

criteria for the effectivity of colchicinotherapy, as well as predictive criteria for the development of amyloidosis and immunosuppression.

ESSENTIAL OILS OF BASIL CULTIVARS AFFECT THE ACTIVITY OF ANTIOXIDANT ENZYMES IN NEURONAL MICROGLIAL CELLS

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Plants of the *Ocimum* genus (Lamiaceae family) are rich in essential oils (EO) and used for various purposes including the treatment and prevention of various diseases. The qualitative and quantitative composition of essential oils of *Ocimum* species, cultivated in high altitude Armenian landscape was quite different and the main components of *O. basilicum* var. *purpureum*; *O. basilicum* var. *thyrsiflora* and *O. x citriodorum* oils belong to the class of oxygenated monoterpenes. Investigated EOs possess remarkable antioxidant activity. They inhibit the tyrosinase activity, the enzyme responsible not only for the melanin production, but also for various aging-related metabolic processes. Investigated EOs had no any significant effect on catalase at the protein levels, but alters its activity in neuroglial BV-2 different cell lines. Treatment of the neuroglial cell lines with the sub-cytotoxic concentrations of three mentioned EOs influence also the activity of acetyl-CoA oxidase type 1.

The microglial cells play a pivotal role as the neuroprotective agents against neuroinflammation. Different data included in the present article are

stating that plant origin substances can play a role of regulators of enzymatic antioxidant capacity of cells. EOs extracted from the *Ocimum* different cultivars are able to trigger the activity of acetyl-CoA oxidase type 1 (or palmytoil-CoA oxidase type 1), which can serve as a basis of regulation of redox deviation in WT cells. So, it can be suggested them to be applied for the prevention of some processes, which can influence on the aging, as the process of ageing is commonly associated with mitochondrial dysfunction, oxidative stress caused by the increased level of free radical production, dysfunction of the microglia, high blood pressure and so on.

Key words: *Ocimum*; essential oil; Oxygenated monoterpenes; microglia; palmytoil-CoA oxidase

РОЛЬ ПЛАЗМИД КИШЕЧНОЙ ПАЛОЧКИ ПРИ КАНЦЕРОГЕНЕЗЕ

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Полученные нами данные, относительно транслокации *E. coli* у больных с канцерогенезом, а также электронно-микроскопические исследования выявили, что если кишечник, где происходят изменения с микробом, иногда необратимые (образование бесструктурных протопластов) является наименее, благоприятной средой для *E. coli* то кровь и тем более опухольнаиболее благоприятные условия для её существования.

Плазмида это репликон, которая кодирует не основные для жизнедеятельности бактериальной клетки функции, но даёт бактерии преимущества при попадании в неблагоприятные условия.

Выделяемые нами плазмиды из *E. coli* здоровых и больных онкологией людейдаютнам возможность продвинуться вперёд в