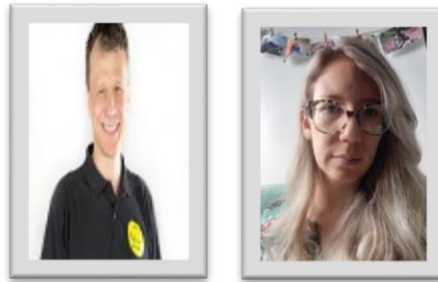


Treatment of behavioral disorders in dogs with herbal medicines

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Abstract

Dogs can strongly bond with their keepers, but when they express behavioral disorders, these are often seen as undesirable behaviors by the keepers[1,2]. This is a widespread issue in the population of domestic dogs[3,4,5]. The expression of such behaviors frequently results in a failure of the bond between dogs and their keepers[6,7], which commonly culminates in relinquishment or even euthanasia of dogs [8,9,10]. In fact, such undesired behaviors of dogs are among the main causes of abandonment of these animals [10,11,12]. A recent study showed that keepers who relinquish their dogs to shelters point out that behavioral problems of these animals influenced their decision to abandon these animals, at least in some way (65%) or even strongly (43%) [13]. In addition, such undesired behaviors can also be a source of stress for dogs [14,15] and, consequently, they can negatively affect the welfare of these animals.

Considering behavioral disorders expressed by dogs, disorders associated with anxiety, such as separation anxiety, are among the most common behaviors considered as problematic by dog keepers[16,17]. Separation anxiety is usually expressed by behaviors that can easily bother dog keepers, such as urination or defecation in inappropriate places, excessive vocalization or destruction of home objects [18,19]. Moreover, dogs can also express depressive conditions as a behavioral disorder, especially after experiencing some kinds of aversive events, such as when they are deprived of their keepers or after the loss of a social partner [20]. In these situations, dogs can become profoundly inactive and unresponsive [20], which can indicate they are showing behavioral signs similarly to depression, both considering the public domain [21,22] and the scientific literature [16,23,24].

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In this context, the importance of properly treating anxiety disorders and depression in dogs to improve the welfare conditions of these animals and the relationship with their keepers is clear. Thus, an interesting possibility for such treatments is the use of psychoactive herbal medicines to relieve such symptoms, which have been popularly recommended for humans[25]. Herbal medicines have been used even more than the traditional synthetic medicines for the human treatment of depression in some countries, such as Germany [26]. In fact, the use of herbal medicines in the treatment of diseases- including behavioral disorders - has increased in Brazil, even considering the treatments for pets, because although only 1% of the Brazilian market of herbal medicine is aimed at the veterinary sector, it is the one that grows more (rate of 25% per year)[27].

Herbal medicines are obtained only from active vegetable raw materials, and they cannot include isolated, synthetic or natural active substances in their composition, nor the associations of these with plant extracts [28]. They are characterized by knowledge of the effectiveness and risks of their use and also by the reproducibility and constancy of their quality [28]. Thus, they are drugs that have their action already proved through pharmacological and toxicological studies [28], similarly as synthetic drugs, that is, herbal medicines are registered only after the confirmation of their action and quality.

The general use of alternative and complementary medicine, also considering therapy with herbal medicines, is common in several countries, including studies based on populations from Australia, Europe and the United States [29]. Considering dogs, some alternative products for the treatment of behavioral disorders, such as nutritional supplements, herbal medicines or pheromones - in addition to traditional synthetic medicines - have been shown to be safe and effective [30,31,32]. However, there are still some barriers of stigma, as well as controversies, about the use of psychoactive drugs in the treatment of psychic disorders in general, even considering the use of alternative products, such as the herbal medicines, in the treatment of behavioral problems in dogs [33,34].

Keepers seem to be more comfortable about giving psychoactive medications to their dogs, including alternative treatments such as nutritional supplements or herbal medicines, when they had personal experiences with these drugs and substances in their own treatment of anxiety or depression [35]. On the other hand, it is also necessary to be careful considering the use of these medications with dogs, because people commonly think that once phytotherapies are natural medicines made from plant extracts, they cannot cause any harm, which is a mistake. Herbal medicines are usually subject to fewer checks than other medicines, with less rigorous efficacy and safety criteria sometimes, besides possibly not having a standardized preparation and being more prone to contamination, replacement, adulteration, incorrect dosage, as well as inadequate labeling and advertising [36]. Thus, caution is needed when using phytotherapies. Furthermore, herbal medicines, similarly as more traditional synthetic drugs, can interact with the active principles of other medications and cause drug interactions that can be harmful and toxic [37,38].

We conclude that phytotherapies, which are medicines with proven action by pharmacological and toxicological studies, have great potential as psychoactives for the treatment of behavioral disorders such as anxiety and depression in dogs. As the expression of these disorders is a source of stress for dogs and their keepers and is one of the main causes of abandonment of these animals, herbal medicines can be an important tool to help dealing with this problem. In fact, its use in treatments of diseases, including behavioral disorders, has increased for pets as dogs. However, it is necessary to be careful with the use of these medicines for dogs, because as they are made only from plant extracts, it is common that people think they can use them freely, without caution or professional monitoring, which can cause serious problems.

Biography

1. Alexandre Pongracz Rossi, also known as Dr. Pet, is a zootechnician, veterinarian, holds a Master's degree in Psychology. Alexandre researched zoos in several countries, and, back in Brazil, he developed the "Adestramento Inteligente" (Intelligent Training, in English), his own pets' training method. Later, Alexandre founded "Cão Cidadão", a company that offers pet training classes. Author of seven books, he is also a TV show host, lecturer and offers courses in the field. In partnership with renowned scientists, he is constantly involved in research and scientific work. Additionally, he is a member of the Animal Welfare Council of CRMV-SP (BEA) and the Association of Professional Dog Trainers (APDT).
2. Caroline Marques Maia is Biologist, MSc and PhD in Zoology in the field of animal behavior and welfare and a specialist in Scientific Journalism. She worked as scientific advisor and consultant for GEC (Group of Scientific Studies) of Cão Cidadão company. Caroline is part of the FEG team (FishEthoGroup), acting as a researcher, scientific disseminator and mainly in the development of fish species profiles for FishEthoBase. She is also a manager at GilsonVolpato Institute for Scientific Education and maintains the blog ConsCIÊNCIA Animal.

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Publication

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