



Hannah Campbell BSc (Hons) RVN

Hannah graduated from Edinburgh Napier University in 2019. During training she was regularly involved in the nursing care of British and French Bulldogs c-sections. This inspired her honours project to focus on the nursing implications of overbreeding brachycephalic canines, which was published in 'The Veterinary Nurse' in June 2020. Shortly after qualifying Hannah worked in a small animal hospital in Bermuda. Hannah has recently moved back to the UK and works at a small animal practice in Cardiff. She now hopes to become more involved in nurse clinics and raising brachycephalic awareness.

The RVNs role in educating brachycephalic breeders and owners

Hannah Campbell BSc (Hons) RVN

Cardiff, UK

ABSTRACT: Brachycephalic canines have grown in popularity, but many owners are unaware of pre-existing breed related health conditions. Brachycephalic breeds most encountered in practice include British Bulldogs, French Bulldogs and Pugs. The veterinary team are faced with challenges in the medical and surgical treatment of these patients. Therefore, there needs to be a collective effort to increase public awareness of the breeds predispositions and educate owners on safely improving the animal's welfare. Methods to achieve awareness include nursing clinics, social media, veterinary websites and improved veterinary communication with the breeding community.

KEYWORDS: Brachycephalic; nurse clinics; education

Introduction

French Bulldog ownership increased by 2964% between 2008 and 2017 (Kennel Club, 2018). Despite the veterinary profession acknowledging the extreme growth of brachycephalic ownership, surgical and medical implications are still faced daily. This includes specialised anaesthetic monitoring and recovery, involvement in brachycephalic related surgeries, advising owners on brachycephalic care, and dispensing medications to treat breed related health conditions. Therefore, the profession must take a more active role in raising public awareness. Veterinary practices must aim for good relationships with brachycephalic owners and breeders to provide the best care for these pets, whilst producing educational content. This can be in the form of care sheets, website content, social media posts and evidence-based materials. If bad relationships are formed, veterinary care is less likely to be sought and the breeds quality of life may be impacted.

The veterinary role

The veterinary profession must encourage responsible breeding and ownership at both practice level and at a wider professional stance. Within the practice, Registered Veterinary Nurses (RVNs) can discourage the purchase of dogs with extreme conformation, educate owners on health and welfare considerations, educate breeders on the effects of extreme conformation, become actively involved with pre-purchase consultations, and

share brachycephalic health related data resultant of overbreeding, e.g. conformation related surgeries and caesarean sections. At a professional level, practices must work with other organisations to record data, raise awareness, review breed standards, set up brachycephalic protocols and further veterinary education on the topic (World Small Animal Veterinary Association, 2020). An appropriate method to achieve this has been outlined by the British Veterinary Association (2020) '10-point plan' shown below:

- Offer pre-purchase consults
- Strongly advise against breeding
- Promote the 'puppy contract'
- Promote and actively participate in available health schemes
- Carry out exercise tolerance tests and functional grading
- Enrol the practice in clinical surveillance programmes
- Develop a practice communication strategy
- Maintain discipline in your practice communication strategy
- Ensure practice policy supports staff
- Support local breed clubs and representatives.

Nurse clinics

Pet owners are becoming increasingly aware of their access to nurse clinics. These can now be utilised to discuss breed health at all stages of ownership. Ideally, owners should be made aware of how to look after these

breeds prior to ownership. However, most owners do not seek veterinary advice until after purchase. Therefore, it would be beneficial for practices to advertise pre-ownership nurse clinics to educate new owners in advance so care of these animals can be adapted appropriately. Breed specific health issues and what to look out for should be discussed during these clinics.

Topics to discuss with owners during nurse clinics:

- Monitoring respiratory changes
- Dental hygiene of undershot jaws and overcrowded teeth
- Cleaning skin folds
- Checking for redness or itching of skin
- Checking eyes regularly
- Maintaining a suitable weight to prevent further breathing difficulties, spinal issues, exercise intolerance and heat stroke
- Surgical procedures available to correct Brachycephalic Obstructive Airway Syndrome (BOAS).
- When admitting surgical procedures, discuss the increased risks due to the breeds predisposition to regurgitation and airway blockage caused by impairment of oxygen absorption (Gruenheid et al., 2018)

If advice has not been sought prior to purchase, RVNs must be careful in explaining health issues as new owners may be shocked with this new information and might feel overwhelmed. For this reason, leaflets and handouts may be useful for owners to take home so that information is reiterated following veterinary care. Reliable resources can be found on the Kennel Club (2017) website.

RVNs should encourage discussion about the increase in puppy purchases during the recent lockdown and how this can impact animal health and welfare. Owners should be made aware of how puppy farms operate so that they can be avoided. Recent legislative changes have brought more public awareness to the issue through 'Lucy's Law', which came into effect in 2020. In England, it has now been made illegal to sell puppies under six months old unless they are bred by the seller, or from a legitimate rescue centre. Prior to this, dogs were forced to breed multiple times a year at puppy farms for financial gain, with the pups sold at a young age with socialisation and health issues. This could perhaps explain the extreme rise in brachycephalic ownership before this law was enacted.

For RVNs to gain more confidence in running brachycephalic nurse clinics, it may

prove beneficial to undertake related CPD. There are already numerous articles and webinars on nurse clinics readily available, so RVNs could instead focus on developing their knowledge of brachycephalic anatomy and related veterinary interventions.

Social media

Many owners will have chosen these breeds due to posts on social media by celebrities and influencers advertising them as small, childlike dogs. This has previously been seen through the increase of Chihuahua ownership around the time of Paris Hilton's fame (Redmalm, 2014). To counteract public perception, veterinary practices and organisations must use their social media platforms for educational posts and to share articles from reputable sources. Incorrect information shared by other sources must also be acknowledged so the profession can re-educate accordingly.

Veterinary websites

Individual practices usually have a website. This can be used to highlight the practice's stance on the treatment of brachycephalic canines used for breeding purposes. As many members of the breeding community opt to schedule caesarean sections, there is much debate within the veterinary community as to what is the safest date for caesarean sections and whether natural birthing should be encouraged at the practice where intervention can be made if necessary.

The People's Dispensary for Sick Animals (PDSA) advise clients against breeding. This is fully explained on their website along with reasons to neuter pets that are under the charity's care. However, they have also outlined the responsible breeding process (PDSA, n.d.). This includes assessing the animal's health, considering birthing risks and new-born pup after care, as well as the overall cost and ensuring ownership of pups is already arranged. This is a good example of what veterinary practices could post on their websites, even if there is a no breeder policy in place, so that educational content is still provided. Likewise, it is important that practice's provide reasoning for their stance, so that the public and breeding community understand the animal welfare concerns from a veterinary perspective. An example of this can be seen on Valley Vets Ltd (2017) website, explaining their reasoning whilst also reassuring pre-existing owners by stating 'We will most certainly not discriminate against any canine patient'. Contrastingly, the Royal Veterinary College's (2020) website advertises their specialist clinic for brachycephalic dog breeds. Their website has interactive infographics on brachycephalic health issues, as

well as a dedicated section with all the latest research (Figure 1).

Communicating with breeders

Veterinary professionals are likely to have a different perception of brachycephalic breeds to breeders and owners. Although, it is important to consider that for breeders this is a lifestyle, so any negativity towards these breeds can be offensive. They may presume you are discouraging breeding and as a result their source of income. Instead, safe breeding should be promoted, and regular health checks encouraged. Nurse clinics should also be available for breeders to allow for discussion of progesterone testing, ultrasound scanning, caesarean sections, and care of new-born pups.

As current breeding methods are thought to significantly impact animal welfare due to extreme conformation (Steinert et al., 2019); perhaps standards for these breeds should be questioned. Although, around 70% of dogs are not registered with the kennel club and so extreme breeding can be more difficult to trace (Kennel Club, 2020).

Fortunately, there has been recent progress within the industry, with the Kennel Club and University of Cambridge joining together to produce a 'Respiratory Function Grading System' (Ladlow, 2019). This is a graded system from 0-3, carried out by a specialist veterinary surgeon (VS) to assess breathing before and after exercise. It is advised that dogs used for breeding purposes are reassessed every two years until they stop breeding. The aim of this system is to reduce the possibility of puppies born with BOAS. Each grade is given a traffic light colour to provide a visual guide on safer breeding matches, as shown in Figure 2. Between January 2017 and December 2019, 165 Bulldogs, 126 French Bulldogs, and 156 Pugs were assessed. Most Bulldogs and Pugs had a grade of 1, whilst most French Bulldogs were graded 0. In comparison to the increase in ownership and breeding statistics the number of dogs assessed are relatively low. To improve breeding standards, breeders should be encouraged by RVNs to participate in this scheme. It must be noted that this is not a compulsory scheme, but the expected uptake could improve with increased awareness.

Conclusion


It is important that the veterinary profession, continues to actively seek further education on the effects of brachycephaly on animal welfare. RVNs should utilise nursing clinics to communicate new developments effectively. This is more important than ever in the current climate with puppy ownership continuing to increase. As soon as the

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Health Issues

Brachycephalic (or "short-nosed") dogs, such as the French bulldog, pug and British bulldog, are some of the most popular breeds in the UK. Popular flat-faced breeds include Boston terriers, pugs, Cavalier King Charles spaniels, French bulldogs, English bulldogs, shih tzus and boxers. However, these breeds have some serious inherent health problems. A core welfare message is "Stop and think before buying a flat-faced dog".

Our interactive infographic gives more detail on the related health issues of these breeds:




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Latest Research

The RVC is a world-leader among research centres that investigate brachycephalic health and welfare.

The RVC sees the brachycephalic issue as a highly complex system and therefore takes a holistic approach to brachycephalic research that covers basic and population science, human social factors as well as clinical and welfare work. RVC academics and researchers are recognised globally as international experts who work collaboratively within multi-disciplinary teams to generate new knowledge that ultimately improves animal welfare.

As part of these efforts, the RVC has now formed a dedicated Brachycephalic Research Team to maximise collaborative focus on the priority issues among the brachycephalic questions. Comprising many experts in their fields, this team will work towards providing an ever-stronger evidence-base on which positive reforms can be built.

Team Vision
"Reduce the negative welfare impacts of brachycephalism on companion animals through world-leading research and education"

Team Mission
"Drive multi-disciplinary cutting-edge research of the highest global quality through clinical and academic collaboration and leadership across the RVC and with outside partners"

Figure 1. Royal veterinary college website section on brachycephaly.

| | | DOG ONE (sire or dam) | | | |
|------------------------|---------|-----------------------|---------|---------|---------|
| RFG GRADE FOR EACH DOG | | GRADE 0 | GRADE 1 | GRADE 2 | GRADE 3 |
| DOG TWO (sire or dam) | GRADE 0 | | | | |
| | GRADE 1 | | | | |
| | GRADE 2 | | | | |
| | GRADE 3 | | | | |

Figure 2. Respiratory function grading system.

veterinary practice can open fully to the public, RVNs must be prepared to educate by adding brachycephalic specific information to their website, update social media pages, and display relevant information in the clinic. With further knowledge and understanding, information can be accurately shared with breeders and owners to lead a better pathway to increased public awareness. As progress is slowly being made regarding breeding standards, it is vital research continues and efforts are being made from all levels of the veterinary practice.

References

British Veterinary Association. (2020, January). *BVA Policy - Brachycephalic Dogs*. Retrieved July 3, 2020, from <https://www.bva.co.uk/take-action/our-policies/brachycephalic-dogs/>

Gruenheid, M., Aarnes, T., McLoughlin, M., Simpson, E., Mathys, D., Mollenkopf, D., & Wittum, T. (2018). Risk of anesthesia-related complications in brachycephalic dogs. *Journal of the American Veterinary Medical Association*, 253(3), 301–306. <https://doi.org/10.2460/javma.253.3.301>

Kennel Club. (2017, March). *Kennel club launches learning resource for health concerns in brachycephalic breeds*. Retrieved December 19, 2020, from <https://www.thekennelclub.org.uk/media-centre/2017/march/kennel-club-launches-learning-resource-for-health-concerns-in-brachycephalic-breeds/>

Kennel Club. (2018). *French Bulldogs - UK's most popular dog breed*. Retrieved January 22, 2021, from <https://www.thekennelclub.org.uk/media-centre/2018/june/french-bulldogs-over-take-labradors-as-uks-most-popular-dog-breed/>

Kennel Club. (2020). *What is the kennel club doing to improve brachycephalic dog health?* Retrieved August 6, 2020, from <https://www.thekennelclub.org.uk/health/what-is-the-kennel-club-doing-to-improve-brachycephalic-dog-health/>

Ladlow, J. (2019). The respiratory function grading scheme: What's it all about? *BSAVA Companion*, 2019(6), 8–10. <https://doi.org/10.22233/20412495.06198>

People's Dispensary for Sick Animals (PDSA). (n.d). *Should I breed from my pet?* PDSA. Retrieved December 19, 2020, from <https://www.pdsa.org.uk/taking-care-of-your-pet/looking-after-your-pet/all-pets/should-i-breed-from-my-pet>.

Redmalm, D. (2014). Holy bonsai wolves: Chihuahuas and the Paris Hilton syndrome. *International Journal of Cultural Studies*, 17(1), 93–109. <https://doi.org/10.1177/1367877912464539>

Royal Veterinary College. (2020). *Health Issues - Brachycephaly in companion species - Research - Royal Veterinary College, RVC*. Rvc.ac.uk. Retrieved January 22, 2021, from <https://www.rvc.ac.uk/research/focus/brachycephaly/health-issues>.

Steinert, K., Kuhne, F., Kramer, M., & Hackbarth, H. (2019). People's perception of brachycephalic breeds and breed-related welfare problems in Germany. *Journal of Veterinary Behavior*, 33(1), 96–102. <https://doi.org/10.1016/j.jvbeh.2019.06.006>

Valley Vets Ltd. (2017, December 17). *Brachycephalic dog breeding: our position statement*. Retrieved December 18, 2020, from <https://www.valleyvets.net/advice/brachycephalic-dog-breeding-our-position-statement-december-17>

World Small Animal Veterinary Association. (2020, September 26). *Vets must 'dare' to speak out*. Retrieved July 3, 2020 from <https://wsava.org/wp-content/uploads/2020/01/Urgent-action-on-brachycephalic-dogs-called-for-during-panel-discussion-at-Congress-in-Copenhagen.pdf>