



Dr. Vikas Sharma of SKUAST-J isolated anticancerous compounds from Jammu Spice



Jammu, May7: In a major achievement, a scientist of SKUAST Jammu, Dr Vikas Sharma isolated two active ingredients from the rhizome part of “*Curcuma longa*” popularly known as “Turmeric or Haldi”, that possess significant *in vitro* cytotoxic effect against colon, lung and prostate cancer cells. While working on the anticancer potential of Jammu spices from the last four years, Dr Sharma along with his Ph.D scholar Miss Arti Heer yielded very interesting and significant consensus from medicinal view point as the pure molecules isolated during the investigation were observed to be most cytotoxic against colon cancer cells with more than 90% activity at even lower concentration.

Dr Vikas Sharma informed that indigenous variety of turmeric was collected from Chatha Village, crushed into powdered form, extracted and then treated with human cancer cells from different tissues. He further informed that these active ingredients (happen to be polyphenolic compounds) have the potential to serve as candidate drugs for cancer therapy and may very well be



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exploited for cancer treatment to provide a great promise and service to patients with colon carcinoma regarding which the advance research is going on in the Division of Biochemistry, Faculty of Basic Sciences, SKUAST-Jammu in collaboration with Cancer Pharmacology Division, Indian Institute of Integrative Medicine (IIIM-CSIR), Jammu

Dr. Vikas informed that cancer cases are on rise in Jammu and Kashmir with lung cancer becoming most prominent due to smoking. The summer capital Srinagar tops the number followed by Jammu and Ladakh, but most of the drugs used in cancer chemotherapy exhibit cell toxicity and can induce genotoxic, carcinogenic and teratogenic effects in non tumor cells. Therefore, the research for alternative drugs of natural origin, which are less toxic, endowed with fewer side effects and more potent in their mechanism of action, is an important research line.

Dr. Sharma said that Jammu region has great botanical diversity, but very few of them have been subjected to accepted scientific evaluation for their potential anticancer effects. Therefore, *Curcuma longa* was collected from Jammu subtropics and evaluated / tested for its *in vitro* cytotoxic effect against various human cancer cells. Dr Vikas stressed that the people of Jammu should encourage the consumption of turmeric in their daily meals so as to avoid the risk of cancer and regular consumption of this spice is associated with reduced risk of colon cancer as additive/synergistic effects of phytochemicals are responsible for the potent anticancer effects. Dr. Vikas Sharma, S/o Sh. Harbans Lal Sharma and Pushplata Sharma, R/o Sector No. 3, Channi Himmat is presently posted as Assistant Professor (Biochemistry), Faculty of Basic Sciences, SKUAST-JAMMU, Main Campus Chatha and has been working on bioprospecting of natural products.