

Session 6: Chemotherapy and Discovery of Chemotherapeutic Agents: Research on Natural Products

Research on Thai medicinal plants for cancer treatment

Arunporn Itharat

Applied Thai Traditional Medicine Center, Faculty of Medicine, Thammasat University, Thailand
E-mail: iarunporn@yahoo.com

Abstract

This topic reviews the research on anticancer effects of medicinal plants originating from Thailand. The selection of the plants for the research was based largely on their ethnomedical use by Thai folk doctors and on the knowledge of Thai traditional medicine. The investigations focused primarily on the plants frequently used in the preparations for cancer treatment. The plants were tested for active components followed by using the National Cancer Institute (NCI) assays for anticancer compounds. The biological assay which correlated with cancer such as, antioxidant, immunology, anti-inflammatory and antimicrobial were also investigated. Plant extracts have been compared with whole plant preparations as well as combinations of many plants for their effectiveness as anticancer medicine. In one preparation composed with many plants which were proved that some plants in the preparation showed cytotoxic activity against cancer cells and plant showed no cytotoxic activity but they exhibited another activity such as antioxidant, anti-inflammation, antimicrobial and enhance immunology. The concept of cancer treatment research in Thailand is moving toward the holistic approach, which requires the knowledge of both body and mind. Most of the current research on the subject in Thailand is on elucidation of biological activity of plant materials to confirm. Informal clinical trials have been conducted on some of the anticancer preparations, but most are unpublished. The present results indicated that using whole herbal preparations has produced gentler effects on the human body because of the synergy of the plants, which make up the preparations. All of these cancer research can supported using cancer preparation of Thai folk doctors

Key Words: Thai medicinal plants, Thai traditional medicine, anticancer herbs