

Global Cancer Conference & Medicare Summit

September 15-17, 2014 Hyderabad International Convention Centre, India

Antitumor effect of aqueous extract of *Ziziphus jujuba* fruit on P53/P21 expression in cervical cancer

Reyhane Hoshyar, Abedini Mohammad and Fereydooni Mohammad
Birjand University of Medical Sciences, Iran

The medicinal plant *Ziziphus jujuba* has various therapeutic effects such as antibacterial, antiviral, anticancer and antioxidant effects. It is known that *Ziziphus jujuba* can elicit vital cellular responses such as cytotoxicity, cell cycle arrest and apoptosis by activating a cascade of molecular events. But the exact mechanism of its action is still unclear. The aim of this study was to investigate growth-inhibitory effects of this herb in OV-2008 human cervical cancer cells in vitro. Assays were performed to determine cell viability and gene expression, measured by MTT assay and real time polymerase chain reaction (RT-PCR). *Ziziphus jujuba* revealed a dose- and time-dependent cytotoxic effect against OV-2008 cells. *Ziziphus jujuba* also increased p53 and p21 expression (as tumor suppressor genes) after 6, 12, 24 and 36 h treatments that may lead to cell cycle arrest of cancer cells. These findings indicate that the *Ziziphus jujuba* could be useful to prevent and treat human cervical cancer.

reyhaneh.hoshyar@gmail.com