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Synergistic effect of *Laginaria siceraria* and citalopram on memory in experimentally induced Amnesia in Wistar rats

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Many medicinal plants and conventional drugs are therapeutically active at one dose and toxic at another. Interaction between herbs and drugs may increase or decrease the pharmacological or toxicological effects produced by either of the component. The present study was aimed to evaluate the synergistic effect of citolapram and aqueous extract of *laginaria siceraria* on memory in experimentally induced amnesia in wistar rats. Scopolamine 0.3 mg/kg and electro-convulsive shock were used to induce amnesia in rats. In order to evaluate synergistic effect of aqueous extract of *laginaria siceraria* and citalopram in the doses 800+0.2 mg and 400+0.4 mg/kg respectively, administered orally in experimentally induced amnesic rats. The treated animals were tested for retention of memory using behavioral and cognitive features mainly elevated plus maze, passive shock avoidance test and morris water maze. The result obtained from the present study both in scopolamine and electro-convulsive shock reduced the cognitive activity in untreated animals where as concomitant (*laginaria siceraria* and citalopram) treatments significantly increased the cognitive activity as well as decreased elevated glucose and lipids. From the present study, it indicates that concomitant treatment of *laginaria siceraria* and citalopram shows dose dependant anti-amnesic activity in experimentally induced amnesic animals. Further studies are needed to evaluate the potential effectiveness of *laginaria siceraria* and citalopram as nootropic agents.

Keywords: Laginaria siceraria, Citalopram, Scopolamine, Amnesia, Synergistic effect.

Biography

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