

Pharmacological evaluation of aqueous extract of *solanum nigrum* linn. in oral mucositis

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Oral mucositis is one of the side effect of cancer therapy which occurs in 70% of patients which negatively impacts patient's quality of life (QOL). It also influences optimal chemotherapy cycle through dose reductions, treatment delays or discontinuation. Our investigation aims at identifying intervention to reverse or prevent oral mucositis associated with combined chemotherapy and radiation. *S.nigrum* reported to possess potential antioxidant, anti-inflammatory, ulcer healing, antifungal and immunomodulatory activities. Aqueous extract (AESN) of this plant was investigated for its protective role to reverse IR-Busulfan induced oral mucositis model in female wistar rats which was developed by us earlier. Treatment with *S.nigrum* aqueous extract resulted in significant increase in body weight and food intake compared to mucositis control rats. Also groups treated with test extract showed significantly reduced oral mucositis score compared to mucositis control. Treatment with positive control (L-Glutamine) and test extract at 100 & 200 mg/kg, p.o. showed normal thickness of epithelium and optimal number of blood vessels with absence of lymphocytic infiltration. Our study concludes that AESN can be a potential intervention for oral mucositis associated with chemotherapy and radiotherapy so as to improve cancer patient's QOL.

Biography

Dr. Nandakumar K has completed his Ph.D. at the age of 28 years from Bharati Vidyapeeth University, Pune. Presently he is working as Associate Professor at Department of Pharmacology, Manipal College of Pharmaceutical Sciences, Manipal. To his credit he has 45 papers in reputed journals and reviewer of reputed International journals. He has completed about 10 Industrial funded projects.

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