and she wanted none. She roamed around the interior of the barn and seemed to enjoy that. She was not anxious to go back into her pen, anticipating another shot, so I let her into another pig's pen.

10am

Drs. Cowart and Dawes arrived. We discussed how to approach Maise's condition after looking over her blood work results. We would: 1) check vitals; 2) hand-held ultrasound (we might detect a mass in the uterus); 3) check mucous membranes; 4) draw blood. The FINDINGS were: Temp-96.9; Heart rate-128; Mucous Mem.-Still pinpoint condition; Ultrasound-Nothing significant. Therefore, Dr. Dawes proceeded to draw the blood and was successful. Immediately upon releasing Maise she began convulsing. Dr. Dawes helped me get Maise into my lap so that I could hold her, comfort her, and keep her from hurting herself. After what seemed a VERY long time, she died. Her body was taken back to the Vet School for a necropsy.

#### Tues. 9-26-2006

<u>Preliminary Path Findings:</u> Small pale kidneys Blood in thoracic cavity

## **Final Path Findings:**

Kidneys gone – uremia Severe tubular necrosis (inability to filter)

Maise could have had a chronic kidney condition and with the ingestion of acorns, the condition became severe, and she succumbed.

## These Plants Can Kill, Today's Farmer, Oct. 2006

\*ACORNS

There is tannic acid in acorns that can be toxic. It can damage both the digestive tract and kidneys. Drought makes acorns more toxic. The toxic effects can be countered by feeding a palatable concentrate mix (feed ration) with 7 to 10% hydrated lime. After a hard frost the danger is usually over.

## **Note from Nancy:**

It is interesting to note that Maise could have been self-medicating with the lime waste in her pen. I have been raising potbellies since 1989. We are always careful at the farm with toxic materials such as antifreeze and rat poison, since we have cows, pigs, cats, and dogs who roam the property. I have been aware for many years that acorns contain tannic acid that can cause the kidneys to work harder than normal. I do notice that when the potbellies eat acorns, their urine takes on a rusty color. I have always been cautious to limit the time

and frequency my potbellied pigs are allowed to graze and/or have access to acorns. This incident with Maise is a first.

I spent several hours raking, mowing, and collecting the acorns and related yard debris from under the only oak tree my pigs frequent when afforded "free time". Needless to say, I am VERY concerned about the health of my herd and have allowed my pigs very little access to acorns since this incident, always followed by adding cranberry concentrate to their drinking water. Next year I will follow the recommendation above and add lime to their ration during acorn season. I will research this further since the article from Today's Farmer was mainly referring to sheep and cows– pigs were not mentioned.