Cannabis-derived substances in cancer therapy--an emerging anti-inflammatory role for the cannabinoids.

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Abstract
Cannabinoids, the active components of the cannabis plant, have some clinical merit both as an anti-emetic and appetite stimulant in cachexic patients. Recently, interest in developing cannabinoids as therapies has increased following reports that they possess anti-tumour properties. Research into cannabinoids as anti-cancer agents is in its infancy, and has mainly focussed on the pro-apoptotic effects of this class of agent. Impressive anti-cancer activities have been reported; actions that are mediated in large part by disruptions to ubiquitous signalling pathways such as ERK and PI3-K. However, recent developments have highlighted a putative role for cannabinoids as anti-inflammatory agents. Chronic inflammation has been associated with neoplasia for sometime, and as a consequence, reducing inflammation as a way of impacting cancer presents a new role for these compounds. This article reviews the ever-changing relationship between cannabinoids and cancer, and updates our understanding of this class of agent. Furthermore, the relationship between chronic inflammation and cancer, and how cannabinoids can impact this relationship will be described.

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