

Reactie Jane Ladlow

When I read your paper in the recent book, I get the impression that CFR is probably a good indicator for BOAS in Pugs, Bulldogs and French Bulldogs, but the research from 2017 with dr Liu found no strong link. Is this a correct interpretation?

Is a maximum CFR rule for parent dogs like we currently have in The Netherlands in your opinion useful to prevent BOAS in offspring?

I'm not sure what a difference CFR ratio makes in an individual breed (rather than across breeds). In our studies we found a weak trend (ie a non statistically significant) for better breathing in French bulldogs that had longer CFR but did not find this in the pug or bulldog. This may be because variance in CFR in pugs is small but I don't think this is the case in bulldogs. Also one issue is that the CFR will improve if cranial length is reduced in addition to or instead of increasing nasal length which almost certainly make things worse. Brachycephalic obstructive airway syndrome is a very complex issue with multiple sites of airway obstruction/ restriction and although I think it will help (in most cases) to increase the length of the nose I think this will not eliminate it. We also found that we were inaccurate between two observers (both very experienced) with most of our soft tape measurements so being precise with this ratio is very difficult (and does not seem to have been considered).

On the form for the RFG scheme it is asked whether dog's have no, mild, moderate or severe stenosis. But I don't see whether and how the severity of the stenosis should be taken in to account when dogs are graded for breeding. As I understand it, the grading is only based on the results of the exercise tolerance test. Is stenosis within the RFG scheme used to exclude dogs from breeding? And if so, how?

The reason we included nostril conformation is that on our conformational paper (which you mention above) the status of the nostril was the strongest conformational factor associated with BOAS. Many of our dogs, particularly French bulldogs, have severely stenotic nostrils and we wished to monitor if this changed over a period of years. You are correct that we do not use it to assign the BOAS grade we give, which is based purely on the RFG test.

Is there any research that proves using either the RFG scheme or the current Dutch Rules to select parent dogs diminishes the occurrence of BOAS with offspring?

Not as yet that I am aware of. BOAS does not fully manifest itself until dogs are up to three years old. Both tests are too recent for us to have sufficient data.

Is the RFG scheme a first step in the good direction that breeders might be willing to make, but not necessarily the best method to prevent BOAS with offspring?

BOAS is a functional disease. The RFG scheme addresses directly that functional deficit. We are hopeful that screening for the worse affected dogs will decrease the incidence. Less than 50% of

the variance in BOAS in the breeds we have looked at is dependent on external conformational factors.

In the Dutch rules there are also criteria for the eyes. Unless I missed them, there aren't any in the RFG scheme. Why is this the case?

Is it a good idea to have criteria for the eyes when selecting Brachycephalic dogs for breeding?

This is a good question. We have worked on breathing issues in brachycephalic dogs for over 10 years. The RFG scheme is based on our database of over 2000 dogs that we have examined. We are not ophthalmologists and defer to our colleagues on other disease that affect the breeds.

In general: Is it better for the wellbeing of offspring to breed with dogs with less extreme features?

Yes

Which method is best to prevent the occurrence of BOAS and eye problems in offspring from Brachycephalic dogs in your opinion, the RFG scheme or the Dutch rules?

I don't know yet. I don't think the Dutch scheme would work in the UK as we get a lot of imported dogs and also breeders that don't register dogs. I think we would end up with a lot of (even more) expensive puppies that are not official and available to be monitored. I'm also slightly concerned that some dog breeds may be affected by this ban but not have much disease- for example I have not treated a Griffon or Affenpinscher for BOAS.