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Review Article

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Prevention of Viral Diseases, Including Covid-19, with the Help of Bee Products (Results of Three Years of Testing)

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Annotation

Currently, the main areas of combating the coronavirus infection pandemic are considered vaccination and prevention (wearing protective masks, observing social distance and personal hygiene rules) [1]. The article shows that the preventive use of a number of natural bee products can provide a significant reduction in the incidence of the population, including COVID-19. The author has developed and proposed a scheme for the prevention of viral diseases with the use of 4 bee products - royal jelly, caps, wax moth tincture and propolis oil. The circuit was tested with February 2020 to February 2023). It turned out that the use of the above products actually provided effective protection against viral infections. The use of the proposed prophylaxis allows in a short time to activate the immune system and protect against viral attacks. The products used are absolutely safe, not addictive and are quite compatible with pharmacological preparations. A viral disease prevention regimen is an effective and feasible strategy for dealing with a pandemic.

Keywords: Prevention, COVID-19, Royal jelly, Capping, Bee moth tincture, Propolis oil, Mechanism of action, Effectiveness, Contraindications.

Introduction

The SARS-CoV-2 coronavirus pandemic is gaining momentum. Modern methods of treatment have not shown the expected effectiveness, moreover, their use can be associated with serious negative side effects. The constant medical need has led to a renewed interest in the prevention of viral diseases based on the phenomenon of the antiviral activity of bee products. The composition of these products, their antiviral and antimicrobial properties gave convincing evidence of the possibility of their effective use in the prevention of viral diseases, including COVID-19. ROYAL JELLY. Royal jelly is a strong biological stimulant of all types of metabolism [2]. In terms of its composition, it has no analogues in nature. The composition of royal jelly is complex and includes: 65% water, 14-18% proteins, 9-19% carbohydrates, 2-5% fats, mineral salts, trace elements, vitamins of group B, H, PP, folic, pantothenic. nucleic acids, bio stimulants. Royal jelly proteins are rich in essential amino acids and are complete. They

contain 21 amino acids (glycine, alanine, valene, cysteine, tyrosine, aminobutyric acid, etc.) [3]. Milk contains a large number of free sulfhydryl groups. Along with the so-called proteinogenic amino acids, which are part of protein molecules, the content in milk is of great importance aminobutyric acid, which plays an important role in the transmission of nerve impulses and improves metabolism in the brain [4]. In addition to bound proteins, milk contains free amino acids, as well as amines and amides. The main groups of protein substances are simple proteins - albumin and globulins in a 2: 1 ratio. The presence of globulin in royal jelly was confirmed by electrophoretic analysis of globulins. The presence of complex proteins of glycoproteins, lipoproteins was also established. It also contains 14-15 different trace elements. With the systematic use of royal jelly, the process of protein formation in the body is stimulated, the synthesis of globulins is enhanced, in the fraction of which most of the antibodies are located [5]. Some milk proteins have enzymatic

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activity, catalyze the processes of hydrolytic degradation of sucrose, starch, choline esters, proteins, oxidation of glucose, ascorbic acid and other organic compounds [6]. Royal jelly has antibacterial, antiviral and antitumor effects [7]. Contraindications for the use of royal jelly include acute infectious diseases and Addison's disease (a disease of the adrenal cortex).

Zabrus

Zabrus is a highly effective remedy in the treatment of bacterial and viral diseases, lack of allergies and addiction of the pathogen disease to this natural product distinguishes it favorably from conventional medicines. Convalescence most often occurs quickly and without complications, without the transition of the disease into a chronic form. The chemical composition of the backing is very rich, varied, but unstable, as it depends on weather conditions, the harvest of certain plants, and other reasons. The backing must include propolis, pollen, bee bread, wax and, of course, honey [8]. This beekeeping product contains vitamins A, C, E and group B, protein, chitin, macro- and microelements, organic acids, essential oils, various enzymes, resins, balms, fats, carbohydrates, etc. Hence the medicinal properties of the zabrus - antimicrobial and anti-inflammatory. After thoroughly chewing and swallowing the zabrus, after 2 hours, its active components are found in the blood, lymph and intercellular space. The use of this concentrated beekeeping product accelerates the metabolic process in the body. The only contraindication to use is individual wax intolerance.

Tincture of wax moth. Tincture (extract) of wax moth larvae contains free amino acids, mono- and disaccharides, nucleic bases and their derivatives, fatty acids, biologically important macro- and microelements (a lot of zinc and magnesium). The preparation contains biologically active substances produced by bees, as well as components that stimulate the growth and development of cells [9]. But the most important thing is the cerase enzyme it contains, which helps to cleanse the respiratory tract and actively resists bronchopulmonary diseases [10]. When studying the pharmacological properties of the wax moth larvae extract, it was found that the drug is low-toxic, stable during storage and does not give undesirable side effects. The alcoholic extract of wax moth larvae has been successfully applied for the treatment of chronic bronchopulmonary diseases (including in pediatrics) when conventional treatment (antibiotics or other chemotherapeutic methods) does not give a positive result. The valuable qualities of the tincture (extract) of wax moth larvae are the absence of toxicity, high efficiency, no pharmacological and medical risk; compatibility when used with pharmaceuticals and storage stability (up to 5 years). It was carried out many scientific studies of wax moth tincture, as a result of which undesirable side effects have not been identified.

The main contraindication to the use of wax moth tincture is individual intolerance to beekeeping products.

PROPOLIS OIL (10-20% concentration). Propolis (also called "bee glue") is a plasticine-like substance produced by bees. About 50-60% propolis consists of resins and pollen balsam. It contains resins, waxes and essential oils, which have antiviral effect, tannins, which have an anti-inflammatory effect, help the regeneration of damaged tissues; terpenic acids, which have a pronounced antifungal effect. Also propolis includes kaempferol, rhamnazine, rhamnocentrin, acacetin, isorhamnetin, which have an active antimicrobial and wound healing effect [11]. Bee glue also contains organic acids, in particular: benzoic, coffee, cinnamon, which effectively stop the development of bacteria, and also have analgesic properties [12]. In total, this the product contains about 50 active substances [13]. The ability of propolis to actively eliminate a wide range of harmful microorganisms, suppress their activity, including even tubercle bacillus, various types of viruses, fungi, candidiasis, and, most importantly, is able to protect the body from viral attacks, has been established. Due to the fact that the composition of the propolis substance is different and it is collected thanks to various plants, microorganisms do not develop addiction to it. When applied to mucous membranes the shell is absorbed up to 20%. It does not accumulate in the body and is excreted mainly by the kidneys during the day. Propolis is able to significantly slow down the development and growth of viruses, and it can also be used for prophylaxis, preventing the further development of a viral infection [14]. It is undesirable to use propolis oil for allergic dermatitis and negative reactions to bee products [15].

Materials and Methods

A test of the scheme for the prevention of viral diseases, including COVID-19, was carried out by volunteers during February-December 2020. and January-February 2021. For preventive purposes (per 1 person), the following products are introduced into the diet in Recommended Doses:

- 1. Royal jelly (daily dose 0.25-0.50 g).
- 2. Zabrus (daily dose -30-40g).
- 3. Tincture of bee moth (daily dose 8-4 drops / 10 kg of body weight).
 - 4. Propolis oil (daily dose 1-1.5 g).

Mode of Application

- a. Royal jelly $(0.25\text{-}0.50\,\text{g})$ on an empty stomach, 30 minutes before the morning meal, sublingually (by sucking under the tongue).
- b. Zabrus (30-40 g) after the morning meal, chew thoroughly for 15-20 minutes.
- c. Tinctures of wax moth 2 times a day (4-2 drops / 10~kg of a person's body weight 30 minutes before a lunchtime meal + 4-2 drops / 10~kg of a person's body weight 30 minutes before an evening meal), after diluting in 1-2 tablespoons of water.

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d. Propolis oil (1-1.5 g) - it is necessary to lubricate the nasal mucosa before going outside (or going to work).

The mechanism of substantiation of substances is due to the absorption of components and their assimilation by the lymphatic system of the human body. Mechanism of action of substances ensures the prevention of viral diseases, including COVID-19 by enhancing immunity, improving metabolism, optimizing the anticoagulant indicators of protection of the nasopharynx (primarily the oral cavity) from the penetration of viruses, and also provides an increase in the working capacity of the human body. The presence in the proposed substances of a significant amount of the enzyme catalase provides protection of the cells lining the internal the surface of the alveoli in the lungs, has an anti-inflammatory effect and regulates the production of cytokines that are involved in the body's immune response.

Substances

Royal jelly obtained from apiaries in Ukraine. Bee moth tincture. For its preparation, young (not passed to the pupation stage) larvae of wax moth and 70 degree ethyl alcohol in a ratio of 2:10 were used. After mixing the prepared components, we stand them in a dark cool place for 30 to 45 days. Propolis oil. For its preparation, propolis (20%) and vegetable oil (80%) were used. The extraction of propolis is carried out with vegetable oil at a temperature of degrees Celsius for 2 hours. The drug contains a large amount of natural antibiotics, does not have an irritating effect.

Induction and Clinical Evaluation

Groups of volunteers (8 groups of 100 people, age composition 30-60 years-40% and 61-82 years-60%) took the recommended product for 90 days and again, after 180 days, according to the proposed scheme (4 groups of 100-person age composition is the same):

- a. Royal jelly $(0.25\text{-}0.50\,\mathrm{g})$ on an empty stomach, 30 minutes before the morning meal, sublingually (by sucking under the tongue).
- b. Zabrus (30-40 g) after the morning meal, chew thoroughly for 15-20 minutes. 3) Tinctures of wax moth 2 times a day (4-2 drops / 10 kg of a person's body weight 30 minutes before a lunchtime meal + 4-2 drops / 10 kg of a person's body weight 30 minutes before an evening meal), after diluting in 1-2 tablespoons of water.
- c. Propolis oil (1-1.5g) it is necessary to lubricate the nasal mucosa before going outside (or going to work).

The use of the recommended products did not cause any side effects. There is an increase in tone and performance.

Statistics

Not a single case of morbidity, including COVID-19, was observed.

Obtained Results

The applied prophylaxis scheme provided 100% protection against viral diseases, including COVID-19. The use of this prophylaxis regimen, including COVID-19, can prevent the development of a coronavirus infection pandemic caused by the SARS-CoV-2 coronavirus. In most cases, a concomitant result is noted - an increase in tone and performance. The prophylaxis course lasts 1.5 months and is carried out twice a year. It is better to start it from October to December, and from March to May. It should be noted that improper use of the prophylaxis regimen without taking into account the individual characteristics of the organism can be harmful, which will cause disappointment and give rise to mistrust in its effectiveness.

Discussion

The positive results from the use of royal jelly, zabrus, tincture of wax moth, propolis oil in the prevention of viral diseases represent an attractive concept for the development of new pharmaceutical products and treatments for COVID-19 [16]. Of particular interest are preparations based on wax moth, which, in addition to antiviral action, also have cardioprotective properties, as well as antituberculosis activity [17-37].

Findings

Results of the application of the scheme for the prevention of viral diseases, including COVID-19 three years in the context of the growing pace of the pandemic coronavirus infection caused by the SARS-CoV-2 coronavirus have shown its effectiveness and stability. 1670 people underwent prevention of viral diseases according to the proposed scheme; not a single case of covid disease has been recorded. The limitation is the negative reaction to beekeeping products, which is typical for about 5% of the total population.

Conflict of Interests

Author Sergey Roslyak is an independent researcher who is not an employee of government agencies and private companies that offer contract development services for the pharmaceutical industry. This invention (registration number a 2020 03366 dated 06/03/2020) relates to medicine and can be used as a method for the prevention of viral diseases, including COVID-19. If you interested in using this invention, I am completely free to provide the necessary materials.

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Used Substances

This study was fully funded by the author. The wax moth tincture and propolis oil were made by the author.

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