

## Review of the therapeutic effects of Ayurveda and complementary medicine in colorectal carcinoma

B. M. S. Amarajeewa<sup>1</sup>, L. D. C. Sandun<sup>2</sup>, D. H. I. S. Weerasinghe<sup>3</sup>

<sup>1</sup>*Department of Ayurveda Surgery, ENT, Ophthalmology and Gynecology, Obstetrics and Pediatrics, Faculty of Indigenous Medicine, University of Colombo, Sri Lanka*

<sup>2</sup>*Postgraduate Institute of Indigenous Medicine, University of Colombo, Sri Lanka*

<sup>3</sup>*Institute of Biochemistry, Molecular Biology and Biotechnology, University of Colombo, Sri Lanka*

Colorectal carcinoma (CRC) is the third most common type of cancer and the second leading cause of cancer-related deaths globally. Disparities in CRC epidemiology exist among populations, likely due to variations in exposure to lifestyle and environmental factors associated with CRC. Primary prevention involves identifying and mitigating modifiable risk factors, such as alcohol consumption, tobacco use, and unhealthy dietary components, while concurrently promoting protective factors like physical activity. CRC is a condition that exclusively affects the colon or rectum, resulting from the abnormal proliferation of glandular epithelial cells within the colon. There are three main types of colorectal cancer: sporadic, hereditary, and colitis-associated. Approximately 20% of CRC cases are linked to genetic factors, with research indicating a threefold increased risk of cancer among first-degree relatives of CRC patients. The main objective was to review the therapeutic effects of Ayurveda and complementary medicine on CRC. A comprehensive review of studies from January 2005 to August 2025 was conducted on PubMed, Scopus, and Web of Science. Combining Ayurveda with systems like TCM and Korean medicine may offer additional treatment options. Evidence suggests that these methods can influence gene expression, signaling pathways, and immune function and reduce treatment side effects. Herbal remedies and traditional therapies may alleviate symptoms, improve quality of life, and sometimes cause tumor regression when combined with conventional treatments. Ayurvedic therapies, including Rasayana and herbs like *Catharanthus roseus*, show potential for long-term management and recovery. However, most research is anecdotal; rigorous clinical trials are needed to confirm safety and effectiveness. Future studies should integrate traditional and modern medicine for a comprehensive approach to CRC treatment.

**Keywords:** *Colorectal carcinoma, Arbuda, Ayurveda, Complementary medicine, Herbal therapy*