

## Protective Effect of Germinated Fenugreek Seeds on Keratoacanthoma Cancer Skin

**Authors :** Zahra Sokar, Sara Oufquir, Brahim Eddafali, Abderrahman Chait

**Abstract :** Fenugreek is one of the oldest plants used in traditional herbal medicine. Several studies have demonstrated the anticancer effects of seeds by inhibiting the proliferation, angiogenesis, invasion and metastasis of various cancers. While there is plenty of research demonstrating the antineoplastic effects of dormant seeds, little is known about the potential of sprouts in fighting cancer. Therefore, we propose to study the chemoprotective effect of germinating fenugreek seeds on keratoacanthoma skin cancer induced by cutaneous exposure to DMA/Croton oil in mice. The results obtained show that oral administration of 250 and 500 mg/kg aqueous sprout seed extract reduces the incidence, rate, volume, and tumor weight in a very significant manner. Histological examination revealed that mice treated with 250 mg/kg showed strong inhibition of squamous cell carcinoma formation with thickening of the epithelial layer and mild acanthosis and hyperkeratosis. A dose of 500 mg/kg prevented invasion and the occurrence of hyperkeratosis. Fenugreek sprouts appear to be a promising natural product for preventing keratoacanthoma skin cancer. Nevertheless, further studies in the same field need to be developed to evaluate the antineoplastic potential of germinated seeds.

**Keywords :** anticancer, fenugreek, keratoacanthoma, sprouts

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