ANTITUMOUR POTENTIAL OF NANOPARTICLE TAGGED PECTIN IN CARCINOMA INDUCED MICE

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As the world battles with the growing incidence of carcinogenesis, the search for novel chemopreventive agents to selectively target the tumour cells with negligible toxicity to the host cells constitute an urgent priority. Co-chemotherapy using nanotechnology and natural products can be fully exploited for the advantages of cancer patients.

In the present study, the anti-tumour potential of nanosilver (nAg) tagged fractionated pectin powder (FPP) was explored against Ehrlich ascites carcinoma (EAC) induced mice at two doses using different control and treatment groups. At the end of the experimental period, parameters including morphology of animals, body weight, tumour volume, packed cell volume, cell viability, mean survival time (MST) and percentage increase in life span were recorded.

There was significant (P < 0.01) increase in body weight, packed cell volume, marked (P<0.05) increase in the total cell count and (P<0.01) decrease in MST in EAC induced mice. nAg tagged FPP has restored the abnormal parameters to near normal levels.

nAg tagged FPP has excellent EAC tumour suppressing properties.