ELECTRONIC TRAINING DEVICES:

ESVCE Position Statement

E-collars, also known as "shock collars" are used in dog training. There are three types of electronic devices commonly used in dog training [1]:

- Bark activated collars that operate automatically in response to the dog barking
- Electronic boundary fences that are activated at a boundary line to keep the dog inside
- Remote controlled collars that are activated manually via a remote-controlled transmitter

Their use employs learning theory and the principles of conditioning: positive punishment (if used after an undesirable behaviour) and negative reinforcement (if maintained until a desired behaviour is shown).

Their use is controversial and several European countries have decided to either ban or restrict their use, in the interest of dog welfare, which is at risk.

Having researched and compiled current available scientific articles, our working group edited the following lines as a position statement to inform the public and to take a position regarding the possible use of this technique as an educational tool for dogs.

E-collar pros: are they admissible arguments?

- Precisely controllable intensity [1]
  indisputably proved incorrect by 1) below
- Low cost [1]
  not a valid argument when in relation to the welfare of dogs
- Aversive enough to suppress an undesired behaviour [1] [2]
  alternative non-aversive techniques can alter undesired behaviour as shown in 8) and importantly not just suppress it
- When used as a negative reinforcer they reinforce alternative behaviour
  as do other non-aversive techniques as shown in 8)
- E-collars pose a smaller risk to the longterm welfare of dogs than other punishing techniques [3]
  e-collars pose a higher risk to the welfare of dogs compared to positive training techniques as shown in 8)
- E-collars can solve behavioural issues that no other technique can
  no evidence of this could be found in the scientific literature available

Hence, no argument makes a valid point to use an e-collar for dog training.
E-collar cons: what are the risks of using e-collars?

1) e-collar intensity: not controllable
   - many parameters are likely to modify the shock and consequently the level of pain which the animal receives: shock intensity [4] [3], shock duration [4], electrode size [3], beep warning [5], degree of humidity and the morphology of the dog itself (hair length, moisture level of skin, subcutaneous fat level) [6]
   - it is not possible to determine the appropriate intensity for a particular dog [3] [7] which leads to two possible risks when using the e-collar:
     - too high intensity which may induce intense fear or pain [5], aggression [8], phobias [8], high levels of stress may block or lower an animal’s ability to learn [7]
     - not high enough intensity (may induce habituation): the undesired behaviour will remain but the animal will habituate to pain

2) Association with external stimuli: a major risk
   - in an everyday situation, many uncontrolled and un-associated environmental stimuli can be associated with the shock [8] [7], including the trainer [4]

3) Perfect timing required
   - e-collar use requires perfect timing between the undesired behaviour and the presentation of the shock [5] [7] [4]. Without this flawless timing, both fearful and aggressive responses have increased likelihood of presenting and of becoming part of the dog’s behavioural repertoire [1] [2]. Consequently, unqualified trainers carry a higher risk of negative outcome when using e-collars [9]

4) Risk of abuse
   - There is a risk of abuse when an owner activates the collar when in a negative emotional state such as when angry [4] [5] [10]

5) Physiological risks
   - The following physiological risks have been reported when using e-collars: a raise in salivary cortisol [11], a raise in heart rate (both increase with shock unpredictability) [5]), intense burn sensation than can lead to physical burns with skin necrosis [3]

6) Stress related behaviours
   - These include high risk of: distress, suffering stress-related behaviours (yelping, tongue flicking, lowering of tail position, inhibition) becoming part of the dog’s behavioural repertoire outside of the training context [4]

7) Other risks when using any punishing technique
   - Punishing training methods induce higher risks of aggression [1] [12], fear, anxiety [13] and undesirable behaviours [14], while they decrease the quality of the dog-owner relationship [15], dog welfare and dog-human team performance, [16] compared to non-aversive techniques. This is especially the case with positive punishment, where an aversive event (an electric shock, a kick, etc.) follows an undesirable dog behaviour and in the case of negative reinforcement where an aversive event (an electric shock, a sharp pull or a check on a choke or prong collar) ends after a desired dog behaviour.
8) Efficacy
No study shows a superior efficacy when comparing an e-collar to positive training. Some conclude a superior efficacy of positive training [10] [17], while others show no difference in efficacy but a decrease in welfare when using e-collars [18]. In relation to fence collars, one study even suggests a higher risk of escape when using an e-fence rather than a normal fence [19].

9) The "easy fix" illusion
E-collars are seen as an "easy fix" (even if as demonstrated above they are not). This neglects a more preferable approach which would seek to understand the mechanisms of canine behaviour on every level which cause undesirable behaviour and then identify a successful and welfare compatible resolution [4].

In conclusion, e-collar training is associated with numerous well documented risks concerning dog health, behaviour and welfare. Any existing behaviour problem is likely to deteriorate or an additional problem is likely to emerge, when such a collar is used. This becomes an even greater risk when this aversive tool is used by an unqualified trainer (as training is largely unregulated throughout the EU, it appears that a large number of trainers are unqualified).

Additionally, the efficacy of these collars has not been proven to be more effective than other alternatives such as positive training. Hence, ESVCE encourages education programmes which employ positive reinforcement methods (while avoiding positive punishment and negative reinforcement) thereby promoting positive dog welfare and a humane, ethical and moral approach to dog training at all times.

Members of ESVCE position strongly against the use of e-collars in dog training, using the above argument as a basis for our position and urge all European countries to take an interest and position in this welfare matter.

ESVCCE proposal: as stated above, ESVCE members argue that there is no strong evidence to justify e-collar use on dogs. On the contrary, there are many reasons to never use these and better training options exist.

This said, the aim of ESVCE is to improve dog welfare and consequently ESVCE has been working on possible solutions to manage situations where e-collars have been a choice. The following alternative suggestions respect the precautionary principle:

- ban e-collar sale, use, distribution, promotion (including internet sale and promotion within Europe), under European legislation immediately applicable in all member states.
- ensure that the law is enforced and adhered to: employing the animal welfare acts or equivalent in each member state, significant fines might be introduced for a first or minor offence, that is an offence where unintentional harm is caused to the dog. In the case of successive offences or where a collar has been used to intentionally
abuse a dog, a custodial sentence in line with that applicable to similar offences might be introduced. Additionally, significant fines need to be implemented for persons identified selling, distributing or promoting e-collars.

- suggest an alternative: spray collars could be used under veterinary or qualified behavioural supervision, instead of bark activated collars and remote controlled collars. This would allow the cause of the behaviour problem to be addressed and not just the symptom.
- Electronic boundary fences could be replaced with actual fences (even actual electrified fences) which would prevent the electronic fences being used incorrectly and the dog not being given opportunity to learn; for example if the owner does not use the flags which should be supplied to condition the dog to where the fence “is”

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