



351

**THE EFFECT OF INHIBITION OF PISTACIA LENTISCUS'S
ETHANOLIC EXTRACT ON ACETYLCHOLINESTERASE ACTIVITY**

Naderi, Gholamali,^{1,*} Ahmadi, Masodeh¹

¹Biochemistry Department School of Medicine, Shahed University. Tehran, Iran
E-mail:naderi@shahed.ac.ir

Dementia is a progressive reduction in perceptual abilities, which some mental disease or damages cause it. Initial signs of Dementia are change in character and manner, short time memory, abilities of understanding and language. There is difference kind of Dementia but Alzheimer is the most prevalent Dementia disorders. Reductions in memory, unusual behavior, exposition decrease and change in character have been seen in this disease. Accession of this disorder is 5-1 percent after 65 years of age and 20-40 percent after 85-100 years of age[1]. There aren't any definite methods to treatment this disease but there are some ways to decrease the signs and control of disorders. In this way antioxidant agents, acetylcholinesterase inhibitors and anti-inflammation drugs such as physostigmine could be used [2]. The most important effect of Alzheimer disease is the reduction in memory, in the traditional medicine of Iran pistacia Lentiscus was used to support memory. In this study for the first time the quality of pistacia Lentiscus extract to improve Alzheimer disease and comparison between inhibitory effects of this extract and physostigmine into acetylcholinesterase was investigated. It was showed that pistacia Lentiscus extract could improve Alzheimer disease sings and this positive was achieved via comparative inhibition of acetylcholinesterase such as physostigmine. However, the inhibitory effect of pistacia Lentiscus was half of this effect in comparison with physostigmine [3].

References

- [1] Ballantye, B.; Marrs, T. C. *Clinical and experimental toxicology of organophosphates and carbamates*. 1992, 96-15.
- [2] Parihar, M. S.; Hemneni, T. *JClin Neurosci*. 2004, 11(5), 456-67.
- [3] Tran, M. H.; Minkyang, N.; Byung, S. M. *Arch Pharm Res*. 2007, 309, 685-690.