

Poster presentation

Anti-epileptic properties of oleamide

Ekaterine Mikautadze*¹, Natalia Avaliani¹, Nino Kuchiashvili²,
Maia Nozadze², Tamar Kiguradze², Victoria Pkhakadze²,
Irina Mamulaishvili², Eka Mikeladze² and Revaz Solomonias^{1,2}

Address: ¹Faculty of Life Sciences, I. Chavchavadze Tbilisi State University, Tbilisi, 0179, Georgia and ²Department of Biochemistry, I. Beritashvili Institute of Physiology, Tbilisi, 0161, Georgia

Email: Ekaterine Mikautadze* - katia827@gmail.com

* Corresponding author

from Infectious diseases of the nervous system: pathogenesis and worldwide impact
Paris, France. 10–13 September 2008

Published: 23 September 2008

BMC Proceedings 2008, 2(Suppl 1):P42

This abstract is available from: <http://www.biomedcentral.com/1753-6561/2/S1/P42>

© 2008 Mikautadze et al; licensee BioMed Central Ltd.

Epilepsy is a heterogeneous group of disorders. It is the most common neurological disorder after the stroke, with a 2–3% life-time risk of being given a diagnosis of epilepsy [1]. Antiepileptogenic drugs that retard or prevent epileptogenesis are not yet available [2]. Extract of the plant *Aquilegia vulgaris* is widely used in folk medicine as an antiepileptic medicament [3]. We have previously demonstrated that oleamid – sleep inducing lipid and myo-inositol are two compounds acting on γ -aminobutyric acid type A receptors and hence candidates determining the anti-epileptic properties of the plant *Aquilegia vulgaris* [4]. Further it was shown that myo-inositol reduces the strength of seizures induced either by pentylenetetrazol or kainic acid in rats. In the present work we are demonstrating that oleamid also possesses anti-epileptic features and significantly decreases the degrees of convulsions induced by pentylenetetrazole in rats.

fraction exhibiting anti-epileptic activity. *J Biol Phys Chem* 2004, **4**:187-192.

References

1. Browne TR, Holmes GL: **Epilepsy.** *N Engl J Med* 2001, **344**:1145-1151.
2. Loscher WW: **Animal models of epilepsy for the development of antiepileptogenic and disease-modifying drugs. A comparison of the pharmacology of kindling and post-status epilepticus models of temporal lobe epilepsy.** *Epilepsy Research* 2002, **50**:105-123.
3. Shreter AI: *Medicinal Herbs of Soviet Far East Moscow: Medicina*; 1975:105-106.
4. Solomonias R, Kuchiashvili N, Berulava A, Pkhakadze V, Trapaidze N, Zhvania M, Abesadze I, Kojima H, Dalakishvili N: **Purification and identification of components of the *Aquilegia vulgaris* extract**