

Has been 42 years since the International Symposium on the substance 1. During this time, there is considerable evidence on the medical properties propolis [7, 9, 10, 11, 12, 13]. However, the issues involved with drugs obtained from propolis reduce age-related risks, enhance the quality of life in elderly patients ages are not known until the end. In the present work aimed to study the effect of preparations of propolis, in time for a group of elderly and senile age. With all the science and practice of observations and facts the question remains is propolis substance may affect the human aging process? How long does it take? If the biological age is a feature of the body, could reduce the gap PV and propolis BV? The term "biological age" appeared in 30-40 years of the twentieth century with the writings of Russian scientists in g. Štefko, d. g. Rokhlin, etc.

Surveillance was conducted within 2 years. Randomly conducted a survey of 200 people aged 60 to 86 years. (Fig. 1). Participants split into two groups and 60-69 years (n = 108; 48 men and 60 women) and b 70-86 years (n = 92; 42 men and 50 women). In each of a and b groups, half of the participants included a control group. After two years of observations at the end of the experiment the human sty 163 the rest eliminated for various reasons. In the observations did not participate a person suffering from diabetes, stroke and cancer. The control group took 5% solution of honey, and a pilot group of 5% aqueous extract of propolis, ldrive lymph medicinal herbs (currant leaf, leaf bergenia, rosehips, tansy, radiola pink, Immortelle, bark krushin). (Fig. 2). Of each of the mentioned crops take on 100 gram, mix with other plants. One table spoon, with top, collection, fall asleep in brought to boil 0. 5 l of water, pushing 30-40 minutes, filter, add to taste 1-2 tablespoons of honey. During 23 months of testimony, some plants cleaned out or replaced. The solution was in the form of heat on the 50, 100, 150 grams 3 times a day for 30 minutes before eating. Water infusion of propolis produced by infusion of pure propolis in a thermos at the rate of 5 grams per 100 ml of water, take 10, 20, 30, 40, 50 ml. Propolis and herbal courses were 5-7 days, and then a break 3-4 days. Then welcome increased to 10 days and a break to 5-7 days. Evaluating the physical condition, the rate can be continued 5-7 days, then followed the break in 1-2 months. Reception of propolis and medicinal herbs lasted 23 months. In some cases, the dose of propolis or reduced to 10 ml or 50 ml to increase. Reception of propolis conducted under the control of the blood (hemoglobin, prothrombin index on blood clotting time, prothrombin ratio determination ) and urine analysis (pH, the presence of protein, sugars).

Thermal loads were different. For some people it is a visit to the dry room temperature of 70-80 degrees and a humidity of 30% with the exposition -5 -7 minutes. For others it was a bathhouse with humidity up to 90% with a temperature not greater than 55-60 degrees. In some cases, it was a normal bath or shower. Sessions are conducted in the morning hours twice a week. In some cases, according to testimony given to patients through day 10% propolis honey with pollen, dry powder of bees to examine evidence of differences (BV) of (RO) ages, used anthropological criteria (height, standing and weight). Body weight (Mt) was determined in light clothing and no shoes, on an empty stomach was determined in kilograms using electronic scales. Included the calculation of vesorostovogo index (SDI) height in cm-100 = weight in kilograms, the torque index (CI) ratio of forces the brush to body weight multiplied by 100%.

In some cases, the biological age was determined by a blood test [5]. Blood pressure (systolic and diastolic DD SJ) was measured by the method of Korotkov (in mmHg) at his right hand in a sitting position 3 times with an interval of 5 minutes. Heart rate (beats/min) by palpation. Due to the fact that (BV) and (RO) may not match each other and vary by 10-20 years. Standard deviation was BV from PV within +5 years if it ranged from 5 to 10 years at the "bottom" result was assessed as "good", more than 10 years as a "very good". When the up button respectively as "a little premature aging and premature aging. An electrocardiogram (ECG) received on the standard equipment of the district clinics. Set age parameters of external breath, for example, holding your breath (ZD). The duration of breath hold is measured three times at an interval of 5 minutes. We chose the highest ZD.

Dental health was assessed as to their number and functional value. Not the presence of carious lesions of teeth. The materials processed statistically. Reliability of the differences between the control and experimental groups were assessed by student's t-test.

**Results and discussion.** Known facts that when physiological ageing Passport age PV and BV must be exactly the same in real life have significant differences, sometimes for 10-15 years [3, 2]. Differences of BV and PV represent the human ageing, i. e. BV is the age of the human body. For the elderly and old people is polimorbidnost', but we do not set ourselves the task of studying the structure and dynamics of the diseases. We are investigating the effect of preparations of propolis on older people, found a number of patterns. It was found that the reception preparations of propolis, limfogonnyh fitopreparations and thermal treatments reduced the difference of BV and PV. In the experimental group b increased line BV and PV up to 58%. For the control group b match remained at the level of 23%. Appearance in the experimental group the result "good" in the 12% is characterized by slowing aging. During observations in the control group has decreased to 16% of cases with BV and PV, that is noted. Based on these results, it can be assumed that the intoxication of metabolites and Xenobiotics in old age may influence. We used the invention of Levin management of interstitial humoral transport and lymphatic drainage of the tissues. Preparations containing propolis, we change the osmotic balance of blood, increasing the absorption of lymphatic capillaries. It promotes the growth of the volume of transport tissue fluid in the lymphatic system, purifying. We have identified the facts are consistent with the data on the increase in the old age of lymphatic capillaries.

Found that, since the research topic human height has changed little in both experimental and control groups a and b. At the beginning of the experiment average figures in the groups studied are equal in a  $164 \pm 2.8$  cm after the  $163 \pm 2.5$  cm. Group b  $168 \pm 3.1$  cm. at the end of the  $165 \pm 3.2$  cm.

We observed weight loss observed during two years in the control groups a and b can be attributed to muscle atrophy and osteoporosis. (Fig. 3). Whereas people taking propolis, especially in Group b at the end of the observation noted the stabilization of weight. In the control  $67.1 \pm 3.2$  to  $68.5 \pm 4.1$  whereas b  $69.5 \pm 3.2$  to  $68.5 \pm 4.1$ . Data that contradicts Muhlmann, (1900), noting that the weight loss observed in the seventh decade.

The most common characteristic of human motor function are indicators of strength, speed and endurance. We have examined the (DI). (Fig. 4). Was decreased (CI) all groups a and b in both the control and experimental groups in men with 66-83% to 40-67% and in women with a 48-51% to 48%-39. Group b were males, with (DI) has not changed. There was a difference, as in the control group and it was  $56 \pm 6.0$ , to b  $60 \pm 8.3$ . Greater differences were observed at

the end of the observation of DI in Group b at the beginning and  $57 \pm 2$  and at the end of  $51 \pm 4.3$ .

The level of blood-pressure is difficult to regulated value and depends on a number of parameters and functions of the various parts of the cardiovascular system. Among the subjects in group a (MD) was equal to  $133 \pm 1.45$ , and (D)  $77 \pm 1.08$  units in subsequent age group (b) grew in intensity (SD)  $151 \pm 2.4$ , and (D) remained doubtful magnifications  $81 \pm 1.74$ . that does not conflict with data [1]. observation of gender differences in experimental groups a and b (SD) not differed so significantly In group a, (MD), women in the Group and  $141 \pm 3.4$ , in Group b  $142.9 \pm 4.1$  males in group a  $141. \pm 3.6$  and group b  $124 \pm 4.1$ .

The ECG in both groups a and b is the length of the electromechanical systole. It may be noted that, in 28% of cases the options ECG, were standard, as noted previously, Soboleva (1963) [3]. According to her, not modified ECG may occur in old age from 15 to 70% of cases. Reception of propolis change does not affect the electrical axis of the heart. In group a, HEART RATE changes in small limits  $66 \pm 2.8$  in the control group and  $65 \pm 2.7$  in the pilot. Meanwhile in Group b, these differences are more pronounced, as in a control group of  $72 \pm 3.8$  while experimental  $67 \pm 3.1$ . You can also indicate that the hemodynamic parameters change slowly with age. It seems to us that we apply solutions of propolis procedures reduce sharp fluctuations in the cardiovascular system.

Assessing the State of the external respiration, it was noted that the indicator (ZD) group a people has not changed (test 28-30 seconds in experimental 29-34 seconds) in Group b, the difference was significant in the 18-20 seconds in an experimental 28-30 seconds. That could explain the movement of calcium in combination with phosphates and carbonates from the bones, in the form of poorly soluble salts in tendons, ligaments and other bodies. As a manifestation of the ossification of the cartilages of the ribs, which limits the respiratory motion of the chest. That reduces the required amount of air during inhalation, so a person has to breathe more often, as if breathing on the floor. As a consequence, we see the decline in ZD.

Analyzing the data collected for the study of the teeth of the two groups, at all stages of observations increased atrophy of the alveolar bone of the leg bone, exposure of necks, and then the roots of the teeth in all groups, a and b. individuals in groups a and b, with physiological aging of the masticatory apparatus of tooth Crown after lengthening of the period of retraction of the gingiva by blurring the enamel, and group a and b were the test subjects with a 70-50% presence of own teeth but the number of such people in both groups did not exceed 12% in group a and 8% in Group b. people who have attended their own teeth or removable constructions were more resistant physiological indexes, for example, DA, DI. The carious lesions of the teeth is not in the control group, while women accounted for 14.2% , 17.1% among men and in Group b for men 40.3% and women 28.4%. In the experimental groups, there was a reduction of this indicator in Group b to 25.4% in males and 19.5% for women. Studies [6] noted more defeats nekarioznogo nature teeth men 56% vs. 28% of cases in women in old age than in our observations.

At the beginning of the work was discovered discrepancies BV with PV in men in the control group and was two years  $63.6 \pm 0.8$  against  $61.5 \pm 2.1$ , while in Group b this difference increased from  $73.8 \pm 0.6$  to  $64.2 \pm 2.1$ , i. e. 9 years that characterizes the premature aging . Figure No. 5 Between BV and PV women in the control group  $63.9 \pm 0.8$  to  $66.2 \pm 1.7$  and group b  $84.2 \pm 0.7$  and  $70.5 \pm 2.2$ . The difference of 14 years. So

we're seeing a premature aging. Admission procedures, preparations of propolis, limfогonnyh fitopreparations reduces variance BV and PV. In the experimental group showed an increase in compliance of BV and PV 51% in group a, group b up to 58%, i. e. see slowing aging. To control groups this match remained at the lower limits of 23% in group a, and group b 18%. Applying the preparations of propolis, in conjunction with herbal fees and thermal treatments, we have made slow aging in experimental groups a and b. As evidenced by the obtained data (weight, power, SD, ZD, refinery) on reducing discrepancies PV and BV in both group a and group b.

## Conclusions

1. Apitherapy, together with Fito- and thermotherapy in terms of observations is an effective means of reducing the risks of premature aging. This is particularly evident in Group b at the final stage of the observation. Marked difference between the PV and BV, in the control groups in 12-15 years, testifies to the accelerated aging of the human body as the beginning of observations, and upon their completion.
2. Oral propolis on the attraction a long time has its own characteristics. If in a group appointment can byt'1-3 times a day, the Group b should take 2-6 times, but a smaller dose, sometimes over short periods of time ranging from a few days to two or three weeks with long intervals. Reception of propolis has a cumulative effect.
3. Despite the marked increase in SD control subgroups a and b, in the experimental subgroups of this growth was small . Detected different hemodynamic indices were not always clear. In confirmation of this-"with blood pressure in the elderly, contrary to the opinion should be very little. " Vernant [3].
4. In view of the fact that in clinical practice to separate age and pathological changes in elderly patients ages quite difficult. In this regard, we have noted the positive developments, DI, ZD, weight in people of elderly and senile age with use of propolis has positive dynamics for both the prevention of age and pathological changes.

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