Cannabis-based medication development for cocaine abuse, effect of a facial cream containing cannabidiol and hemp, anti-cancer potential of cannabinoids and more

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The Cannabinoids Effect on Bone Formation and Bone Healing

This report covers the latest findings from studies investigating the skeletal endocannabinoid (EC) system and its involvement in bone formation and resorption. CBD treatment was shown to enhance bone healing but requires additional clinical trials for validation. Experimental evidence from animals and humans strongly suggests that CB1 and CB2 are bone protectives. Studies in mice determined that CB2 activation stimulates bone formation and inhibits bone resorption. Taken together, there is growing evidence that the EC system holds important roles in skeletal homeostasis throughout life.
THC and CBD Phytocannabinoids as Potential Therapeutics for Parkinson’s and Alzheimer’s Diseases

Current Aspects of the Endocannabinoid System and Targeted THC and CBD Phytocannabinoids as Potential Therapeutics for Parkinson’s and Alzheimer’s Diseases: a Review looks at CBD as potential treatments. Neurodegeneration leading to Parkinson’s disease (PD) and Alzheimer’s disease (AD) has become a major health burden globally. Current treatments mainly target controlling symptoms and there are no therapeutics available in clinical practice to prevent the neurodegeneration or inducing neuronal repairing. Whether genetic, environmental, and behavioral, the exact mechanisms involved are on a molecular level and yet to be determined. The endocannabinoid system involved in the onset of PD and AD are examined to develop therapeutics drugs targeting preventing, ceasing, and repairing neurodegeneration. This is fertile ground for future investigations.

Cannabis-Based Medication Development for Cocaine Abuse

In Neuropharmacology, Xie2-64, a novel CB2R ligand, reduces cocaine abuse-related behaviors in rodents the researchers focus on cannabis-based medication development. Specifically, the cannabinoid CB 1 receptor, CB 1 R, antagonists, and inverse agonists such as Rimonabant, which failed due to significant side effects. The outcomes thus far are

- CB1R ligands studied for addiction treatment, failed clinical trials.
- Xie2-64, a novel CB2R inverse agonist, inhibits cocaine reward and cocaine seeking.
- Xie2-64 reduces extracellular dopamine levels in the nucleus accumbens.
- CB2R inverse agonists warrant further studies as new treatments for cocaine use disorder.

Advancements in Adolescent Treatments and Recovery for Nicotine Addiction

[PDF] Advancements in Adolescent Treatments and Recovery for Nicotine Addiction

Current medications in development are being synthesized with the goal of personal addiction treatment and total rehabilitation. The future medication in development include Rimonabant is a cannabinoid (CB-1) receptor antagonist developed to treat obesity and the metabolic syndrome. Clinical studies displayed rimonabant to be effective as an aid for smoking treatments. Cannabinoid receptors contribute to the reinforcing effects of nicotine action. The U.S. FDA has not approved rimonabant since it may cause adverse neuropsychiatric effects.

Cannabinoid Control of Neurogenic Inflammation
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Cannabinoids are known to have analgesic and anti-inflammatory properties in various compounds. In the *British Journal of Pharmacology* cannabinoid receptors are prime based on their presynaptic and terminal location, to inhibit synaptic transmission. They also possess the potential to regulate neurogenic inflammation. The study surveyed the neuropharmacological processes that make up the handling of antidromic depolarization of afferent nerve terminals by cannabinoids. In addition, to the control of neurogenic inflammation in different diseases. Thus, in addition to a direct effect on vascular smooth muscle and inflammatory cells, cannabinoids appear to reduce inflammation by silencing small diameter neurons.

Naturally Occurring Cannabinoids and their Role in Modulation of Cardiovascular Health

[NATURAL] Naturally Occurring Cannabinoids and their Role in Modulation of Cardiovascular Health

Endocannabinoid-like molecules, including phytocannabinoids and terpenes, are increasing as a promising option for cardiovascular health management. Published in the *Journal of Dietary Supplements*, lines of evidence suggest that the ECS plays a multifaceted cardiac and vascular system function. This assessment concentrated on the known role of the ECS in regulating the cardiovascular system. It included an analysis of evolving information, highlighting the therapeutic potential of naturally occurring non-psychoactive ECS modulators within the cardiovascular system. Additional translational research to explore the long-term treatment effects in diverse populations is needed.

Effect of an Emollient Cream Containing 0.5% Cannabidiol

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This research seeks to evaluate the short, after a single application, and long-term, after periodic application hydrating effect of a topical preparation. The formulation contains CBD and hemp oil on the volar forearm’s skin and the impact on instrumentally measured erythema. Evaluations are completed by a visual scoring technique measuring the appearance of irritation levels at 0 hours, 1 hour, and 4 weeks. The investigational product is an intensive emollient cream applied topically on the skin and manufactured by Avicanna Inca. This preparation contains widely used ingredients from mineral and botanical origin aimed at soothing and conditioning the skin and improving hydration. The moisturizer also contains 1% hemp oil rich in essential fatty acids and antioxidants as well as 0.5% of CBD with regulatory and conditioning effects on the skin.
Effect of a Facial Cream Containing Cannabidiol and Hemp

The investigators' objective is to assess the short, after a single application and long-term, after periodic application, the hydrating effect of a topical preparation. The formulation contains CBD and hemp oil on facial skin, and its effect erythema, appearance, instrumentally measured sebum production, and quality of life. Fifty-four healthy adults 18 years of age or older will receive the first application and will be evaluated according to the objectives defined in the study (short-term data). To assess the long-term effects; two other visits will be made at intervals of 2 weeks to determine the impact of topical skin application according to the study's parameters.

Role of cannabinoids in alcohol-induced neuroinflammation

Progress in Neuro-Psychopharmacology and Biological Psychiatry examined the endocannabinoid system modulation to determine if it could regulate the alcohol-induced neuroinflammation. Although direct CB1 activation can worsen alcohol consequences, targeting other components of the expanded endocannabinoid system may counterbalance the pro-inflammatory response. Emphasis included, alcohol exposure leads to a chronic pro-inflammatory profile in the CNS, the expanded endocannabinoid system is a key regulator of the neuroimmune response, CB1 activation is related to the deterioration of alcohol-induced neuroinflammation, cannabinoids modulate the pro-inflammatory and the anti-inflammatory signaling pathways, and targeting the PPARγ or the usage of OEA leads to promising outcomes.

Thus, cannabinoid modulation provides cooperative anti-inflammatory mechanisms that may help to resolve pathological neuroinflammation in an alcohol-dependent context.

Anti-Cancer Potential of Cannabinoids, Terpenes, and Flavonoids Present in Cannabis

A pilot clinical study looked at the potential of THC treatment in patients with recurrent glioblastoma. Cannabinoids have been suggested and shown to be effective in the treatment of various conditions. In cancer, the endocannabinoid system is altered. Cannabinoids appear to display anticancer effects in several models by suppressing the proliferation, migration and/or invasion of cancer cells, as well as tumor angiogenesis. The therapeutic use of cannabinoids in practice is limited to treating symptoms and pain.
associated with chemotherapy. In contrast, their potential use as cytotoxic drugs in chemotherapy still requires validation in patients. The possible anti-cancer effects of cannabinoids, terpenes, and flavonoids, present in cannabis are explored in this literature review.

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Dr. Diana Rangaves is Doctor of Pharmacy (Pharm D). She graduated from the University of California, San Francisco and specializes in pharmacotherapy management. Diana has a broad range of acute clinical background and ambulatory care. She was an academic college professor; teaching critical thinking, ethics, pharmacology, addiction, behavior patterns, pharmacy, and nursing. As a Clinical Pharmacist she is focused on chronic or disease state management.

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