

“Association between tail injuries and docking in dogs”: P.G.G. Darke, M.V. Thrusfield, C.G.G Aitken. *Veterinary Record* (1985) 116 409.

This study, carried out by the Edinburgh Veterinary School, came to the conclusion that:

“... tail docking cannot be recommended as a prophylactic measure against tail injuries in any dog population similar to the predominantly urban one from which the teaching unit draws its cases.”

With understandable relish, the Anti-Docking lobby has seized on this “study” as accepted scientific evidence in support of its campaign to ban all tail docking and particularly “prophylactic” docking.

Design / execution of the “study”:

- (a) Clinical information was extracted from the clinic database for the period January 1977 to October 1984.
- (b) Docked and undocked dogs were defined according to normal docking practice relating to their breed, e.g. all boxers were assumed to be docked and all whippets were assumed to be undocked.
- (c) Tail injuries included fractures, lacerations, contusions, dermatoses, self-trauma and neoplasia.
- (d) The incidence of tail injuries in both docked and undocked dogs was tabulated thus:

	Tail injuries present	Tail injuries absent	Total dogs
Undocked.....	39	9474	9513
Docked	8	2608	2616
Totals	47	12082	12129

On these figures, there was an incidence of 0.4% tail injuries in undocked dogs & there was an incidence of 0.31% tail injuries in docked breeds.

The “study” then calculated the ratio of % tail injuries in undocked dogs against the % tail injuries in docked dogs (0.4 / 0.31), approximating to an **“odds ratio” of 1.28**, allowing for a statistical margin of error for the sample size.

The “study” proposed that, if the “odds ratio” was significantly greater than one, it would imply that there was a positive association, (i.e. a benefit) between tail injuries and an undocked tail.

Conclusion of the “study”:

As the “odds ratio” was only 1.28, “... *tail docking cannot be recommended as a prophylactic procedure against tail injuries...*” The “study” admitted that the study sample may have had inherent weaknesses/ bias, but concluded that such aberrations would have had little overall impact on the final conclusions.

This “study” may impress those of an unscientific mind or the anti-docking lobby, but it is deeply flawed as a bona fide scientific study.

In any scientific study that researches the impact of a particular variable, it is **critical and accepted practice** to compare two groups of test subjects. These groups cannot differ, except by the variable under test. Thus, as far as examining tail injuries in docked v undocked dogs, all other parameters in the test groups must be standardised thus:

- (a) Same breed
- (b) Same blood lines
- (c) Same sex
- (d) Same environmental conditions – ambient temperature, food and water intake, same exercise programme etc

- to name but a few. In any two groups of test subjects, it is impossible to have exactly the same experimental conditions, even if one group was an exact clone of the other. For that reason, statistical analysis is used to produce final results that allow for inevitable variation between the two groups.

In this “study”, the only variable should have been docked or undocked **within a traditionally docked breed**. Every other variable should have been the same or as close as possible to it. It follows that a proper study should have measured the incidence of tail injury in two groups of, say 3,000 Boxers each, one group docked and one group undocked. Apart from that variable, the respective groups should have been as similar as possible and statistical tools applied to minimise genetic / sex/ age / environmental etc variables.

In fact, this “study” actually compared the incidence of tail injury in two groups of dogs, which by its own test criteria, were simply divided between those that belonged to normally undocked breeds, (eg whippet) and those that belonged to normally docked breeds, (eg boxer). **This group division represented a critical flaw in the design of the “study” because traditionally docked and undocked breeds have quite different tail anatomies and “wag mechanics”.**

Traditionally undocked breeds, (eg whippet), have relatively light and/or short tails and thus low “wag momentum/ exposure” at the tail tip. They represent a low natural risk for tail damage - hence traditionally undocked.

Traditionally docked breeds, (eg boxer), have relatively long and/or heavy tails and thus high “wag momentum/exposure” at the tail tip. They represent a high natural risk of tail damage – hence traditionally docked.

It follows that the “study” was simply not comparing like with like when choosing two groups purely on whether they were traditionally docked or undocked breeds.

The “study” could **not** compare the incidence of traditional, undocked tail damage against that of undocked versions of traditionally docked breeds simply because **virtually none of the latter existed !!**

Secondly, the “study” was inherently flawed because, by its own admission, the results were based on a “predominantly urban population” sample. Common sense would confirm that many of the traditionally docked working breeds are hunting dogs, which face much more risk of tail damage going through rough cover than would the urban equivalent walking along Princes Street in Edinburgh! The “study”, therefore, was simply wrong to extrapolate urban incidence of tail injury into a working, countryside environment.

I am both shocked and disappointed at this “study” was so poorly planned and executed. Given these gross shortcomings, it was always inevitable that any results would be both unscientific and grossly misleading.

Despite being widely quoted and touted by the anti-docking lobby, the “study” is of no scientific value whatsoever in the docking debate.

Signed,

Joseph Holmes MRCVS

16/01/2006.