

Homeopathy as a protocol for post-surgical orchietomy in rabbits: serial case study

Abstract

This work aims to highlight the therapeutic potential of homeopathy in the postoperative period of orchietomy in rabbits. It is an easy application method, proving a standard method for healing and infection control by strengthening the immune system. This study was done 3 male rabbits of different behaviors homeopathy was very well done.

Keywords: arnica montana, domestic rabbit, echinacea angustifolia, homeopathy, netherland dwarf, orchietomy, rabbits

Volume 7 Issue 3 - 2023

Maria Luiza De Sousa Barbosa
University Santo Amaro, São Paulo, Brasil

Correspondence: Maria Luiza De Sousa Barbosa, University Santo Amaro, São Paulo, Brasil, Tel +55 11 974646159, Email maria.cu@hotmail.com

Received: November 06, 2023 | **Published:** November 14, 2023

Introduction

According to Travagin,¹ *Arnica montana* 30cH had a good analgesic effect, indicating its potential as a postoperative analgesia agent in submitted to ovary salpingo hysterectomy. *Arnica montana* has analgesic, anti-inflammatory, and curative action, and its use is recommended especially for traumas, dislocations, sprains, and tendinitis. In addition, it has antioxidant and immunomodulatory activity.²⁻⁴ It provides edema reduction and anti-inflammatory effects in facial plastic surgery and dental surgery.^{5,6} Studies on the effects of this drug on animals are still scarce, although experiments on rats have highlighted reduced edema and better healing.^{7,8}

Echinacea angustifolia has been shown to act as an immunomodulatory activity, which guarantees the fight against infections,⁹ and has great potential for action in all skin conditions with a severe general condition, such as wounds that do not heal.¹⁰ The popularization of rabbits as unconventional pets results in a great demand for the project by the owners of these animals. This study aims to report the use of arnica montana and echinacea in postoperative orchietomy in rabbits.

Serial case study

Three male rabbits, domestic rabbits, Netherland Dwarf and Mini Lop, from one to three years old, weighing between 900 grams and 1.8 kg, were submitted to elective orchietomy in the city of Ribeirão Pires, São Paulo. All patients were classified as ASA 1, according to the anesthetic risk classification proposed by the American Society of Anesthesiologists. The patients were submitted to an eight hour fast for food and hydration.

Ketamine 35 mg/kg, acepromazine 5 mg/kg and xylazine 3 mg/kg intramuscularly were used as anesthetic protocols. After twenty minutes of application, the animals were sedated and without painful stimulus. Trichotomy of the scrotal surface was then performed and after positioning the rabbit in the supine position, antisepsis was performed, which observed the sequence of chlorhexidine degerming - alcoholic chlorhexidine along the entire length of the scrotal and periscrotal cutaneous region. The testicles of all rabbits were removed by conventional technique, through the opening of the scrotum and subsequent ligation and section of the testicular cord. The surgery lasted less than fifteen minutes and the welfare of the animals submitted to the procedure was preserved, with a good breathing pattern and heart rate, and there was no need to intervene with other anesthetic protocols.

When the stimuli returned, about thirty minutes after the end of the surgery, they received the respective homeopathic solution in plus method: five globules in 30 ml of water, 1 ml every ten minutes interspersed for one hour. *Arnica montana* 30 cH and *Echinacea angustifolia* 30 cH diluted in separate containers, produced according to the Brazilian Pharmacopoeia, were administered. After two hours of the procedure the animals are already feeding spontaneously and moving without restraint.

In the first three days, the surgical wound was cleaned and disinfected with saline solution and antiseptic liquid soap and moxibustion at the site. In the domestic rabbit and the Netherland Dwarf, complete healing occurred in five days. The mini Lop removed the surgical stitches two hours after the procedure, which resulted in exposure of the conduit and healing by second intention of one of the scrotal pouches, which did not accept the Elizabethan collar or dressing at the site, and licking was recurrent. The opposite scrotum healed completely in three days, the affected scrotum healed in fifteen days (Figures 1–3).

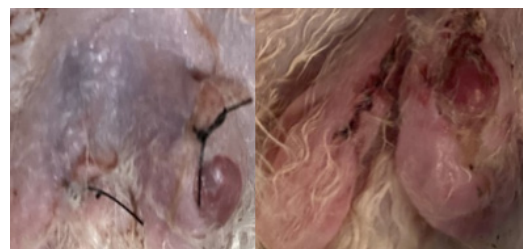


Figure 1 Surgical wound orchietomy Mini Lop. **A.** scrotum two hours after the surgical procedure with removal of the stitches. **B.** scrotum after twenty four hours.

Source: the author, 2023.



Figure 2 Surgical wound orchietomy Mini Lop. **A.** scrotum after three days, right side completely healed. **B.** scrotum after seven days.

Source: the author, 2023.



Figure 3 Surgical wound orchiectomy Mini Lop. **A.** scrotum after ten days. **B.** scrotum after fifteen days.

Source: the author, 2023.

Conclusion

The use of Arnica provides a better anesthetic return, as also described in other studies with the use of the drug in postoperative surgery of ovariectomy in, also acting in the control of pain, inflammation and hematoma at the site. Echinacea strengthens the individual's immune system, enabling them to act in the face of opportunistic infections, the three animals reported did not show any signs of pain or any other changes that would compromise their health status. If necessary, a thorough observation of the lesion aspect was made in order to detail the aspect of wound evolution and healing process. In two of the animals studied, complete healing occurred in five days. In one of the three animals, there was a greater potential for contamination, so complete healing occurred in fifteen days, only with homeopathic treatment at the beginning of the condition.

Acknowledgments

None.

Conflicts of interest

The author declared that there are no conflicts of interest.

References

1. Travagin DRP, Balbuena MCS, COELHO CP. Use of Homeopathic Arnica montana 30cH for postoperative analgesia in female dogs undergoing elective ovariectomy. *Homeopathy*. 2021;111(2):134–138.
2. Kriplani P, Guarve K, Baghael US. Arnica montana L.- a plant of healing: review. *J Pharm Pharmacol*. 2017;69(8):925–945.
3. Blumenthal M, Goldeberg A, Brinckmann, J. Herbal medicine: expanded commission and monographs. *Annals of Internal Medicine*. 2000. Pp. 519.
4. Clauser M, Aiello N, Scartezzini F, et al. Differences in the chemical composition of Arnica montana flowers from wild populations of north Italy. *Nat Prod Commun*. 2014;9(1):3–6.
5. Seeley BM, Denton AB, Ahn MS, et al. Effect of homeopathic Arnica montana on bruising in face-lifts: results of a randomized, double-blind, placebo-controlled clinical trial. *Arch Facial Plast Surg*. 2006;8(1):54–59.
6. Chaiet SR, Marcus BC. Perioperative Arnica montana for reduction of ecchymosis in rhinoplasty surgery. *Ann Plast Surg*. 2016;76(5):477–482.
7. Alfredo PP, Anaruma CA, Pião ACS, et al. Effects of phonophoresis with Arnica montana onto acute inflammatory process in rat skeletal muscles: an experimental study. *Ultrasonics*. 2009;49:466–471.
8. Kawakami AP, Sato C, Cardoso TN, et al. Inflammatory process modulation by homeopathic Arnica montana 6CH: The role of individual variation. *Evid Based Complement Alternat Med*. 2011:917541.
9. Mendes C, Hsiung A, Dencer C, al. Respiratory tract infections: main bacterial pathogens and patterns of resistance Brazilian data from the international study PROTEKT. *Virtual Health Library*. 2003;7(2):97–107.
10. Torro AR. *Veterinary homeopathy: Materia medica*. Edn. Da Aurora; 2020: Pp.139–140.