

**MONOGRAPH OF PROF. JAN KABELÍK'S TEAM ON THE STUDY OF THE EFFECTS  
OF CANNABIS**

*"Cannabis as medicine"*

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*Monograph by Prof. Jan Kabelík's team on the study of the effects of cannabis*

In the fifties, Prof. Jan Kabelík and his colleagues from his research institute in Velké Losiny found remarkably effective bactericidal and anesthetic substances in cannabis during a systematic survey of plant antibiotics. Based on his studies, Kabelík collected medical data on cannabis from the most recent history. The preliminary results of these experiments with cannabis extracts aroused such interest that a wide collaboration developed. In addition to his institute, Prof. Kabelík also recruited and involved in the study of Cannabis indica research institutes of chemical and pharmacology of Palacký University and their heads and aroused the fruitful interest of numerous clinicians who, on the basis of theoretical knowledge, immediately proceeded to the practical application of these preparations.

A set of lectures and discussions on the topic "Cannabis as a medicine" was created at a scientific conference of universities in Olomouc on December 10, 1954. An entire section of it was devoted to the fully medicinal, especially antibiotic effect of cannabis.

This effect was discovered, correctly rediscovered, in a systematic examination of plants for antibiotics. Cannabis aroused special interest of Czechoslovak scientists both because of the intensity of the effect, the stability of antibiotics, which at the same time have a strong analgesic effect, and because these substances can be obtained from industrial waste, while hops are the same substances that the brewing industry needs.

In the Middle Ages and in the folk medicine of many countries, the antibiotic and analgesic properties of cannabis were known. As an antibacterial, it was used mainly in South Africa. The high antibiotic effect has been rediscovered and confirmed by Kabelík's team and the main part of this monograph is devoted to this healing effect. Hemp extract often works where all previous antibiotics have failed and also has a good analgesic effect.

So far, the most advanced clinically has been the testing of an antibiotic agent made from cannabis in dentistry. At the same time, the analgesic effect of cannabis is particularly beneficial here. Furthermore, the effect of cannabis extract in ENT was studied, especially on otitis media.

In the next part, experience with substances from hemp seed - seed is presented. For the time being, these are substances extracted by water, or saline solutions and hot milk, i.e. mainly edestin, choline and trigoneline. The first is a perfect protein, exceptional in the plant kingdom, as it supplies all the important amino acids important for the treatment of tuberculosis and for growth, the other substances are important for the liver.

## **Documents included in the study**

### **Introduction of the study "Cannabis as a medicine"**

Introductory text by prof. Kabelík to the monograph, explaining the history of its origin and the reasons for studying this plant.

### **Historical overview of the therapeutic effect of cannabis - cannabis**

An overview of indications of cannabis - hemp tops and seeds - from old herbaria, folk medicine and today's official medicine is given, if the remnants of the use of Extr. cannabis. It is noted that the ancients used the antibiotic and analgesic effects of cannabis in particular, which today's medicine has forgotten. The hashish

effect of cannabis will not be discussed in these works, if only because our cannabis does not have narcotic effects.

### **Antibacterial effect of substances from Cannabis indica L.**

In the Institute of Hygienic Medicine of the Faculty of Medicine of Palacký University in Olomouc, a systematic survey of the flora of our climate zone was carried out for the content of substances with antibacterial effects. Over 3,000 different plant species were processed, some of which showed relatively good antibacterial effects. This way of systematic research also led to Cannabis indica - Indian cannabis, which scientists subjected to thorough research. Preparation of extracts, bacteriological technique, spectrum of bacteria sensitive to Cannabis indica.

### **Isolation of other substances from the leaves of Indian cannabis sativa L.**

It has been found that the antibacterial substances of cannabis leaves (Cannabis sativa L., indica variety) have an acidic character. Based on this, an acid was isolated in the form of its acetyl derivative, which has retained antibacterial properties against some bacterial strains. This substance resembles the previously isolated cannabidiol and has therefore been called cannabidiolic acid.

### **Pharmacodynamic effect of cannabis indica substances**

Evaluation of the pharmacological effect of substances present in Cannabis indica. During the analysis of the substances contained in Cannabis indica, several distinct effects were found. These are analgesic, anticonvulsant and locally anaesthetic effects. Finally, the toxicity and local tolerability of these substances were determined. All pharmacological effects were found in the crude isolated extract of Cannabis indica, while the two chemically pure substances isolated from cannabis proved to be ineffective. It is therefore likely that the carriers of the effects caused by the cannabis extract are other substances that have not yet been isolated in their pure state, and it is also possible that the raw extract represents a balanced set of pharmacologically differently acting substances that can potentiate each other.

### **Therapeutic results of the application of cannabis indica substances in dentistry**

The application of active substances from Cannabis indica shows a clear therapeutic effect in the treatment of herpes labialis, periodontal painful pockets, gingival hoods above wisdom teeth, dry socket, canker sores and ulcerative gingivostomatitis. More than 500 people were treated in this way.

### **Use of cannabis indica extract in conservative dentistry**

Furthermore, substances from Cannabis indica mixed with sterile dentin powder were used for treatment aimed at preserving vital dental pulp. The anesthetic effect of extr. Cannabis, in many unsuccessfully treated cases there was a painlessness for many days, in many even painless necrosis.

### **Effect of cannabis indica substances in otorhinolaryngology**

Excellent effect of antibiotics from cannabis has been found in acute otitis, furuncles of the entrance to the nose and external auditory canal. In chronic otitis, it has proven itself in most cases, fails in pyocyanea and proteum infections. A particularly striking effect was in sinusitis and namely in bilateral sinusitis maxillaris, where one side was treated with penicillin without success, the other with cannabis was cured by 3 punctures. Side treated with penicillin without success, then smoothly treated with cannabis.

### **Cannabis indica in the treatment of chronic otitis media**

In a short-term study lasting 3 weeks, Cannabis indica was tested in 18 patients with chronic otitis media and in 4 patients in the wound after anthropomy. In 13 cases of chronic otitis, there was a substantial improvement.

## **Preliminary Communication on the Local Effect of Cannabis indica in the Treatment of Specific Fistulas**

Except in cases of pyocyanal infection, cannabis extract has a beneficial healing effect in chronic specific fistulas.

## **The importance of hemp seed in the therapy of tuberculosis**

The use of hemp seed in the treatment of tuberculosis is based on thirty years of experience gained in the field of medical nutrition. Hemp seed ground and extracted with milk at a temperature between 60 and 80 ° C has a significant therapeutic effect even in small doses. Research with a group of 16 tuberculosis children successfully treated with a diet supplemented with hemp seed extract in 1938 and another group of 10 children at the end of World War II. Based on detailed theoretical studies on the composition and nutritional value of the seed, scientists have come to the conclusion that it is a valuable protective food suitable for tuberculosis patients who are overfed today.

## **Summary of the study "Cannabis as a medicine"**

Summary of the results of the entire study.

## **Discussion on papers**

Discussion on individual papers on the topic of cannabis presented at the conference.