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## Treatment of aural hematoma in a dog (*Canis familiaris*) by homeopathy: Case report

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**Abstract.** Aural hematoma is a pathology commonly diagnosed in dogs and characterized by the accumulation of blood in the external ear of the animal, usually of traumatic origin. The treatments of choice for the clinical improvement of the affected ear are, in general, invasive. The present work reports the case of a Labrador female dog attended at NaturalPet Veterinary Clinic and diagnosed with aural hematoma. The patient was treated exclusively with homeopathic medicines. The prescription of the medicines was based on the law of similars, and the treatment comprised the use of *Hamamelis virginiana* D12 ( $1 \times 10^{-12}$ ), *Arnica montana* D9 ( $1 \times 10^{-9}$ ) and *Bellis perennis* 30CH ( $1 \times 10^{-60}$ ). The therapeutic protocol used was conclusive, reestablishing the function of the external ear with no deformations of the affected tissue. Therefore, the homeopathic treatment important therapy to be used and evaluated in other cases similar to this one reported.

**Keywords:** Aural hematoma, deformations, injectable homeopathy

## Tratamento de otohematoma em cão (*Canis familiaris*) pela homeopatia: Relato de caso

**Resumo.** O otohematoma é uma patologia comumente diagnosticada em cães, sendo caracterizada pelo acúmulo de sangue no pavilhão auricular externo do animal, em sua maioria de origem traumática. Os tratamentos de eleição para a melhora clínica da orelha acometida são, em geral, invasivos. O presente trabalho, relata o caso de um cão, labrador, fêmea, atendido na Clínica Veterinária NaturalPet, diagnosticado com otohematoma. O mesmo, foi tratado, exclusivamente, através de medicamentos homeopáticos. A prescrição dos medicamentos, baseou-se na lei dos semelhantes e, o tratamento determinado foi através dos medicamentos *Hamamelis virginiana* D12 ( $1 \times 10^{-12}$ ), *Arnica montana* D9 ( $1 \times 10^{-9}$ ) e *Bellis perennis* 30CH ( $1 \times 10^{-60}$ ). O protocolo terapêutico utilizado neste caso foi conclusivo, reestabelecendo a função do pavilhão auricular, sem deformações do tecido acometido. Assim, a terapêutica homeopática demonstrou ser uma importante ferramenta, no tratamento de otohematoma em cães, dispensando a necessidade de procedimentos invasivos.

**Palavras chave:** Hematoma aural, deformações, homeopatia injetável

## Tratamiento homeopático para otohematoma en un perro (*Canis familiaris*): Reporte de un caso

**Resumen.** El hematoma auditivo es una patología comúnmente diagnosticada en perros y caracterizada por la acumulación de sangre en el pabellón auricular externo del animal, generalmente de origen traumático. Los tratamientos de elección para la mejora clínica de la

oreja afectada son, en general, invasivos. El presente trabajo informa el caso de una perra Labrador atendida en la Clínica Veterinaria NaturalPet y diagnosticada con otopatoma. La paciente fue tratada exclusivamente con medicamentos homeopáticos. La prescripción de los medicamentos se basó en la ley de similares, y el tratamiento comprendió el uso de *Hamamelis virginiana* D12 ( $1 \times 10^{-12}$ ), *Arnica montana* D9 ( $1 \times 10^{-9}$ ) y *Bellis perennis* 30CH ( $1 \times 10^{-60}$ ). El protocolo terapéutico utilizado fue concluyente, restableciendo la función del oído externo sin deformaciones del tejido afectado. Por lo tanto, la terapia de tratamiento homeopático es importante para ser utilizada y evaluada en otros casos similares a este reportado.

**Palabras clave:** hematoma auricular, deformaciones, homeopatía inyectable

## Introduction

Aural hematoma, also known as auricular hematoma, is a pathology that often affects the external ear of dogs ([Evangelista et al., 2012](#)) and, rarely, of cats ([Silva et al., 2018](#)). The surgical procedure for correction of this is considered the eighth most performed procedure in dogs among the routine surgeries in the clinical practice ([Graça, 2010](#)). The physiopathology of this alteration comprises the formation of a large swelling filled with floating blood, which size and position may vary, being located in the concave surface of the external ear ([Evangelista et al., 2012](#)).

Predisposing factors for the occurrence of aural hematoma in small animals have already been described. Dogs with pendulous ears, as well as adult and elderly patients appear to be more susceptible to the problem ([Rosychuk & Merchant, 1994](#)). The presence of affections involving the hearing system, which result in abrupt head movements due to the pain, pruritus, or acute inflammations in the ears, such as otitis, also appear to trigger the aural hematoma in this species ([Evangelista et al., 2012](#); [Rodrigues et al., 2016](#)).

The aural hematoma comprises two phases. The acute phase consists of the initial formation and is characterized by the rupture of the branches of the caudal auricular artery, located in the auricular cartilage, and fluid accumulation in the external ear. In this phase, discomfort is caused by the increase of the ear volume, and pain may be present or absent ([Marignac, 2005](#)). In the chronic phase, maturation occurs, fibrin is deposited on the walls of the hematoma, and a central bloody seroma is produced. Later, the seroma transforms into granulation tissue, and the ear becomes thickened ([Krahwinkel, 2003](#)).

In general, aural hematomas are self-limiting because, in the natural evolution of the disease, fluid reabsorption and healing occur. Therefore, it is characterized for being a dynamic method. However, the disease resolution is slow, and fibrosis may occur in the healing process, which increases the thickness and, consequently, the deformation of the ear ([Krahwinkel, 2003](#); [Marignac, 2005](#)).

Aural hematomas are diagnosed by physical examination. The auricular region is swollen, palpation reveals a fluid and floating content (acute phase), which can be firm and thick due to fibrosis (chronic phase). The history of the patient must be considered to identify and eliminate predisposing factors to the disease, preventing recurrence ([Valle et al., 2015](#)).

The treatment of aural hematoma varies and different therapies are available for its clinical improvement. Surgical procedures are those with the highest incidence. However, the results are not always satisfactory in general ([Rosychuk & Merchant, 1994](#); [Schossler et al., 2007](#)). According to several authors, regardless of the therapy used, the treatment of aural hematomas should be performed as early as possible after diagnosis in order to prevent the extension of the lesion or the deformation of the ear, secondary to fibrosis ([Krahwinkel, 2003](#)). Clinical therapy may be indicated in most cases, and homeopathic medicines have become an excellent alternative, with no need for drainage of the hematoma or surgical procedures ([Reddy et al., 1992](#)).

Homeopathy, a technique created by the German Doctor Samuel Hahnemann in 1796, has become the first-choice treatment of clinicians, with the advent of the growth and understanding of the Integrative Veterinary Medicine. It relies on the law of similar, in which highly diluted medicines can cure diseases or clinical signs, similar to those diseases or signs they can produce in a healthy organism at their ponderal dose ([Valle et al., 2015](#)). In this context, homeopathic medicine has been used as a

therapy and demonstrated significant capability on healing aural hematoma, leaving aside the need for invasive and high costly procedures (Valle et al., 2015).

The objective of this study is to report the occurrence of an unilateral case of aural hematoma in a Labrador female dog attended on September 2018, at NaturalPet Veterinary Clinic, in Brasilia, DF, Brazil.

### Case report

An 11-year-old female Labrador weighing 38 kg was attended with the main complaint of increased volume in the left external ear and restlessness of the ears (Figure 1). According to the owner, the clinical signs appeared approximately 10 days before, and the patient was more agitated in the past four days when the volume of the left ear increased. The dog had normal colored mucosa, TPC 2", cardiac auscultation within normal limits according to the age and species, good overall condition despite its overweight, and no significant alterations or other complaints by the tutor. After anamnesis and clinical examination, an aural hematoma was diagnosed on the external face of the left ear. The etiology remained unknown. However, the tutor of the animal described that, sporadically, the animal used to scratch only the left ear. Nonetheless, a swab was collected from both ears for cytological analysis. A complete hemogram was requested as well as biochemical measurements of alanine aminotransferase (ALT), alkaline phosphatase (AP), urea, and creatinine.

A subcutaneous injectable homeopathic treatment was prescribed (Injectcenter<sup>®</sup>), Ribeirão Preto-SP, Brazil), and consisted of an application of 1 ampoule (1mL) of *Hamamelis virginiana* D12 ( $1 \times 10^{-12}$ ) + 1 ampoule of *Arnica montana* D9 ( $1 \times 10^{-9}$ ) on the day the patient was attended at NaturalPet. From the second day, the applications were carried out by the owner in her house, as follows: Day 1. *A. montana*; Day 2. *H. virginiana*; and so on during 15 days. Four drops of *Bellis perennis* 30CH ( $1 \times 10^{-60}$ ), SID, were also indicated as an oral treatment, during 30 days.

After eight days, the patient was attended at the clinic for a reevaluation. It was observed that the hematoma had considerably decreased in size. The result of the cytology was positive for *Malassezia* for the left (++) and right (+) ears. The hemogram showed the following results: Red blood cells 6,780,000//mL; Hemoglobin 16g/dL; Hematocrit 16%; MCV (mean corpuscular volume) 67.85 fL; Total leukocytes 8,500/mL; Planchettes 272,000/mL; Total Plasmatic protein (TPP) 6.9g/dL; Urea 30mg/dL; Creatinine 1.23 g/dL; ALT 72 U/L; AP 182 U/L. The patient returned to the clinic every seven days for follow-up, during 30 days. Total disease resolution was observed at the end of 21 days. The patient was followed-up for 50 additional days, in which the animal was evaluated biweekly. No disease recurrence was observed during the entire period.



Figure 1. The patient whit aural hematoma.



Figure 2. A: Started treatment (09.02.18); B: Treatment evaluation (10.10.18); C: After 8 weeks of treatment.

### Discussion

Aural hematoma in dogs is a common disease in the small animal clinic. It is characterized by the increased volume in the external ear due to a fluctuating, tense, and sometimes painful swelling, which varies in size and position (Evangelista et al., 2012; Graça, 2010; Valle et al., 2015). The surgical

procedure is the most common treatment for aural hematoma. However, it involves subjecting the animal to general anesthesia, postoperative recovery, and the possibility of recurrence, besides the high cost of the procedure. In this context, complementary treatments stand out as a promising alternative. Among them, homeopathy is a safe medical treatment that does not intoxicate patients or depress the immune and biological responses of the body. It maintains homeostasis and develops a long-lasting and effective improvement in disease control (Valle et al., 2015).

The treatment of choice in the present work was based on the law of the similars and used highly diluted and dynamized medicines to treat symptoms or diseases which would be caused by these same substances, in ponderal doses, to a healthy person (Demarque, 2002). This therapy uses the natural healing tendency of the organism, the so-called *Vix Medicatrix Curantus Naturae*, announced by Hippocrates in 400 BC, which assists the vital energy for the complete reestablishment of the organism.

*H. virginiana*, *B. perennis*, and *A. montana* are medicines of plant origin and equally indicated in the treatments of phlebitis, varicose ulcers, and traumatic inflammations (Cairo, 1991; Marzotto et al., 2016; Vannier & Poirier, 1987). *H. virginiana* has hemostatic, venotonic, and vasoprotective properties. It acts in hemorrhages of venous origin, especially the post-traumatic ones. This medicine is indicated in the treatment of phlebitis, varicose ulcers, and traumatic inflammations on the skin (Cairo, 1991). *B. perennis* acts in sites of increased volume and accumulation of blood due to mechanical trauma, with left laterality (Horvilleur, 2003). *A. montana* has a well-known action in acute traumatic processes, which involves the collection of blood, pain, and increase of the local volume. Furthermore, it has proven action on the migration of fibronectin, which is the main protein organizing the connective tissue during the initial phase of healing and inflammation (Marzotto et al., 2016).

According to Valle et al. (2015), the homeopathic treatment for aural hematoma is extremely effective when well prescribed and administered. Additionally, the authors report the occurrence of an aural hematoma case in a Labrador male dog treated by homeopathy. The solution of the case was quick (25 days) and effective since no subsequent recurrences were observed.

Reddy et al. (1992) described the treatment of seven dogs with aural hematoma using the homeopathic medicines *H. virginiana*, *Bufo rana*, and *A. montana* in combination with anti-inflammatory doses of corticosteroid and heparin ointment recovery occurred within 7 to 23 days, and only one recurrence was recorded.

The 30-day recovery period of aural hematoma in the present study was similar to those reported by Reddy et al. (1992) and Valle et al. (2015). In this study, the dog was exclusively treated with homeopathic medicines and did not demonstrate thickening of the external ear at the end of the homeopathic treatment, which is in agreement with Valle et al. (2015).

The surgical treatment is faster due to the removal of the liquid contained in the aural hematoma. However, it is more invasive and has a higher cost, in addition to the risks of infection in the postoperative period, deformities in the external ear during the healing process, sequels, and relapses. In contrast, the homeopathic medicines used in this study resulted in a favorable response and fast disease resolution. No scars or deformities were observed in the external ear.

## Conclusion

The homeopathic treatment prescribed in this study was low cost compared to the surgical procedure and of easy administration. It proved efficacious, with an excellent healing process, no side effects to the patient, and no need for any invasive procedure.

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