

EXPLORATION OF MECHANISM OF *HYGROPHILA AURICULATA* TO TREAT CARBOPLATIN INDUCED TOXICITIES BUILT ON NETWORK PHARMACOLOGY

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ABSTRACT

Hygrophila auriculata is a traditional herb used for several ailments, with an unclear mechanism of action. The present study aimed to detect its efficacy on nephrotoxicity and hepatotoxicity in Wistar rats followed by network pharmacology analysis to explain its mechanism of action. 24 rats were divided into 4 groups (n=6). After baseline blood investigations, group 1 was treated with normal saline on 13th day, groups 2-4 with carboplatin, groups 3, 4 with different strengths of *H. auriculata* (day 15 to 30). The active components along with targets of *H. auriculata* were screened and overall network was created using Cytoscape software. We made preliminary predictions about the major active components, targets along with signalling pathways of *H. auriculata* to treat carboplatin induced hepatotoxicity and nephrotoxicity, which could pave way for clinical application of *H. auriculata* against carboplatin induced toxicities.

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