

Format: Abstract ▾

Send to ▾

Cardiology. 2009;114(3):212-25. doi: 10.1159/000230691. Epub 2009 Jul 29.

Role of the endocannabinoid system in abdominal obesity and the implications for cardiovascular risk.

Rosenson RS¹.

Author information

Abstract

Several cardiometabolic factors present in obese and insulin-resistant individuals represent a continuum of increasing risk for the development of type 2 diabetes and cardiovascular disease. The importance of abdominal obesity as an independent risk factor is underscored by its association with adverse endocrine function. Recent evidence from animal and human studies has shown a role for the endocannabinoid system in maintaining energy balance and glucose and lipoprotein metabolism, with overactivity linked to aberrant glycemic and lipoprotein control, and a link to adiposity. Modulation of this system through endocannabinoid-receptor blockade has resulted in an improvement in a number of important risk factors in clinical trials, including visceral and subcutaneous abdominal adipose tissue, glucose tolerance, dyslipidemia and measures of inflammation. These findings may have significant implications for the management of patients at risk of developing cardiovascular and metabolic disease; however, the occurrence of psychiatric adverse events with rimonabant may preclude further development of centrally active endocannabinoid receptor antagonists for the treatment of cardiometabolic disorders. Future research is needed to explore the role of selective peripheral CB(1) receptor antagonists in the treatment of patients at high cardiometabolic risk.

Copyright 2009 S. Karger AG, Basel.

PMID: 19641317 DOI: [10.1159/000230691](https://doi.org/10.1159/000230691)

[Indexed for MEDLINE]




Publication type, MeSH terms, Substances

LinkOut - more resources

Full text links



Save items

 Add to Favorites 

Similar articles

Review The endocannabinoid system as a nove [J Am Osteopath Assoc. 2007]

Review Effect of blockage of the endocannabinoid [Pharmacol Rep. 2009]

Review Endocannabinoid system and cardiometab [Clin Pharmacol Ther. 2007]

Review Role of the endocannabinoid system in manager [Endocr Pract. 2007]

Review The endocannabinoid system and cardiometabolic [Int J Cardiol. 2009]

See reviews...

See all...

Cited by 2 PubMed Central articles

CB(1) antagonism restores hepatic insuli [Am J Physiol Endocrinol Metab...]

Review Endocannabinoids in liver disease. [Hepatology. 2011]

Related information

Articles frequently viewed together

MedGen

PubChem Compound

PubChem Compound (MeSH Keyword)

PubChem Substance

Cited in PMC


Recent Activity


[Turn Off](#) [Clear](#)

 Role of the endocannabinoid system in abdominal obesity ; PubMed

 The endocannabinoid system in obesity and type 2 diabetes. PubMed

 Cannabis and Δ9-tetrahydrocannabinol (THC) fi PubMed

 Cannabinol and cannabidiol exert opposing effects on rat feedin PubMed

 Cannabidiol Is a Potential Therapeutic for the Affective- PubMed

See more...

GETTING STARTED

- NCBI Education
- NCBI Help Manual
- NCBI Handbook
- Training & Tutorials
- Submit Data

RESOURCES

- Chemicals & Bioassays
- Data & Software
- DNA & RNA
- Domains & Structures
- Genes & Expression
- Genetics & Medicine
- Genomes & Maps
- Homology
- Literature
- Proteins
- Sequence Analysis
- Taxonomy
- Variation

POPULAR

- PubMed
- Bookshelf
- PubMed Central
- BLAST
- Nucleotide
- Genome
- SNP
- Gene
- Protein
- PubChem

FEATURED

- Genetic Testing Registry
- GenBank
- Reference Sequences
- Gene Expression Omnibus
- Genome Data Viewer
- Human Genome
- Mouse Genome
- Influenza Virus
- Primer-BLAST
- Sequence Read Archive

NCBI INFORMATION

- About NCBI
- Research at NCBI
- NCBI News & Blog
- NCBI FTP Site
- NCBI on Facebook
- NCBI on Twitter
- NCBI on YouTube
- Privacy Policy