

Curcumin Application For The Treatment Of Colitis And Colon Cancer

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ABSTRACT

Colon cancer is very common type of GIT cancer that arises from any part of the colon. An examination of your entire colon using a long, flexible tube equipped with a camera (colonoscopy) is one way to detect colon cancer and polyps. The standard treatment for cancer is generally based on using cytotoxic drugs, radiotherapy, chemotherapy, and surgery, but the herbal drugs also attract attention of researchers toward itself. The aim of the present work is to develop and evaluate the curcumin loaded bio- tablet formulation effective on colitis & colon cancer with special emphasis on turmeric components (curcumin) and its mechanisms of action. Based on literature search, Curcumin, a component of turmeric obtained from the rhizomes of an herbaceous perennial plant of ginger, family (*Curcuma longa*) are the most effective plants component against colon cancer. Various mechanism of colon cancer follows the path by chromosomal instability, mutation in the tumor suppressor or cell cycle gene in S phase leading to cellular transformation & genetic alterations resulting in impaired cellular pathways, such as DNA repair mechanism. In addition, curcumin has received great attention over the past two decades as an anticancer agent. Curcumin affects a variety of growth factor receptors and cell adhesion molecules involved in tumour growth, angiogenesis and metastasis. Analytical results for curcumin were found to be satisfactory in tablets so turmeric extract powder was used as a source of curcumin in tablet formulation. Thus, in this review we consider curcumin as such a potential candidate supporting its therapeutic activity of controlling and treating colon cancer.

Keywords:

*Colonoscopy, Polyps,
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