Curcumin as New Phytochemical for Skin Cancer Treatment

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Letter to the Editor

Many studies on the biological activity of curcumin have indicated its anticancer, antioxidant, anti-inflammation, antimicrobial and wound healing effects [1]. Therefore, its therapeutic effects have been considered in dermatology fields and recently in skin cancers, however, over the past few years, several clinical trials have started to evaluate the effects of curcumin in inflammatory and infectious diseases of the skin. Recent studies indicate curcumin upregulates the expression of pro-apoptotic proteins such as some caspases members and inhibit NFκB pathway and likewise showed anti-proliferative activity in the murine melanoma cells [2,3]. Recently cationic liposomes were utilized for topical co-delivery of curcumin and siRNA for effective treatment of skin cancer [4].

Taken together, low aqueous solubility, poor tissue absorption, rapid metabolism and short plasma half-life have made curcumin unsuitable for its better administration in therapeutic application [5]. Hence, currently, we try to evaluate curcumin delivery by designing an efficient delivery system.

References


