MINISTRY OF HEALTH OF GEORGIA G.M. Mukhadze Scientific and Research Institute of Blood Transfusion 1961 Papers Volume VII B. Maghlakelidze ON THE EFFECTS OF CAMELYN PREPARATE ON GERMAL TUNES.

Honey as a medicinal agent has been known since ancient times. It is still widely used in modern medicine against gastrointestinal diseases (Vanderer 1946, F. Menshikov, S. Feldman, P. Medovikov, A. Geltman, 1949), diseases of the nervous system and anemia (Tselskij 1946), in the practice of childhood diseases (Frauslender and Emrich (1946), Golumb et al. N. Yorish (1946) successfully uses honey for lung abscess. According to the study of D. Rosiiskij and A. Tevi (1948), honey contains 74% glucose and fructose, 20% water, and the rest is sucrose, maltose, melite, deltin, dextrin, organic acids, phacogen-aromatic, coloring and other substances. It also contains mineral substances: calcium, magnesium, sodium, iron, copper, zinc; phosphoric, sulfuric and other acids; chlorine, beeswax, ferments, invertase, diastase and a ferment with pepsin-like properties, as well as vitamins A, B, C and inhibins with antibacterial properties. The antibacterial properties of honey are reported by Lubarsky (1891), Zaketa (1919), V. Temnov (1944), P. Kataev (1945),

F. Kaganov (1957) and others. We used honey as a therapeutic agent for the treatment of suppurative wounds back in 1946. Clinical observation of sufficient material and obtaining excellent results led us to isolate from honey a preparation for parenteral administration into the body. As a result of the work carried out in this direction, we obtained a liquid from honey (1946-1949), conventionally known as the preparation "M". The mentioned preparation is a yellowish transparent liquid, pH -2.03-3.45, specific gravity is higher than that of water, at a dilution of 1:4; 1:8 the pH of the preparation does not change. Currently, the preparation is used in liquid and powder form. Studies of the preparation "M" in experiments have shown that it does not have pyrogenic and toxic properties (Institute of Experimental and Clinical Hematology of the Academy of Sciences of Georgia, Academician K. Eristavi). It can be introduced into the body both intravenously and intramuscularly. The product has strong antibacterial properties not only against staphylococci, streptococci and enteric bacteria, but also against viral infections (G. Mukhadze Blood Transfusion Institute, Vaccine and Serum Institute, All-Union Institute of Cancer Pathology and Therapy). The broad spectrum of antibacterial activity of the "M" preparation became the basis for the study of its anticancer properties. Research was carried out in Tbilisi, as well as at the Institute of Oncology of the All-Union Medical Academy (Leningrad) under the supervision of academician L. Shabad. Testing of the preparation in the experiment was carried out on both spontaneous and transplanted tumors (mouse and rat sarcomas). Dozens of animals were tested in different series. As a result of the observations, it was found that the preparation inhibits tumor growth. Under its influence, spontaneous, as well as transplanted, tumors shrink rapidly. Micromorphological necrosis of tumor cells and hemorrhages in places were marked. After determining the aforementioned biological properties, the "M" preparation was used in the clinic to test its effect on malignant tumors. We tried to select, depending on the location, the forms of the tumor, the actual determination of which would be possible through biopsy. The otorhinolaryngology department of the Central Republican Clinical Hospital (headed by Prof. A. Chargeishvili) was used for this purpose. Thus, the effect of Preparation "M" was studied mainly on laryngeal tumors at an early stage. Preparation "M"

were injected intramuscularly, 1-3 ml 3 times a day. In addition, they were given powder of the 0.5 formulation 3 times a day at intervals between injections. For illustrative purposes, we will give some cases. Case I (case history 7709), patient Kh.S. 43 years old, was admitted to the otorhinolaryngology department of the Central Republican Clinical Hospital 24/X-57 as an emergency. Clinical diagnosis: cancer of the larynx. The patient has heavy breathing, cyanosis on the face and mouth. Pulse rate 120 per minute. A tracheotomy was performed, after which breathing was restored. The patient had been ill for a year, having previously been admitted to the same department for a laryngeal tumor, where biopsy material was taken. Histomorphologic analysis revealed a diagnosis of keratinized squamous cell epithelial carcinoma (see Figure 1). Wassermann reaction was negative. Figure 1: Squamous epithelial carcinoma with keratinization. Figure 2. flat epithelial carcinoma with keratosis. Laryngoscopy: marked by severe swelling in the arytenoid cartilage area due to the absence of visible vocal cords. On 29/XI-57, treatment with preparation "M" was recommended. On 23/XI-57 repeated laryngoscopy: laryngeal swelling disappeared. The glottis slit is wide, tight closure of the tracheotomy tube allows free breathing. The left vocal cord has a dead color. In neoplasm, the anterior spiracle may be white with ulceration.

I saw. After 38 days of laryngoscopy treatment: the articular cartilage area slightly swollen with a smooth surface, slightly swollen on the left side near the vocal cord. The surface is smooth, without ulcers. The vocal cords are mobile. They approach well during phonation, and no neoplasm was marked. The breathing tracheotomy tube was removed, the patient can speak freely. On the 40th day (7/XII-57) since the beginning of treatment, he was discharged from the clinic in good condition. After three years, he is in good health. Case II (case history No. 157), patient D. OJ, 25 years old. On 25/V-58 he was admitted to the otorhinolaryngology department of the Central Republican Clinical Hospital.

Clinical diagnosis: cancer of the larynx. He has been ill for 2 weeks, has lost his voice, has pain when swallowing and speaking. Laryngoscopy: both vocal cords are bloodied and thickened. A neoplasm is observed in front of the left cord in the upper third, from which biopsy material of the neoplasm was taken. Histomorphological analysis showed a diagnosis of squamous cell carcinoma with keratosis (see Figure 2). On 2/VI-58, treatment with "M" was recommended. After 15 days of treatment, the patient had no pain and can speak freely. Laryngoscopy: congestion and swelling of the vocal cords disappeared. A small swelling was marked in the upper third of the left cord, in the area of the tumor. No laryngeal cancer was found after 24 days of treatment. (17/VII58) The patient was discharged from the clinic in good health, two and a half years have passed, and the patient still feels healthy. Case III (interview no. 4766), patient G.E., 65 years old. On 9/VII-57 he was admitted to the otorhinolaryngology department of the Central Republican Clinical Hospital.

Clinical diagnosis: cancer of the larynx. Laryngoscopy: the vocal cords are not visible either during inspiration or expiration. The false cords are completely covered by infiltration. A peck-like growth with an uneven surface was found in the anterior spiracle on the right tumor. A biopsy was performed. On the basis of histomorphological analysis, flat cell carcinoma of the epithelium without keratosis was diagnosed (see Figure 3). Wassermann reaction negative. On 11/VII-57

Treatment with preparation "M" was started. After 20 days, the swelling of the false strings completely disappeared. Both vocal cords are visible. The left cord is slightly thickened, normal, mobile, serrated. Tumor growth on the right cord is not marked. The cord is freely movable. Breathing is free, he speaks freely, after twenty days of treatment on 1/VIII57, he was discharged from the clinic in good condition. Three years later, he is still doing well. Figure 3: Flat epithelial carcinoma without keratosis. Figure 4: Flat epithelial carcinoma with keratosis. Case IV (interview no. 194), patient K., age 60, was admitted to the otorhinolaryngology department of the Central Republican Clinical Hospital on 8/I-60. Clinical diagnosis: cancer of the larynx. He had been ill for a year, and gradually his voice became hoarse and he had pain in swallowing. Laryngoscopy was performed on 13/I-60: left vocal cord completely involved with uneven, shaggy superficial tumor, spread subcortically. The right vocal cord thickened and congested. A tumor the size of a grain of white wheat was observed in its center. The laryngeal valve and arytenoid cartilage are unchanged. He has a hoarse voice. A biopsy was performed. Based on histomorphological analysis, the diagnosis was squamous cell carcinoma with keratosis (see Figure 4). Wassermann reaction was negative. For 16 days, the patient was treated with penicillin, novocaine and aerosol. The treatment was unsuccessful. On 24/I- 60, treatment with "M" was started. 30/I-60 (7th day of treatment) by laryngoscopy: on the left vocal cord, the tumor has significantly shrunk, it can be cleaned. The right vocal cord has congestion. on 8/II-60 the voice is no longer hoarse. The tumor has decreased in volume. A small white incrustation is visible in its center. After 22 days (13/II-60)of laryngoscopic treatment: vocal cords clear, pink, mobile. No tumor was observed. The patient speaks freely. No complaints. On 20/II-60 he was discharged from the clinic in good condition. One year has passed, he continues to enjoy good health. In addition to the above four cases, the preparation

"M" treated 12 patients with laryngeal cancer. In 10 cases the cancer was diagnosed clinically and histomorphologically, in two only clinically (case histories 3354 - 5670). Eight patients were discharged home in good health (case histories No. 171-2090-2011-190-3544-291-6370-5670). Two patients (case history no. 2011-190) returned with tumor recurrence at the 8th and 9th month. The remaining 6 patients are in good condition. Follow-up period 2-3 years. 4 patients (stage III and IV disease. Case histories No. 6343-1294-6713-4724) were discharged home in an improved state.