

Short Communication

Centralized aerobic-anaerobic energy balance compensation theory perspective in biomedicine

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Abstract

Recently announced centralized aerobic-anaerobic energy balance compensation (CAAEBC) theory has already demonstrated achievements in the treatment of arterial hypertension (AHT), diabetes myelitis (DM) and osteochondrosis. Such demonstration lifts the necessity to check the applicability of this theory to other non-communicable diseases (NCDs) and develop the proper way to model the main idea of CAAEBC.

Introduction

For a while the etiology of essential AHT was unclear. Namely, this is a reason why it was called essential by Mahomed and Frank in 1911 [1]. Even several years ago the scientific community felt that the knowledge about detailed mechanisms of conversion of pre-AHT to AHT was far from understood [2]. It needs to be underlined, that for a while the observations that AHT correlates with the brachiocephalic arterial blood flow issues existed. The vast majority of authors acknowledged statistical correlation [3-5]. As a matter of fact, we were able to find a single report, where AHT was considered a result of the obstructions of blood access to the brain [6].

Recently we explained through the development of CAAEBC theory why the access of arterial blood flow to the rhomboid fossa is so critical to the body internal conditions regulation [7]. The visual explanation is exhibited in Figure 1. So far, we have demonstrated, that the proposed approach helps the body regain control of arterial blood pressure (BP) [8], HbA1c [9] and vertebral cartilage [10]. Following the above-mentioned, let's discuss the directions of consecutive steps to find a place for CAAEBC theory in the garden of contemporary therapy.

Discussion

CAAEBC theory suggests that the restoration of the

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Submitted: August 25, 2022

Approved: September 12, 2022

Published: September 13, 2022

How to cite this article: Zhukov KV, Gasparuan BA, Vetcher AA, Shishonin AY. Centralized aerobic-anaerobic energy balance compensation theory perspective in biomedicine. Arch Biotechnol Biomed. 2022; 6: 007-009.

DOI: 10.29328/journal.abb.1001031

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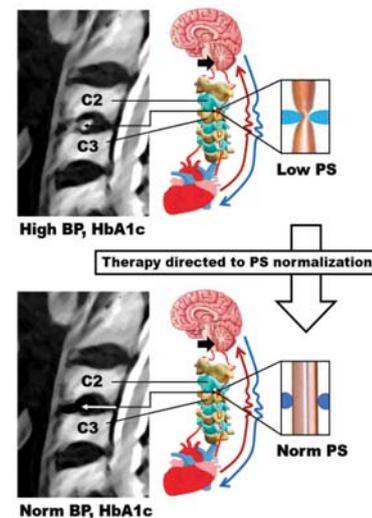


Figure 1: The summary of the available data of CAAEBC theory applications to AHT, DM and osteochondrosis [7-10]. Black arrow indicates rhomboid fossa. The Systolic peak (PS) represents the linear velocity of the blood flow.

above-mentioned access with the subsequent strengthening of the cervical muscular corset will eventually lead to the normalization of the majority of internal body functions and therefore, parameters. Of interest is to understand which parameters are easy to acquire to start with them. It seems that in addition to BMI [11] and SaO₂ [12,13] it will be easy to obtain pH data. Indeed, pH measurements are very important for the following reasons:



- According to modern Medicine, maintaining acid-base balance is an indicator of a good health
- CAAEBC theory directly connects certain NCDs with changes in blood pH [7,10].

But it appears that there are some restrictions on its acquisition and interpretation [14]. Therefore, a procedure for blood pH measurements needs to be developed.

Another issue is the necessity to step from medical record analysis to the experiment. The best options to collect experimental data are definitely animal models, but available sources do not allow us to choose the best specie [15-23].

Conclusion

We demonstrate, that next steps to prove CAAEBC theory should be

- Analysis of BMI and SaO₂ data
- Development of the procedure to collect blood pH data
- Introduction for appropriate animal model

Author contributions

Conceptualization, A.Y.S., A.A.V., B.A.G., A.Y.S.; writing—original draft preparation, A.Y.S., A.A.V.; writing—review and editing, A.Y.S., A.A.V.; visualization, A.A.V.; supervision, A.Y.S. and A.A.V.; project administration K.V.Z. All authors have read and agreed to the published version of the manuscript.

Funding

This paper has been supported by the RUDN University Strategic Academic Leadership Program (recipient A.A.V.).

Acknowledgment

The authors wish to thank BS V.D. Bystrykh for her assistance with the editing of the submission's final version. Alexandre Vetcher expresses acknowledgments to the RUDN University Strategic Academic Leadership Program for the obtained support.

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