

Tail Docking in Dogs: Historical Precedence and Modern Views
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As everyone gathered in the kitchen to prepare for an extended family dinner, Mother took a large ham and cut off a big piece of the end and put it in another smaller pan to cook. As she prepared the two baking dishes, one of the grandchildren asked, "Grandma, why do you cut off part of the ham?"

"Well, that's the way I learned how to do it from my Mom, your great grandmother."

One of the Aunts says, "I thought it was because Dad liked to have his own separate piece."

An Uncle says "I thought it was because it made the meat more tender."

A different Aunt chimes in, "Mom said it was just the way it was always done."

Curious, they decide to ask Great Grandmother the reason why the end of the ham was separated.

History and Veterinary Standing

Tail docking (amputation of the tail) has been done on dogs for hundreds of years. A variety of justifications have been offered, usually in accordance to the historical tasks of the breed. For instance, in hunting dogs, conventional wisdom said it was to prevent injury in the field from nettles, burrs or sticks; in herding or bull-baiting dogs it was thought to help avoid injury from large livestock.

In truth, there are two primary historical reasons for docking. For our mastiff-based working dogs that accompanied the ancient Romans, it was believed that tail docking and tongue clipping would ward off rabies.ⁱ Obviously, this was before modern bacteriology and vaccines, when rabies was still a feared, lethal zoonotic disease that raced through cities and countrysides, infecting all mammals encountered in its path.

Second, in the 17th century, pleasure/companion dogs in England were taxed, and “working” dogs, designated by docking, were not. Therefore many of the herding (farm), terrier (ratters), and some of the hunting (pointers) dogs were docked, to avoid paying the tax. Funnily, many of the English hunting dog breeds were not docked, as hunting was a pastime of wealthy landowners, and it was a sign that they could afford the tax.

The dog tax was repealed in 1796, and Pasteur discovered a rabies vaccine in 1885.ⁱⁱ Nonetheless, tail docking continued unquestioned and unabated. Docked tails had become part of the description some dogs’ breed picture, and with dogs being property, breeders and owners were allowed to physically alter animals at their discretion. However, tail docking and ear cropping began to be seriously questioned several decades ago by veterinary communities around the world. Armed with modern understandings of physiology, kinesiology, behavior and cognition, pain response and trauma in higher order vertebrate mammals, the practice came under intense scrutiny for therapeutic or prophylaxis need, and failed.

When tail docking was banned in the European Union in 1998, it was rumored and readily accepted in the American pure-bred dog community that the animal rights activist community (i.e., PETA and HSUS) had somehow pushed their agenda through to curtail animal ownership rights without the knowledge or consent of the general public in Europe. In truth, the ban was proposed and endorsed by the World Veterinary Association and the World Organisation for

Animal Health, which is part of the World Trade Organisation. Turns out it wasn't the animal protection groups at all—it was the professional veterinary associations! National veterinary organizations such as the Royal College of Veterinary Surgeons (UK), the Canadian Veterinary Medical Association, the Australian Veterinary Association, and yes, even the American Veterinary Association (hereafter referred to as AVMA)—just to name a few-- have all issued public position statements against tail docking.

The same speculation was addressed here in the United States by the AVMA. Dr. Golab, director of the AVMA Animal Welfare Division, noted in the Journal of American Veterinary Medical Association (JAVMA), “The reason [the revision] came up is because of the review requirement. We were not approached by the HSUS; we were not approached by PETA; nor did anyone else call to ask us to change the policy.”ⁱⁱⁱ The records show that the AVMA has stood against cosmetic procedures done on dogs since 1976. In 1999, after the EU ban in 1998, the AMVA released this official resolution,

“Ear cropping and tail docking in dogs for cosmetic reasons are not medically indicated nor of benefit to the patient. These procedures cause pain and distress, and, as with all surgical procedures, are accompanied by inherent risks of anesthesia, blood loss, and infection. Therefore, veterinarians should counsel dog owners about these matters before agreeing to perform these surgeries.”^{iv}

The issue continued to be contentious among veterinarians, breeders and dog owners. Studies, which will be synopsized for the purpose of this article, produced evidence of actual harm to dogs undergoing tail docking, further bolstering veterinary associations' position worldwide. Thus, in 2008, the AVMA announced their new and simplified policy:

“The AVMA opposes ear cropping and tail docking of dogs when done solely for cosmetic purposes. The AVMA encourages the elimination of ear cropping and tail docking from breed standards.”^v In concordance with this position, in July 2009, Banfield, owning over 730 pet hospitals, stated that none of their veterinarians or hospitals would “perform ear cropping or tail docking surgeries on dogs for cosmetic reasons.”^{vi}

Physically Speaking

“The tail is not a limb but is an appendage; it is the distal section of the spinal column and comprises 20 (6-23) caudal or coccygeal vertebrae, muscle, nerves and blood vessels. The muscular structure and activity are an integral part of the normal bodily shape and function, especially in the perineal region. The insertion of the left and right sides of the rectococcygeus onto the 5th and 6th coccygeal vertebrae serves to support, anchor and stabilise the anal canal and the rectum, preventing them from being pulled cranially by a peristaltic wave.”^{vii}

Does docking cause harm? As of right now, the veterinary community is armed with evidence that docking does indeed cause physical harm and distress, and there is substantial pain, both acute and ongoing, from the docking procedure.

Tail docking entails, when done properly, cutting of the nerves, tendons, ligaments and muscles of the tail in between the vertebrae of the tail. When done improperly, bone is crushed and/or broken, and nerves, tendons, ligaments and muscles can be torn or crushed. The procedure is traditionally done without anesthesia or analgesics, due to the danger of anesthetics on a neonate^a pup and predicated on the belief that because the nervous system is not yet mature, it is relatively painless for the pup. Pups returning to nursing or sleeping are often cited as evidence of this assumption.

However, studies in the last 20 years have found neonate humans, dog and rodent pups have hyper^b pain sensitivity, and not hypo^c, meaning that the pain they experience is heightened, not lessened as previously believed. In brief, the nociceptive (pain receptor) cells are mature at birth, but the inhibitory pathway, which is critical in modulating pain and reflex to pain and distress, is still undeveloped until at least day ten, translating pain at a higher level and not lower.^{viii} In other words, the body and brain's ability to perceive, sort, and control pain is diminished due to immaturity of the neurological pathways. The closest fact in support of the argument of the "less or no pain" theory to be had is that

^a Defined as four weeks of age and under

^b *Hyper*: from the Greek origin for over or beyond

^c *Hypo*: from the Greek for "under"

newborn pups are still developing myelination. However, myelination is not necessary to enable nerve cell conduction;^{ix} myelination merely makes the reception of the pain faster, by approximately 0.25 seconds.

Evidence also exists to dogs suffering from amputation neuromas. Neuromas are bundles of nerve fibers that develop when axons are severed in mammals and birds, consisting of swollen, tangled messes of nerves, either as one large mass or as several smaller, scattered masses. Many neuromas resolve over several weeks, however they can and have been documented to exist indefinitely, causing chronic pain. Histology in one study^x showed “proliferation of small nerve bundles” in microscopic examination of docked tails belonging to adult dogs that exhibited hypersensitivity of their tail endings. It is postulated that unlike amputations of a limb, which effect a single large nerve or nerves, “amputation of multiple spinal nerve roots in a tail would result in proliferation of numerous small nerve bundles throughout the affected tissue.”^{xi} In other words, as the nerves attempt to regenerate and heal, they come up against an obstruction or barrier, such as scar tissue or the sutured skin of the stump, consequently proliferating out to the sides in tangled masses of axons.

Amputation pain in human amputees is well documented, and at times so severe hospitalization is required. It would not be a far stretch to imagine the same pain for some docked dogs; it has been postulated such chronic pain may be responsible for aggression problems in some dogs.^{xii} In these cases, “aggressive behavior . . . is a defensive reaction to avoid physical contact that

may cause further injury.” The authors go on to state, “Pain, especially chronic pain, also causes unseen changes in the central nervous system that can lead to magnification of pain perception.”^{xiii} Absence of anecdotal observations of dogs not exhibiting discomfort of their docked tails does not necessarily equate to lack of pain. Indeed, many breeds are known and boasted for their ability to hide and rise above pain.

The tail and its accompanying musculature are vital to dogs for several reasons. The highly versatile muscles and mobile vertebrae of the tail are associated with the rectum, the anus and the pelvic diaphragm, as well as integral in locomotion. “Tail muscles are also important in stabilising the vertebral column and supporting the action of the extensor muscles of the back as well as those of the croup and buttocks.”^{xiv} Problems resulting from tail docking previously noted in medical journals include “atrophy and degeneration of tail and pelvic muscles, leading to an increased risk of faecal incontinence, and compromised pelvic diaphragm integrity, leading to an increased incidence of perineal hernia.”^{xv} One study found a clear association between acquired incompetence of the urethral sphincter in both dogs and bitches to an over-representation of docked breeds, specifically the Old English Sheepdog, Rottweiler, Doberman Pinscher, Weimaraner and Irish Setter (in order of highest to lowest percentage affected).^{xvi} The same study also suggests that docking may be indicated as a cause of submissive puppy urination as well, due to the weakening of the responsible sphincter muscles.

The tail is known to be a counter-balance for dogs in action, especially when moving at high speeds, turning sharply, balancing, jumping or climbing, and, according to traditional water-dog breeds, a rudder in the water. One study using camera and electromyographic imaging confirmed “tail movements are important in maintaining body balance during locomotion.”^{xvii} Over a hundred years ago, one misguided answer for a dog who was too fast and sharp with sheep was to dock the tail, which would always result in slowing the dog down; whether it was because of balance or pain problems can only be guessed. There is even conjecture amongst performance sportspeople that the lack of a tail may be the culprit for the high rate of torn cruciate ligaments in the Rottweiler.

There is also evidence of compromised dog-to-dog communication. One study found that “a longer tail is more effective at conveying different intraspecific cues, such as those provided by tail motion, than a shorter tail.”^{xviii} The authors conclude, “It appears that the signals communicated by difference in tail motion were most effectively conveyed when the tail was long.”^{xix} For breeds which commonly suffer from dog-dog aggression, this is a significant finding that could potentially lessen antagonistic encounters.

A Thoughtful Process

With all this information (plus more), veterinarians and veterinary societies, both national and international, have united against the practice of tail docking. This appears to put veterinary professionals and pure-bred dog enthusiasts at

odds. “A survey conducted in Australia in 1996 found that 76% of veterinarians surveyed believed that tail docking causes significant to severe pain, with none believing that no pain is experienced. In contrast, 82% of dog breeders believed that docked puppies experience no, or only mild pain.”^{xx} Yet, one study noted that upon docking, all puppies “vocalise intensely, struggle and often defecate or urinate,”^{xxi} a sure sign of intense pain.

Notably, no empirical evidence supporting the counter-claim of breeders that newborn pups do not experience pain at the time of docking exists. Substantial evidence exists attesting to the acute pain and lower mortality rates caused by tail docking in lambs, piglets and calves.^{xxii}^{xxiii} ^{xxiv} Breeders’ observations of pups going to sleep or nursing are not accepted within the veterinary community as a sign of painlessness, due to correlating studies “in which young animals or humans show increased feeding or what is known as a ‘sleeping fit’ following a painful or stressful experience . . .conclud[ing] that this may be either a displacement activity or an adaptive mechanism which ensures that the baby animal has sufficient nourishment and rest to survive under adverse circumstances.”^{xxv}

The burden of proof for the need, and lack of harmful consequence, is now upon the pure-bred dog fancy. Many veterinarians and animal welfare concerned people look to Professor David Morton’s paper of 1992,^{xxvi} where he lists six questions of criteria to test the “Necessity to Remove or Modify Any Part of a Dog:”

1. Is there evidence that leaving the dog intact predisposes them to harmful consequences?
2. Is there evidence that the interference is in the best interests of the dog and will be beneficial to the dog?
3. Would the harmful consequences or the benefit occur in a significant proportion of dogs and therefore justify the procedure on all dogs of a particular breed?
4. Does the proposed interference cause greater harm to the dog than the damage one is trying to prevent?
5. Is there another way with no, or lesser, adverse effects that would achieve the same end?
6. Does the increase in “value”^d as a result of the interference justify the harm done to the dog?

When queried at this level with the information we now have about what tail docking is and does, it is simple and within reason to understand the position of veterinary medical professionals.

Shifting Paradigms

Presently, all first-world countries, except for the United States, either outright prohibit tail docking in dogs, or have heavy restrictions, with allowances only given to a few specific gun-dog breeds and the procedure must be done by a veterinarian.^{xxvii} This leaves the United States in the position of being aligned with countries that, for the most part, suffer a dearth of human and civil rights, women’s rights, and where animal cruelty or welfare laws are non-existent.

^d I.e. the monetary sale of the dog

Historically, veterinarians and dog breeder/owners have been united in wanting what is best for animals. Preventive care, modern and effective treatments, new surgical procedures, reproductive success, cancer protocols, funding of major medical studies—all have been made possible by and shared between the veterinary and pure-bred dog communities. The subject of tail docking has wrought great disconcertion between the two fields, not to mention upsets between long-standing friends. While docking may be called for due to injury on a case-by-case basis, modern veterinarians feel that to dock all puppies in a breed because of a standard that was written in another time with lesser knowledge of veterinary medicine is not only medically unsound, but could also be perceived as advocating cruelty in light of what we know about immediate pain and stress on the neonate, as well as potential long-term consequences, both physical and emotional, to dogs.

When the family went to Great Grandmother who was sitting peacefully in the living room and asked her why did she cut an end-piece off the ham, she paused, thought about it and said simply “Because it wouldn’t fit in the pan. So I cut it into two pieces.”

“No other reason?”

“No.”

Endnotes

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- ⁱ Podberscek, A. Paul, A., Serpell, J., Companion Animals and Us: Exploring the Relationships Between People and Pets, Cambridge University Press, 2000, p. 307.
- ⁱⁱ “A Short History of Rabies,” Rabies Free World site, <http://rabiesfree.org/page26.htm>
- ⁱⁱⁱ “Ear crop, tail dock policy not a radical departure, AVMA says,” JAVMA, vol. 234, no. 6, March 15, 2009, pp. 713-714.
- ^{iv} “AVMA Position on Ear Cropping and Tail Docking,” April 25, 2007 <http://webcanine.com/2007/avma-position-ear-tail-docking/#more-62>
- ^v “AVMA Policy: Ear Cropping and Tail Docking of Dogs,” 2008 http://www.avma.org/issues/policy/animal_welfare/tail_docking.asp
- ^{vi} “Banfield Stops Offering Tail Dock, Ear Crop Procedures,” Veterinary Practice News, July 27, 2009, <http://www.veterinarypracticenews.com/vet-breaking-news/2009/07/27/banfield-stops-offering-tail-dock-and-ear-crop-procedures.aspx>
- ^{vii} “A Review of the Scientific Aspects and Veterinary Opinions Relating to Tail Docking in Dogs,” Information on dog tail docking provided for the Animal Welfare Division (Great Britain) for DEFRA, Oct. 16, 2002, p. 3.
- ^{viii} “Neonatal Pain and its Effect on Adult Behavior and Socialisation: A Brief Overview” from Anti Docking Alliance, citing Wall and Melzak (eds), Textbook of Pain, Harcourt Publishing, London, 1999. Chapters cited are: “Pain in Children,” by Berde and Masek; “Developmental Neurobiology of Pain,” by Fitzgerald, and “Central Nervous System Mechanisms of Pain Modulation” by Fields, Basbaum and Fields
- ^{ix} Bennett and Perini, “Tail docking in dogs: a review of the issues,” Australian Veterinary Journal, April 2003, vol. 81, no. 4, p. 211.
- ^x Gross, T.L., and Carr, S. H., Amputation Neuroma of Docked Tails in Dogs, Veterinary Pathology, 1990, vol. 27, pp. 61-62.
- ^{xi} *Ibid*, p. 61.
- ^{xii} Camps, T., Amat, M., Mariotti, V., Le Brech, S., and Manteca, X., “Pain-Related aggression in dogs: 12 clinical cases,” Journal of Veterinary Behavior, March-April 2012, vol. 7, no. 2, pp. 99-102.
- ^{xiii} *Ibid*, p. 99.
- ^{xiv} Wansbrough, Robert, “Cosmetic Tail Docking of Dogs' Tails,” Australian Veterinary Journal, July 1996, vol. 74, no. 1, pp. 59-63. <http://www.anti-dockingalliance.co.uk/page4.htm>
- ^{xv} Bennett and Perini, “Tail docking in dogs: a review of the issues,” Australian Veterinary Journal, April 2003, vol. 81, no. 4, p. 211-212.
- ^{xvi} Holt, P.E., and Thrusfield, M.V., “Association in bitches between breed, size, neutering and docking, and acquired urinary incontinence due to incompetence of the urethral sphincter mechanism,” Veterinary Record, 1993; vol. 133, pp.177-180.
- ^{xvii} Wada, N., Hori, H. and Tokuriki, M., “Electromyographic and kinematic studies of tail movements in dogs during treadmill locomotion,” Journal of Morphology, vol. 217, no. 1, pp. 105-113.
- ^{xviii} Leaver, S. and Reimchen, T., “Behavioural responses of *Canis familiaris* to different tail lengths of a remotely-controlled life-size dog replica,” Behaviour, 2008, vol. 145, no. 3, p. 377.
- ^{xix} *Ibid*, p. 386

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- ^{xx} Bennett and Perini, "Tail docking in dogs: a review of the issues," Australian Veterinary Journal, April 2003, vol. 81, no. 4, p. 209.
- ^{xxi} Noonan, G.J., Rand, J.S., Blackshaw, J.K., and Priest, J., "Behavioural observations of puppies undergoing tail docking," Applied Animal Behaviour Science, 15 Sept. 1996, vol. 49, no. 4, p. 336.
- ^{xxii} Lefebvre, D., Lips, D., Odberg, F.O. and Giffroy, J.M., "Tail docking in horses: a review of the issues," Animal, vol. 1, no. 8, pp. 1167-1178.
- ^{xxiii} Simonsen, Klinken, Bindseil, "Histopathology of Intact and Docked Pigtales," British Veterinary Journal, 1991, vol. 147, pp. 407-412.
- ^{xxiv} Van Beirendonck, S., Driessen, B., Verbeke, G., Permentier, L., Van de Perre, V., and Geers, R., "Improving survival growth rate, and animal welfare in piglets by avoiding teeth shortening and tail docking," Journal of Veterinary Behavior: Clinical Applications and Research, 2012, vol. 7, pp. 88-93
- ^{xxv} Bennett and Perini, "Tail docking in dogs: a review of the issues," Australian Veterinary Journal, April 2003, vol. 81, no. 4, p. 211.
- ^{xxvi} Morton, D., "Docking of dogs: practical and ethical aspects," Veterinary Record, 1992, vol. 131, pp. 301-306.
- ^{xxvii} Wikipedia, "Docking: Dog," [http://en.wikipedia.org/wiki/Docking_\(dog\)](http://en.wikipedia.org/wiki/Docking_(dog))

Other Sources Consulted

Broughton, Amy, "Cropping and Docking: A Discussion of the Controversy and the Role of Law in Preventing Unnecessary Cosmetic Surgery on Dogs," Michigan State University, Detroit College of Law, 2003

<http://www.animallaw.info/articles/dduscroppingdocking.htm> Accessed 9-26-11

Crook, Alice, "Cosmetic Surgery in North American and Latin American," World Small Animal Veterinary Association World Congress, Vancouver 2001

<http://www.vin.com/VINDBPub/SearchPB/Proceedings/PR05000/PR00014.htm>
Accessed 10-1-11

Delafenetre, David, "The Divided Kingdom: Inconsistency in the UK Legislation Restricting the Tail Docking of Dogs," Journal for Critical Animal Studies, 2010, vol. VIII, no. 4, pp. 5-18.

Textbook of Pain, Wall, Patrick and Melzack, Ronald, editors, Harcourt Asia, 1994 edition