

HONEY

**A NEW POSSIBILITY OF
TREATMENT**



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INTRODUCTION

Bee products were considered from ancient times an important food, but also medication for prevention and treatment of some diseases. Apitherapy was mentioned in RIG-VEDA, an ancient Indian book, 3000-2000 B.C., where honey and bees are mentioned many times. It is important to know that 1 kilo of honey is equivalent to 1,680 kg of meat (beef), 50 eggs, 5,675 l milk, and 40 oranges.

MAURICE MAETERLINCK said :

This wonderful spring rises from the miraculous honey which is nothing else than a transformed sunray, which has waked up the violets and anemones and put the bees to work, saying themthat the uninterrupted circle which connects life to death has made another way round and revive again.

It is important to know that honey has very good effects in a lot of diseases using as simple by oral administration, but also local on some wounds, as intravenous in some degenerative diseases (cancer, ulcer varicosa, gangrene etc...) .

Traditional Chinese medicine studied the efficiency of honey looking from the point of Yin and Yang and in the law of the 5 elements honey is in the middle, because of the sweet taste. In TCM sweet stimulates the activity of spleen and stomach, helps the heart and sustains the liver. This taste also generates the functions of the lungs, but also has an effect of relaxation and releasing of pain in the nervous and muscular cells. That's why oriental medicine considers that there is no food like a universal panacea, everything having or strength or deficiency.

Very rich in simple assimilated glucose and fructose, honey has a better bioavailability compared with the sugar and it is important to know that 100g of honey contains 38,5 g fructose and 31 g of glucose, Riboflavin-0,004mg/100g, Niacin-0,12 mg/100g, vit. B6-0,007mg/100 g, vit. C-0,5 mg/100 g. Calcium-52 mg/100g, Na -4 mg/100g, Potassium-52 mg/100g, etc...

After Donadieu Y. using honey like an important factor of treatment among all the bee products is attested through:

- physico-chemical studies about honey composition, even if the therapeutical effects are not constant, because of the variability (quantitatif and qualitatif) of factors which insures the pharmacological effect, determined also by the moment of harvest, the region etc.

- the energetic and nourishing advantage, especially the dynamic action-the increase of appetite, a better assimilation and digestion of some foods.

- the benefit of assimilation of calcium at the children ,but also of magnesium, action attested by observing the children which were feeded with honey compaired with those which received sugar.

- a lot of other important properties: laxative, antitoxic, antiseptic, antibiotic.

Ex. Acaccia honey is important for the patient with diabet ; chestnut honey-liver and prostate,apple honey-tonic effect antidyarrheic; lime honey-sedative effect; dandelion honey-depuratif effect; rape honey-local treatment of ulcer varicosa ;

The different varieties of honey possess a large antibacterial effect, according to their contain in different lactobacillus which can explain their mysterious therapeutic properties.

Honey can also promote a better sugar control because it contains a nearly 1:1 ratio of fructose and glucose, so that different studies presented that the consumption of honey may improve blood sugar control and insulin sensitivity compared to other sweeteners. This particularity of honey together with her antioxidant effect can be very efficient for diabetics, by improving the endothelial function.

For the immunity, honey demonstrated her antitumor and pronounced anti-metastatic effect by using the administration of intravenous infusion. (Gribel and Pashinkii). The first studies of the anti-cancer properties of honey were made by Gribel and Pashinskii V.G. (Vopr. Onkol., 36:704-709, 1990), which indicated that honey possessed moderate antitumor and pronounced antimetastatic effects. It must be taken in consideration also the antibacterial effect of honey, which in this cases eases the functioning of the immune system.

A peculiar recent discovery (Mamduh Abdulrhmann, Passau, 2006) was that the **perfusion with honey** can help in the treatment too;

MATERIAL AND METHODS:

Using honey by different ways of administration, we tried to demonstrate all the antibacterial, antitumor, antimetastatic, antioxidant, recovering properties of honey. During the treatment it can be observed some differences in the administration between bee venom and honey.

Local Administration:

Honey is a traditional topical treatment for infected wounds. It can be effective on antibiotic-resistant strains of bacteria. There are now many published reports describing the effectiveness of honey in rapidly clearing infection from wounds, with no adverse effects to slow the healing process

Honey is produced from many different floral sources and its antibacterial activity varies with origin and processing. Honey selected for clinical use should be evaluated on the basis of antibacterial activity levels determined by laboratory testing. The antibacterial property of honey was first recognised in 1892 by van Ketel. Honey, like other saturated sugar syrups and sugar pastes, has an osmolarity sufficient to inhibit microbial growth, but when used as a wound contact layer, dilution by wound exudate reduces the osmolarity to a level that ceases to control infection. However, it has been shown that wounds infected with *Staphylococcus aureus* are quickly rendered sterile by honey

The antibacterial properties of honey include the release of low levels of hydrogen peroxide. Some honeys have an additional phytochemical antibacterial component.

The clearing of infection seen when honey is applied to a wound may reflect more than just antibacterial properties. Recent research shows that the proliferation of peripheral blood B-lymphocytes and T-lymphocytes in cell culture is stimulated by honey at concentrations as low as 0.1%; and phagocytes are activated by honey at concentrations as low as 0.1%. Honey (at a concentration of 1%) also stimulates monocytes in cell culture to release cytokines, tumour necrosis factor (TNF)-alpha, interleukin (IL)-1 and IL-6, which activate the immune response to infection.

Many authors support the use of honey in infected wounds and some suggest its prophylactic use on the wounds of patients susceptible to MRSA and other antibiotic-resistant bacteria.

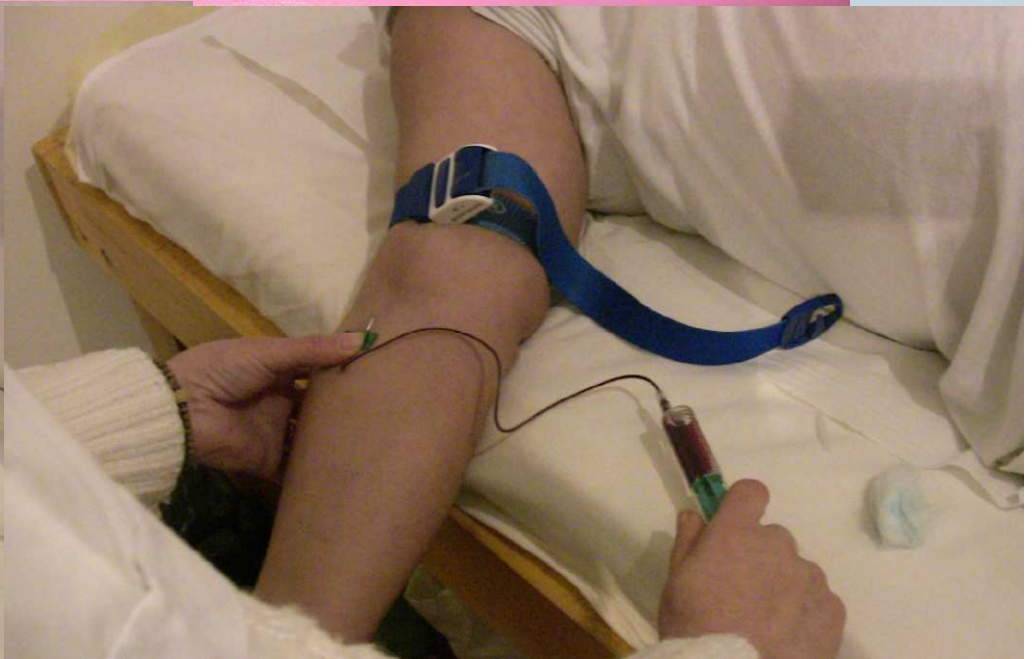
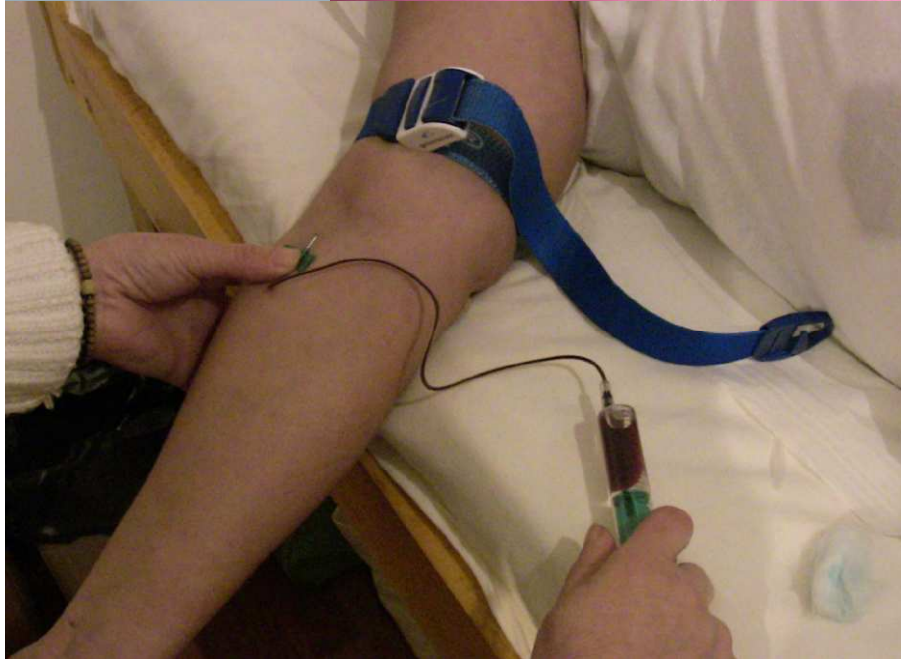
The treatment was made on a period of one year on 10 patients which had different forms of ulcer varicosa and 10 patients with cancer.

The patients had very big ulcers which almost covered the whole ankle and they did not support the application of honey on the wounds. The wounds were very deep so that we considered that it would be very useful to administrate honey in perfusion. The treatment started with 0,5 ml honey in 5 ml serum, after 2 days 1 ml honey in 5 ml serum and after a week 1ml honey in 3 ml serum NaCl 9%. The treatment continued in this way every week for 8 times. From the beginning after the first week the granulation tissue was observed and the tissue became very clean





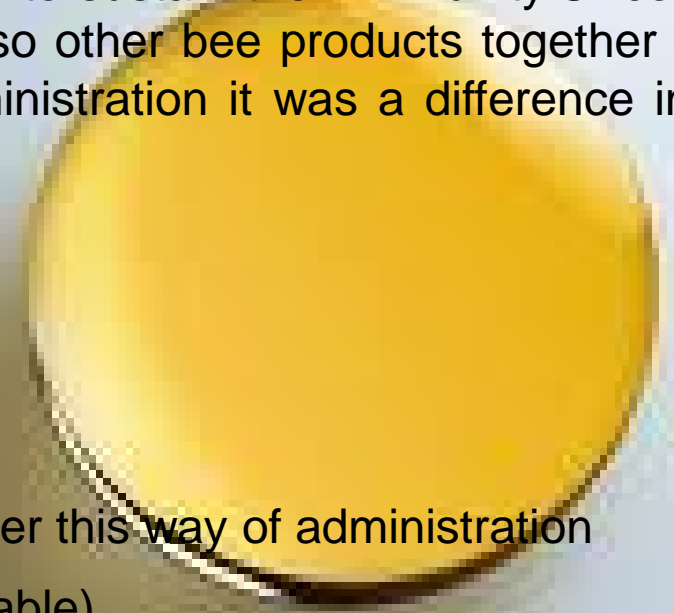




The same administration was made at the patients with cancer. They received this treatment for a longer time because they were under chemotherapy and/or radiotherapy so that it was important for them to sustain their immunity. Of course it is important to mention that they received also other bee products together with a special diet, but through these form of administration it was a difference in their general status.

Important effects:

- increasing of appetite especially observed after this way of administration
- a better sleep(longer and much more comfortable)
- better acceptance than the beevenom
- a very rarious look on their face
- very good lab. results and a good support for the other aggressive treatments.



CONCLUSION

This form of administration improved the healing process of different forms of foot ulcers, stimulate the immunity to the patients with cancer, so that they were able to support better their treatment especially chemo- and radiotherapy. Using honey alone, by oral intake but especially in intravenous administration, or together with the other bee products we can have better results in treating some chronic diseases.

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