

Review on Anti-Neoplastic Properties of Some Selected Indian Medicinal Plants

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Ayurveda since ages has been treating various diseases. Medicinal plants and their bioactive compounds have been reported to prevent and cure several ailments. In today's context where cancer is claiming millions of lives and the existing therapies are not only out of reach of many due to cost involved, but also cause several unwanted, dreadful side effects, it is imperative to search for alternative therapies. Ayurveda is an answer to this, where various medicinal plants, their secondary metabolites alone or together with other plant extracts have shown promising anti-tumorigenic and anti-neoplastic properties. The present review has reported such promising properties of few selected Indian medicinal plants. The secondary metabolites of these plants have shown great potential as anti-neoplastic phytochemicals as effective and cheaper alternative of cancer treatment in developing and under developed countries. For instance, andrographolide drug discovery is a promising strategy for the development of a novel class of anti-inflammatory and anticancer drugs. These are also better alternatives in terms of producing no dreadful, lifelong side effects which are commonly encountered with the current cancer therapies. Anticancer activities of plant derived drugs can be enhanced using novel technologies including use of nano-particles as nano-medicines for targeted, controlled and sustained release of compound. The metadata analysis has shown the evidence and significant potential of plant derived metabolites for the cancer therapy and its management. The review focuses on few important ayurvedically acclaimed medicinal plants already documented well for their disease treating abilities and have presented them as strong candidates for cancer treatment as well as supportive therapy.