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Current cancer treatments in the form of chemotherapy, radiation and surgery, while effective in some cases, bring with them an onslaught of complications and unintended consequences. Curcumin as an alternative cancer treatment comes without any of the atrocities these other treatments can bring.

Kinase Inhibitors

One of the most looked at areas in oncology drug development is in the field of developing chemical versions of kinase inhibitors. Kinases are messengers that communicate with cancer cells by transmitting messages from the outside of a cell to the inside of a cell where the DNA command center is located. Block these messages, and it's possible to halt the growth of certain types of cancer cells.

How does Curcumin fit into this scenario? Curcumin has the ability to block some of these transmissions. Fortunately, Curcumin's structural make-up enables it to inhibit multiple kinases. While drug companies seem intent on to trying to develop safe, patentable, synthetic versions of this structure, Curcumin is already available. Blocking kinases, however, is only one of the ways to use Curcumin as an alternative cancer treatment.

Curcumin and NSAIDs

Statistically speaking, those who take anti-inflammatory non-steroidal drugs (NSAIDs) on a regular basis have less of a probability of developing cancer. While NSAIDs may be beneficial in fighting cancer, NSAIDs come with an entire list of health complications, not the least of which is gastrointestinal bleeding. The prescription drug Celebrex is a COX-2 inhibitor, a form of NSAID, and may prevent colon cancer. Celebrex, like other NSAIDs, is accompanied by so called "normal" side effects, and in rare cases, blood clots, heart attacks, liver disease, and even death may occur.

Curcumin is a naturally occurring COX-2 inhibitor that has proven to be effective as a chemopreventive agent against cancer, especially colon cancer, with little, if any side effects.

In Vivo and In Vitro Studies

In vivo and in vitro studies have demonstrated the effectiveness of Curcumin as an alternative cancer treatment. These studies show Curcumin prevents certain types of chemically induced cancers, e.g., colon and skin cancers, from advancing. Researchers have observed Curcumin reduces the volume and size of existing tumors, as well as cutting back on the occurrence of new tumors.

National Cancer Institute

Curcumin as an alternative cancer treatment is living up to its potential to the extent that the National Cancer Institute (NCI) in its 2002 annual report revealed its plans to foster research on Curcumin's utilization in cancer prevention and treatment.

The NCI supported the University of Michigan's Comprehensive Cancer Center's human trial on how the body utilizes, absorbs, and eliminates Curcumin. Additional studies on Curcumin as an alternative cancer treatment have been presented to the NCI and are pending approval.

References

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