

## LETTER TO THE EDITOR

## Gene expressions and mutation analysis in schizophrenia

Şizofrenide gen ifadeleri ve mutasyon analizleri

Serdar Kalemci<sup>1</sup>, Huriye Gülistan Bozdağ<sup>2</sup>, Arife Zeybek<sup>2</sup>

<sup>1</sup>Department of Anesthesia, Kocaeli University of Health and Technology, European Vocational School, Kocaeli, Turkey <sup>2</sup>Mugla Sitki Kocman University Medical School, Department of Chest Surgery, Mugla, Turkey

To the Editor;

We read with interest the article titled "CYB mtDNA mutations and the expression status of genes in the PI3K/AKT/mTOR signaling pathway in patients with schizophrenia" published in Cukurova Medical Journal by Dirican et al<sup>1</sup>.

In this study, CYB mtDNA mutation frequency and PIK3CA, AKTI, mTORmRNA expression levels were found to be higher in schizophrenia patients compared to healthy individuals. Currently, gene association with many diseases are known and thus new treatments are development<sup>2,3</sup>.

When the demographic characteristics of the study were examined, 52.27% of the schizophrenia patients were smokers. Smoking disrupts the mitochondrial DNA structure and gene secretion<sup>4</sup>.We think that it would be appropriate to mention this in the discussion part of this study.

Author Contributions: Concept/Design : SK; Data acquisition: HGB, AZ; Data analysis and interpretation: -; Drafting manuscript: -; Critical revision of manuscript: -; Final approval and accountability: SK, HGB, AZ; Technical or material support: -; Supervision: -; Securing funding (if available): n/a.
Ethical Approval: Ethical approval is not required because this is a comment.
Peer-review: Editorial review. reviewed.
Conflict of Interest: Authors declared no conflict of interest.
Financial Disclosure: Authors declared no financial support

## REFERENCES

- Dirican E, Uzunçakmak SK, Özcan H. Şizofreni hastalarında CYB mtDNA mutasyonları ve PI3K/AKT/mTOR sinyal yolağındaki genlerin ekspresyon durumu. Cukurova Med J. 2022;47:1695-708
- Kalemci S, Edgunlu TG, Kara M, et al. Sirtuin gene polymorphisms are associated with chronic obstructive pulmonary disease in patients in Muğla province. Kardiochir Torakochirurgia Pol. 2014;11:306-10.
- Karaoz E, Kalemci S, Ece F. Improving effects of mesenchymal stem cells on symptoms of chronic obstructive pulmonary disease. Bratisl Lek Listy. 2020;121:188-91.
- Fetterman JL, Sammy MJ, Ballinger SW. Mitochondrial toxicity of tobacco smoke and air pollution. Toxicology. 2017;391:18-33.

Address for Correspondence: Serdar Kalemci, Department of Anesthesia, Kocaeli University of Health and Technology, European Vocational School, Kocaeli, Turkey E-mail: skalemci79@gmail.com Received: 07.04.2023 Accepted: 26.04.2023