

International Conference on Cytopathology

August 31-September 02, 2015 Toronto, Canada

Analyzing the Caffeic acid in *Eugenia caryophyllata* by HPLC with extracting method and treated with cervical cancer cell line

Je-Chiuan Ye

Taipei College of Maritime Technology, Taiwan

Eugenia caryophyllata Thunb. is an herbal medicine and caffeic acid is one of its main components. Caffeic acid (3,4-dihydroxycinnamic acid) has been known to control cholesterol and triglycerides level, reducing the activity of cancer cell and enhancing immunity in the human body. Caffeic acid can also be found in the vegetable oil, such as potato plants, curly kale oil and so on. This paper presents the method by using high performance liquid chromatography (HPLC) with extracting method in the *E. caryophyllata* Thunb., and we found that caffeic acid can suppress the growth of cervical cancer cell line (He-La). Its DNA fragmentation was noted in 83.94% of cells after exposure to 10 mM caffeic acid for 48 hr. We examined the effect of caffeic acid on expression of the P53 protein by western blotting. Exposure of HeLa cells to caffeic acid led to the disappearance of the anti-apoptotic Bcl-2 protein on the mitochondria and the release of cytochrome c into the cytosol. So our findings suggest that caffeic acid has a strong anti-tumor effect and, therefore, might be a promising chemopreventive or chemotherapeutic agent.

Biography

Je-Chiuan Ye has completed his PhD from Chung Shan Medical University. He is the Director of Academic Development Center at Taipei College of Maritime Technology. He has published more than 10 papers in reputed journals.

9503023@gmail.com

Notes: