

Diagram 1) Evaluation of malondialdehyde level in brain tissue among the studied groups. There was a significant difference between all groups at $p < 0.001$. *** indicates a significant difference at the level of $p < 0.001$.

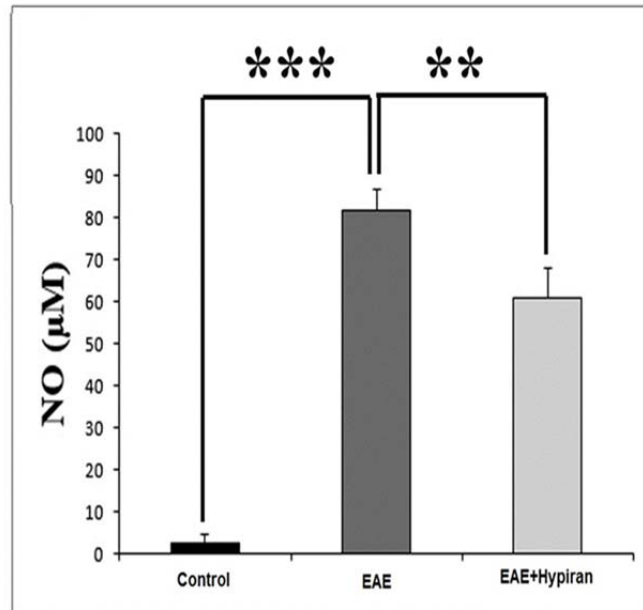


Diagram 2) Serum nitric oxide level changes among the studied groups
** indicates a significant difference at the level of $p < 0.01$ and *** indicates a significant difference at the level of $p < 0.001$.

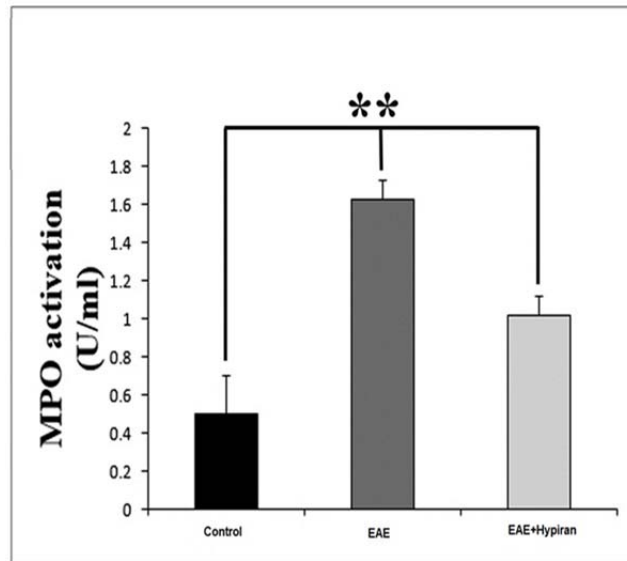


Diagram 3) Serum myeloperoxidase level changes among the studied groups
There was a significant difference among all groups at the level of $p < 0.01$. ** indicates a significant difference at the level of $p < 0.01$.

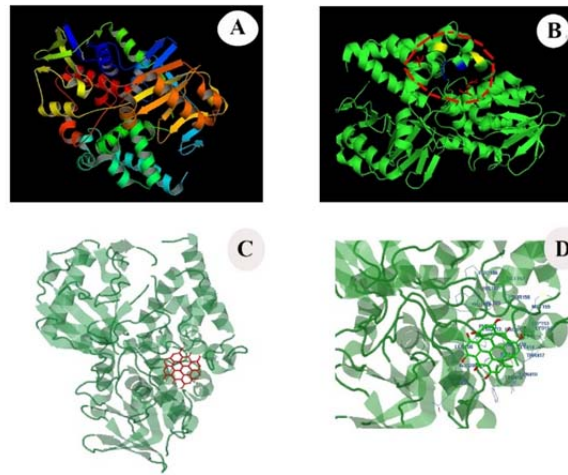


Figure 1) (A) Structure of monoamine oxidase A, (B) Hypiran binding zone to monoamine oxidase A, (C, D) Position of Hypiran in the interaction and the amino acids surrounding it

Table 1) Binding energy, inhibitor constant, and other interaction parameters

ΔG binding	Estimated Ki	vdW + Hbond + desolv energy	Electrostatic energy	Total intermolecular. energy	Frequency	Interact. Surface
7.50kcal/mol	3.18 μ M	08.07kcal/mol	-0.01kcal/mol	-8.08kcal/mol	10%	612.162

Decomposed Interaction Energies in kcal/mol

Table 2) Type of interaction of essential amino acids in monoamine oxidase A

Polar	hydrophobic	Other
ARG297 (-0.803)	PRO413 (-3.0149)	LYS154 (-0.4281)
THR156 (-0.6472)	PRO412 (-1.3801)	GLN418 (-0.3457)
	ILE415 (-0.9529)	