

HONEYBEE PRODUCTS UTILITY IN VETERINARY MEDICINE - short review -

Czirják, Tibor Zsolt*

* University of Oradea, Faculty of Environmental Protection, 26 Gen. Magheru St., 410048 Oradea; Romania, e-mail: drcziri@yahoo.com

Abstract

Apitherapy means treating the most diverse diseases with natural products without any processing or extracts, their combinations with apiterapice drugs. It is a natural alternative treatment in acute or chronic diseases.

Key words: honey bee products, treatment, apitherapy

INTRODUCTION

Apiculture products have a wide range of biological and pharmacological properties beneficial in maintaining the health of the human body. The recommendations to be made than no therapeutic based medical diagnostic tests, laboratory, radiological and other necessary investigations.

Apitherapy uses honey, pollen, beebread, propolis, Royal Jelly, apilarnil (male bee brood), beeswax, bee venom, for prevention and treatment of various diseases.

Honey

Honey contains enzymes: catalase, amylase, invertase; organic acids: lactic acid, gluconic; mineral salts: calcium, potassium, iron, phosphorus. Stimulates appetite and facilitate digestion, improves the activity of the heart, the liver, increases the percentage of hemoglobin in the blood. It has antibacterial properties, used both internally and externally.

Honey since ancient times it has been used in a variety of therapeutic purposes in human medicine: gastric diseases and intestinal, renal, respiratory, infections of the mouth, infected wound. Applicability in veterinary medicine finds that topic in treating various wounds (Simon et al., 2007), as a laxative (mixed with warm water) in hepatic disorders,

constipation in-gall due to carbohydrate that restore glycogen reserve (Ahmad et al., 2008), gastritis, duodenal ulcers (Kandil et al., 2003).

Should be assessed the possible risks associated with the use of raw honey in puppies and kitten.

Propolis

Considered „honey bees pharmacy" propolis is a product of beekeeping in poplar stems resin. Propolis is composed of the following groups of substances: flavones, flavonols, flavanone, chalcones, aromatic acids, alcohols, ketones, sugars, resins and balms, essential oils, vitamins (A, C, E, PP and B complex components), trace elements (sodium, potassium, magnesium, calcium, aluminum, zinc, iron, chromium, manganese, copper, etc.), amino acids, tannins, pollen etc (Bankova et al., 2000).

Used internally has antimicrobial, antifungal effect (*Candida albicans*), antiviral (*Herpes simplex virus*), analgesic, anti-inflammatory, anaesthetic, antioxidant, imunostimulent, cicatrisant, mucolytic, etc. It is used as an adjunct in: pharyngitis, laryngitis, tonsillitis, traheite, bronchitis, respiratory virus infection, sinusitis, gastritis (Castaldo and Capasso, 2002).

Used externally it presents analgesic effect, antimicrobial, anti-inflammatory, anaesthetic, scar. It is used as an adjunct in: gingivitis, pharyngitis, tonsillitis, skin disorders (eczema, dermatitis, superficial wounds).

Pollen and breebread

Pollen is collected and stored by bees in the cells of the honeycomb, used as feed in juvenile growth prosthetics. Through its composition, nutritional properties and shows pollen biostimulatoare. Beebread is processed by the bee pollen, pollen processing as a result of which suffer from a slight fermentation, and due to the honey added fermentatia stops and pollen preserve (Marghitas, 2005).

This product administered in the form of oral bee hive can be used in malnutrite, in convalescence, which presents diarrheal states or constipation, prostate problems, antioxidant activity, those subjected to strenuous sporting activities or a time-consuming effort (e.g. hunting dogs) (Bevzo et al., 1997).

Royal Jelly and Apilarnil

apilarnil and bee products are biologically active with biotrofice properties, energy, vitalizante, balms and psihotonice that help restore the immune system.

Royal Jelly is the only known source of acid 10-hydroxy-2-decenoic (10-HDA), a compound with antibacterial and anticancerigen potential. As

part of entering a number visit of vitamins and amino acids as well as yet unidentified compounds (2.8%) (Boselli et al., 2003).

In the literature are reminded about the important ingredients of Royal Jelly as well as visit are: protein, carbohydrates, lipids (Lercker, 2003). The utility finds in veterinary medicine due to the antioxidant activity, immunomodulatory, rejuvenation, in hematopoiesis, in reproductive dysfunction, as neuroprotective.

Honey bee venom

Bee venom is a complex product that, when used in small doses, stimulates the defense capability and restorative to the body. It has mainly a stimulating effect on the blood circulation, increases blood flow, vasodilation, anti-inflammatory, stimulates the endocrine system, antibacterial, immunostimulating (Krell, 1996). It is recommended in case of rheumatism (arthritis, arthrosis), spondylosis, pains and nerve inflammation, bronchial asthma, diseases of the connective tissue, degenerative neurological diseases, dermatological diseases, chronic pain.

It is used most frequently in external use, in the form of ointment, applied to painful places. In chronic diseases, it is used in the form of injections or standardized in the form of direct or micro prick's prick (Japanese technique). This product requires special attention, due to the fact that patients may be allergic to the venom; Therefore it is appropriate that, before using any product containing bee venom, to test sensitivity.

If side effects do occur it can enlarge the venom dose gradually until reaching. The bees to sting direct must take into account ethics component (protection of animals)

CONCLUSIONS

Conclusions alternative veterinary medicine utilizes numerous products, including a well-defined place and may have the hive. To be able to make use of the beneficial effects of certain products must be fulfilled will keep the desiderata. It takes the Organization of courses for the veterinarians specialize in apitherapy. Protocols and doses used must be well defined according to each species of animal, so in the case of applying local and oral. To get these protocols is needed for carrying out scientific studies in collaboration with universities and laboratories in the field of veterinary or clinical cases within the cabinets of free veterinary practice. All of these studies must be carried out taking into account the legislation in force concerning the protection of animals. Research needs include the following: studies on the effect of the glycemic index on the honey from different animal species; allergic reactions (by species, breed) especially bee venom

and pollen. Apitherapy must create first medicinal products distinct from real food, medicines, scientifically verified and admitted at the global level and their own methods of implementing them.

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