

# Health Problems and End-of-Life Issues in Geriatric Pet Pigs

By  
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Potbellied pigs were first introduced as pets in the mid-1980s. At the time, the pet pig population was too new and too small for veterinarians to be very concerned with health issues related to aging. However, as that original population aged and as the potbellied pig grew in popularity as a companion animal, veterinarians have increasingly recognized the importance of identifying and treating health problems specific to geriatric pigs.

Potbellied pigs are estimated to live approximately 15 to 20 years. Therefore, a potbellied pig who is 10 years or older might be considered geriatric. However, illnesses and conditions that typically develop late in a pig's life can also occur much earlier. Poor nutrition, obesity, and illness can all cause a pig to "age" prematurely. It is important for you as a pig owner to be aware of conditions related to aging in order to slow or prevent their progression and maintain your pig's quality of life.

## **Arthritis**

Arthritis is extremely common and likely will become the No. 1 reason that an owner will elect to euthanize an otherwise healthy older pig. Arthritis results from degenerative changes in the joints that are often accompanied by inflammatory responses. Development of arthritis is related to a number of factors besides age. Conformation likely plays a role — a normal potbellied pig carries a large amount of weight on short, thin legs, and common "backyard breeding" garners poor conformation to make matters worse. Nutrition can also lead to joint degeneration, with deficiencies and/or obesity resulting from an inappropriate diet. Other factors that may exacerbate joint problems include previous traumatic injury, insufficient hoof care, and slippery floor surfaces such as linoleum or tile.

The first sign of arthritis that an owner is likely to notice is that the pig has difficulty rising in the morning sometimes accompanied by distressed vocalization ("crying"). Initially, the pig seems to "warm out" of the stiffness and can walk better after moving around for a bit. This progresses to difficulty rising and lying down every time. As the arthritis worsens, the pig may assume an unusual hunched over position, appearing as if the animal is having difficulty defecating. The pig may also drop to its knees more often or frequently limp. Ultimately, a significant decrease in activity is noted — the pig doesn't move around to lie in the sun anymore, doesn't wander off to graze, doesn't root as much, and lies down to eat meals rather than standing at the bowl.

Methods to diagnose arthritis in pigs are similar to those used in other animals. History is important, and owner perceptions are often correct. Although the problem generally starts subtly, the pig usually has obvious difficulties by the time the owner calls the veterinarian. An orthopedic examination such as that

performed on a dog is generally not feasible; a pig will not allow itself to be placed on its side while the veterinarian examines bones and joints, tests range of motion, etc. X-rays can be performed to assess the degree of damage to the joints. However, the findings on an X-ray won't necessarily correlate with the severity of the problem. For example, a seemingly normal pig may have obvious abnormalities on X-ray, even though it is not showing clinical signs of arthritis.

Treatment for arthritis involves medications commonly used in dogs and humans, and dosages are usually derived from information in these species. Glucosamine/chondroitin sulfate dietary supplements, which are available at local drug or grocery stores as well as from your veterinarian, are a good idea in pigs of any age. These supplements help to keep joints healthy and slow down the degenerative process but are not pain relievers — so an obvious outward improvement may not be observed in an arthritic pig.

Carprofen (Rimadyl<sup>®</sup>) and etodolac (Etogesic<sup>®</sup>) are anti-inflammatory drugs commonly used in dogs and appear to work well in pigs for relieving arthritis pain. Recently, a new product called meloxicam (Metacam<sup>®</sup>) has become available in a honey-flavored liquid that may be better tolerated by finicky patients. Dosages of anti-inflammatory medications should be altered as needed. In dry hot weather, a pig may require a reduced dose or even no medication at all. The opposite holds true for cold, damp conditions.

Although these pain medications may be given along with glucosamine/chondroitin sulfate supplements, they should *not* be given with any other type of anti-inflammatory drug such as aspirin, ibuprofen, or Ascriptin. Side effects of anti-inflammatory medications are similar to those observed in other species and generally include gastrointestinal upset, nausea, and vomiting. A rare but potentially fatal side effect is gastrointestinal bleeding. The benefits of anti-inflammatory medications typically outweigh these risks in potbellied pig patients. However, you should always consult your veterinarian for proper use of anti-inflammatory medication in your pig.

Hoof trims may have to be performed more frequently on an older pig, that is, every 3 to 5 months rather than once or twice a year. To ensure proper footing and prevent falls, you should provide non-slip surfaces such as soil, carpet, or rubber mats. Avoid stairs or inclines. Maintenance of a reasonable body weight is also essential to minimize strain on joints.

The long-term prognosis for pigs with arthritis depends on the animal. Some pigs with arthritis seem to manage well for years. Others may develop fused joints — these pigs do not maneuver as well but seem to be free of pain. Some will eventually develop severe pain and a poor quality of life as a result, and owners elect euthanasia.

You should assume that arthritis is in your pig's future and plan accordingly. Your veterinarian will be able to provide you with information about appropriate diet, exercise, weight management, hoof care, pain medications, and dietary supplements.

## **Uterine Tumors**

Uterine tumors in older intact sows are extremely common and are most often observed in animals that have never been bred. Although these tumors are usually benign smooth muscle tumors (leiomyomas, similar to the uterine fibroids diagnosed in women), they can grow to an enormous size that can compromise the health of the pig and lead to death. One of the largest tumors successfully removed from a pig weighed 50 pounds. As the pig only weighed 100 pounds before the surgery, the tumor comprised half her body weight!

Pigs with uterine tumors may have no signs at all. Subtle signs include abdominal enlargement or firmness to the abdomen, a difficult sign to detect in an animal that normally has a potbelly. The pig might appear as if she is simply gaining weight; however, if a tumor is present, the belly may be asymmetric or appear lopsided. In the end stages, as the tumor outgrows its blood supply and the tissue starts to die, the pig becomes extremely ill. Vaginal bleeding may also occur and should be a definite “red flag” to the owner of an older sow.

Uterine tumors may be removed as part of a routine spay. However, if the pig is already showing clinical signs at the time of surgery, chances of survival may be significantly reduced. If you own an older, intact female pig, you should consider spaying her even if she is not exhibiting any clinical signs. Pigs not intended for breeding should be spayed as young as possible.

## **Dental Difficulties**

Tusk abscesses can be a problem in older male potbellied pigs. Whether these infections are related to the continual growth of these teeth or to repeated tusk trimmings is unclear. An abscess of a lower tusk usually begins as a swelling or draining tract on the jaw or chin area. Often, the abscess will drain and the swelling will resolve, only to recur later; antibiotic therapy improves the condition, but again, the problem recurs. X-rays or CT scan of the head often show significant destruction of the bone surrounding the affected tooth.

As with a tooth root abscess in any species, the offending tooth should be extracted, and antibiotic therapy instituted. However, although tooth extraction sounds simple, this is a major surgery in a potbellied pig! CT scan of the head is often needed to visualize the extent of the infection, as the tusk usually cannot be removed until the infection has completely loosened it from the jawbone.

## **The Necropsy Option**

Despite you and your veterinarian’s best efforts to prolong your pig’s life, inevitably the day will come when your beloved companion dies. As part of your preparation for that day, you should decide whether you will want to have a necropsy performed on your pig. Necropsy is the animal form of autopsy, and may be the most important tool by which we learn about disease and aging processes in potbellied pigs. Even if the postmortem examination does not provide an answer to what contributed to a pig’s death, the information is valuable as a comparison to other pigs – the pathologist must be able to evaluate both normal and abnormal. All of this accumulating information might well save the life of another pig in the future.

Making the decision to have your pig necropsied is extremely hard, and it is often better to make it ahead of time rather than after your pet's death when you are emotionally distraught. Different types of necropsy are possible, so if you elect to go this route, you will have to decide which type you want performed. The first option is a full necropsy, in which the pathologist has complete access to all organs and tissues. Full necropsy is the best means to gather the most information. After a full necropsy, the body will not be returned to the owner. The owner, however, can request return of cremated remains.

A second option is a cosmetic necropsy. This type of necropsy is performed similar to an abdominal surgery. Access to organs and tissues is somewhat limited, but this is still an excellent means of gathering information in most cases. Afterwards, the incision is sewn just like a surgery, and the body can be returned home for burial.

Necropsy is best performed by a trained veterinary pathologist. Your regular veterinarian should be able to direct you to a diagnostic laboratory available in your area. Price varies widely from state to state. If no diagnostic laboratory is nearby, your veterinarian should be able to perform a necropsy. Tissue samples can be removed, placed in formalin to preserve them, and shipped to a laboratory for evaluation. When a necropsy report is generated, an owner can request that a copy be sent to the Duchess Fund ([www.duchessfund.org](http://www.duchessfund.org)), which is a repository of medical information and case studies of potbellied pigs. The information will be entered into the database and is publicly accessible. Regardless of the necropsy method or whether a necropsy is performed at all, private cremation is always available for an extra charge. Cost will vary by geographic location and the size of the pig. Beautiful urns and vases, with or without inscriptions, can be purchased in which to keep your pet's ashes.

As is true for any aging animal, it is important to work closely with your veterinarian to prevent or treat any health problems that might arise in your senior pig. Collaborating with your veterinarian will ensure that your pig's elder years are as comfortable and pain-free as possible, and when the time comes, will also enable you to better determine whether you should consider euthanasia.