

## PRIMENA PREPARATA NA BAZI KONOPLJE KOD ONKOLOŠKIH PACIJENATA

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Primena konoplje (*Cannabis sativa* L., Cannabaceae) u terapijske svrhe je poznata od davnina. Kada je u pitanju palijativna nega i lečenje pacijenata obolelih od kancera, upotreba konoplje se pominje tek sedamdesetih godina prošlog veka. Do sada je izolovano preko 400 biološki aktivnih jedinjenja iz ove biljne vrste, dok su najviše istraživani kanabidiol (CBD), kao glavni nepsihooaktivni i  $\Delta^9$ -tetrahidrokanabiol ( $\Delta^9$ -THC), kao glavni psihoaktivni predstavnik. Brojna preklinička ispitivanja istakla su fitokanabinoide kao potencijalne agense u lečenju kancera različitih organa kao što su pluća, želudac, kolon i leukemija. Međutim, zbog nedovoljno kliničkih podataka o njihovoj efikasnosti, oni nisu lekovi izbora u većini slučajeva. Kliničke studije sprovedene su samo za neke vrste tumora kao što je rekurentni glioblastom rezistentan na hemio- i radioterapiju. Primena  $\Delta^9$ -THC-a kod ovih pacijenata samo je u retkim slučajevima dovela do poboljšanja simptoma, u većini slučajeva stanje je bilo nepromenjeno ili je čak dolazilo do pogoršanja (1). Primena kanabinoida je od najvećeg značaja u simptomatskom lečenju onkoloških pacijenata. Sintetski kanabinoid nabilon pokazao se kao efikasan u suzbijanju mučnine i povraćanja, kao i u povećanju apetita kod pacijenata na hemioterapiji (2). Kanabinoidi su u prekliničkim studijama pokazali potencijal za širok spektar farmakoloških aktivnosti, međutim, zbog nedovoljno podataka iz kliničkih studija njihova upotreba je danas limitirana. Neophodno je sprovesti odgovarajuća istraživanja kako bi ova jedinjenja našla svoju adekvatnu primenu u terapiji onkoloških pacijenata.

### Literatura

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## THE APPLICATION OF HEMP-BASED PREPARATIONS IN ONCOLOGY PATIENTS

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The use of hemp (*Cannabis sativa* L., Cannabaceae) for therapeutic purposes has been known since ancient times. Regarding palliative care and treatment of cancer patients, the hemp is gaining scientific interest in the seventies of the last century. So far, more than 400 biologically active compounds have been isolated from hemp, while the most studied ones are cannabidiol (CBD), as the main non-psychoactive and  $\Delta^9$ -tetrahydrocannabinol ( $\Delta^9$ -THC), as the main psychoactive compound. Numerous preclinical studies have highlighted phytocannabinoids as potential agents for treatment of various organs carcinoma, such as lungs, stomach, colon and leukemia. However, due to insufficient clinical data on the effectiveness of these substances, they are not the drugs of choice in most cases. Clinical studies have been conducted only for some types of tumors, such as recurrent glioblastoma resistant to chemo- and radiotherapy. Administration of  $\Delta^9$ -THC in these patients only in some cases led to improvement of symptoms, and in most cases the condition remained the same or even worsened (1). The application of cannabinoids is of the greatest importance in the symptomatic treatment of oncology patients. The synthetic cannabinoid nabilone has been shown to be effective in suppressing nausea and vomiting, as well as increasing appetite in chemotherapy patients (2). Cannabinoids have shown the potential for a wide range of pharmacological activities in preclinical studies, however, insufficient clinical data limit their use. It is necessary to conduct more research in order for these compounds to find adequate place in the therapy of oncology patients.

### References

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