



Murine models of sleep apnea: functional implications of altered macrophage polarity and epigenetic modifications in adipose and vascular tissues

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| Auteur | Trzepizur, Wojciech [1], Cortese, Rene [2], Gozal, David [3] |
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| Résumé en anglais | <p>Obstructive sleep apnea (OSA) is a highly prevalent disease across the lifespan, is characterized by chronic intermittent hypoxia and sleep fragmentation, and has been independently associated with substantial cardiometabolic morbidity. However, the reversibility of end-organ morbidity with treatment is not always apparent, suggesting that both tissue remodeling and epigenetic mechanisms may be operationally involved. Here, we review the cumulative evidence focused around murine models of OSA to illustrate the temporal dependencies of cardiometabolic dysfunction and its reversibility, and more particularly to discuss the critical contributions of tissue macrophages to adipose tissue insulin resistance and vascular atherogenesis. In addition, we describe initial findings potentially implicating epigenetic alterations in both the emergence of the cardiometabolic morbidity of OSA, and in its reversibility with treatment. We anticipate that improved understanding of macrophage biology and epigenetics in the context of intermittent hypoxia and sleep fragmentation will lead to discovery of novel therapeutic targets and improved cardiovascular and metabolic outcomes in OSA.</p> |
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Liens

- [1] <http://okina.univ-angers.fr/w.trzepizur/publications>
- [2] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=38924>
- [3] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=38925>
- [4] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=6478>
- [5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=964>
- [6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=29121>
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