Research Article
Volume 11:1, 2021

Metabolomics: Open Access

ISSN: 2153-0769 **Open Access**

Obese Manage, Multidisciplinary Medication

Jin-Yu Che, Hong-Ying Wu, Da-Yong Lu*

School of Life Science, Shanghai University, Shanghai, PRC, China

Abstract

Obesity is a prevalence metabolic phenotype that affects social and physical nature of human beings. For obese people, life-style management plays key roles. A small proportion of obesity persons are ineffective by lifestyle controls. Multidisciplinary medication is required.

Keywords: Obesity • Endocrinology • Human Genome • Inflammatory Factors • Mental Disorder • Metabolic Disorders

Introduction

In modern society, human image (body features and physical characters) plays key role for social and economic communication and well-beings. Obesity is a prevalence metabolic and physiological disorder caused by host-environmental consequences [1-6]. For most obese people, life-style management (exercise and food limitation) plays key roles for obesity manage. However, a small proportion of obesity persons are ineffective by lifestyle therapy [7]. In these special cases, in depth scientific and biomedical exploration is indispensable.

Multidisciplinary Medication

Currently, obesity control is divided into two domains; life-style and medicine. Both of them are focused on some nutritional categories. To reduce body-weight for refractory patients, different medical disciplines are associated Table 1.

Pathological Study

Given the complexity characters of human obesity, a great variety of pathophysiological molecules and pathways may be identified;

Table 1. Different medical disciplines associated with human obesity.

Disciplines	Molecules and pathways
Biochemical	Biologically active substance
Nutrition	Calculation of energy and calorie
Social	Communication skills and frequency
Physiology	Vitality and function
Pathology	Genetics & hormone
Psychiatry	Depression and cognitive impair
Pharmacology	Drug develop and application
Surgery	Gastric and tumor
Metabolic	Different types of hormone
Nursery	Physical or spiritual

***Address for Correspondence:** Da-Yong Lu, School of Life Science, Shanghai University, Shanghai, PRC, China, Tel: 4402036210657; E-mail: ludayong@shu.edu.cn*

Received 08 January 2021; **Accepted** 26 February 2021; **Published** 12 March 2021

Pathologic factorials (endocrinological factors)-leptin, thyroxine, insulin and many other Hormonal dysfunction (glucogen-like peptide-GLP)

Brain-visual-appetite axis (hypothalamic)

Psychiatric burden and disorder

Drug adverse effects (hormonal drugs, antibiotics or other drugs associated with human liver dysfunction)

Inflammatory factors (TNF secretion)

Tumor-induced (pituitary tumors and others)

Physiological change (adipose cells or tissues)

Genetic alleles and loci (loss-of-function or copy number changes of key genes and molecules) [8-23].

Future Therapeutics

To achieve targeted therapeutics for genetic/molecular abnormality, clinical treatments and new drug development is important [24-26]. Genetic/molecular abnormality needs to be supported by modern diagnosis [8-23,27,28].

Human conditions in the clinic are largely different. In order to better manage human obese patients, personalized medicine (PM) may be a future trend. Given the possibility of PM in different metabolic disease treatment [29-31], these therapeutic strategies may be widely used lately. To achieve better obesity treatments, new drug development and herbal medicine is also very useful in metabolic diseases [30-34]. Future approaches may be urgent and necessary.

Conclusion

Human obesity is a strong risk factor associated with human morbidity and mortality. Apart from life-style management, multidisciplinary medication should be a future trend.

Conflict of Interests

None

References

1. http//www.who.int/topics/obesity/en/
2. Lu DY, Che JY, Wu HY, and Yarla NS, et al. “Obesity, risks and managements.” *Metabolomics* 8(2018): e155.

3. Lu DY, Che JY, Lu Y, and Wu HY, et al. "An overview of obesity." *Metabolomics* 8 (2018): 200.
4. Jainta N, Grzyb K, and Otto-Buczkowska E. "Infection diseases and vaccination in patients with diabetes." *EC Diabetes & Metabolic Res* 3(2019): 91-97.
5. Lu DY, Che JY, Lu TR, and Lu Y, et al. "Pathology and treatments of obesity." *Trends in Medicine* 8 (2018): 157
6. Lu DY, Che JY, and Putta S. "Obese study, keep up the momentum." *Int J Endocrinology Res*. 1 (2018): 4-8
7. Brestoff JJR and Artis D. "Immune regulation of metabolic homeostasis in health and disease."*Cell* 161 (2015): 146-160
8. Yanai H. "VLDL is the leading actor in lipid abnormality in patients with diabetes and obesity."*J Endocrinol Metab* 7 (2017): 101-102
9. Steculorum SM, Paeger L, Bremser S. "Hypothalamic UDP increases in obesity and promotes feeding via P2Y6-dependent activation of AgRP neurons."*Cell* 162 (2015): 1404-1417
10. Lee YS, Kim JW, Osborne O. "Increased adipocyte O_2 consumption triggers HIF-1α, causing inflammation and insulin resistance in obesity." *Cell* 157: (2014): 1339-1352.
11. Quarta C, Schneider R, and Tschop MH. "Epigenetic ON/OFF switches for obesity."*Cell* 164 (2016): 341-342.
12. Dalgaard K, Landgraf K, and Heyne S. "Trim28 haploin sufficiency triggers bi-stable epigenetic obesity."*Cell* 164 (2016): 353-364.
13. Lu DY, Che JY, Lu Y, and Huang YK, et al. "Mini-review of obesity, etiology progresses and different therapeutics."*EC Diabetes & Metabolic Res* 3 (2019): 98-102.
14. Lu DY, Che JY, Yarla NS, and Putta S, et al. "Human obesity, pathological and therapeutic advances." *EC Pharmacology & Toxicology* 7 (2019): 231-238.
15. Singh A, Srivastav R, and Randey AK "Protective role of Terminalia Chebula in streptozotocin-induced diabetic mice for wound healing activity." *Brit J Medicine & Medical Res* 22 (2017): 1-8
16. Smith RE, Tran K, Richards KM, Luo R "Dietary carbohydrates that modulate the immune system."*Clinical Immunology, Endocrine and Metabolic Drugs*. 2 (2015): 35-42
17. Nzuza S,Zondi S, Hunchund R, Owira PMO "Highly active antiretroviral therapy-associated metabolic syndrome and lipodystrophy: pathophysiology and current therapeutic interventions."*J Endocrinol Metab* 7 (2017): 103-116.
18. Sgrawai P "An overview on adverse drug reactions." *EC Pharmaceutical Science* 2 (2015): 181-182.
19. Correa-Giannella ML, Machado UF "SLC2A4 gene: a promising target for pharmacogenomics of insulin resistance."*Pharmacogenomics* 14 (2013): 847-850.
20. Brettdeld C, Maver A, Aumuller E, and Peterlin B, et al. "Micro RNAs responsible for inflammation in obesity."*J Endocrinol Metab* 7 (2017): 77-85.
21. Van der Klaauw AA, and Farooqi IS "The hunger genes: pathways to obesity."*Cell* 161 (2015): 119-132.
22. Schwartz S "Psychiatry, psychology and climate change." *EC Psychology Psychiatry* 8 (2019): 574-576.
23. Putta S, Peluso I, Yarla NS "Diabetes mellitus and male aging, pharmacotherapeutics and clinical implications." *Current Pharmaceutical Design* 23 (2017): 6321-6346.
24. Lu DY, Che JY, Putta S, and Shen Y, et al. "Human obesity management, pathways and therapeutics beyond metabolic limitation." *EC Diabetes & Metabolic Res* 3 (2019).
25. Saxene M, Caturveelis S, Yadav SK, Modi DR "Anti-diabetic drugs and their effect in T2DM management."*EC Diabetes and Metabolic Research* 4 (2020): 56-61.
26. Lu DY, Lu TR, Chen EH, and Yarla NS, et al. "Keep up the pace of drug development evolution and expenditure."*Cancer Rep Rev* 2 (2018**):** 165.
27. Putta S, Kilari EK "A review on methods of estimation of advanced glycation end products." *World J Pharmac Res* 4 (2015): 689-699.
28. Lu DY, Che JY, Putta S, and Shen Y, et al. "Human obesity management, pathways and therapeutics beyond metabolic limitation." *EC Diabetes Metabolic Res* 3 (2019): 106-108.
29. Lu DY, Che JY, Shen Y, Xu B"Human obesity therapeutics, modern diagnosis and biomarker." *EC Pharmacology Toxicology* 7 (2019): 997-1000.
30. Putta S, Yarla NS, Peluso I, and Tiwari DK, et al. "Anthocyanins: Possible role as multitarget therapeutic agents for prevention and therapy of chronic diseases." *Current Pharmaceutical Design* 23 (2017): 4475-4483.
31. Lu DY, Che JY, Yarla NS, and Zhu H, et al. "Type 2 diabetes study, introduction and perspective." *Open Diabetes J* 8 (2018): 13-21.
32. Lu DY, Che JY, Yarla NS, and Wu HY, et al. "Type 2 diabetes treatment and drug development study."*The Open Diabetes J* 8 (2018): 22-33.
33. Lu DY, Lu TR "Drug discoveries from natural resources."*J Primary Health Care & General Practice* 3 (2019): pp28.
34. Lu DY, Lu TR "Herbal medicine in new era." *Hospice Palliative Med Int J* 3 (2019): 125-130.

How to cite this article: Jin-Yu Che, Hong-Ying Wu, Da-Yong Lu. "Obese Manage, Multidisciplinary Medication." *Metabolomics (Los Angel)* 11 (2021):283.