conferenceseries.com

3rd Euro-Global Conference on

# Infectious Diseases

September 05-06, 2016   Frankfurt, Germany

Immunomodulating potential of Argemone mexicana through cytokine regulation

Anjana Goel and A K Bhatia
GLA University, India

Argemone mexicana is used in folk medicines to treat many diseases in India. e decoction of leaves is used for the treatment of malaria, ulcers and chronic skin diseases. It is reported earlier that sanguinarine and dihydrosanguinarine alkaloids are present in di erent parts of this plant. In the present study the leaves of Argemone mexicana were analyzed for the presence of these toxic compounds with HPTLC and GC-MS analysis and found negative for these compounds. ese toxic compounds are probably present in seeds and owers. us aqueous leaves extract was investigated to validate the e ect of plant on chronic skin diseases by regulating the expression of cytokines. Wistar albino rats were fed with non toxic dose, 250 mg/kg body weight of A. mexicana extract for 20 days. Spleens were removed from control and A. mexicana treated animals. Splenocytes were cultured in presence of 10 µg/ml con-A for 48 hours. IL-2, IFN-gamma and IL-10 cytokines were quantitated in culture supernatant by ELISA technique. ere was a signi cant increase in IL-10 expression as compare to control animals. In contrast IL-2 and IFN- were expressed in signi cantly low quantities when compared with control animals. It can be concluded from the study that e ect of A. mexicana is used to cure the allergic and hypersensitive type of immunological disorders of skin, like psoriasis, might be due to the stimulation of IL-10, immune suppressive cytokine, secreted by TH-2 subset of TH cells. While the cytokines secreted from TH-1 subsets, IL-2 & IFN- , which increase the immunological responses were down regulated.

## Biography

$ Q M D Q D   * R H O   K D V   F R P S O H W H G   K H U   0 6 F   L Q   % L R F K H P L V W U \   I U R P   / X F N Q R Z   8 Q L Y H U V L W \   D Q G   R E W D L Q H G   K H U
3 U L Q F L S D O   , Q Y H V W L J D W R U   L Q   ' 6 7   V S R Q V R U H G   S U R M H F W   X Q G H U   : 2 6   $   V F K H P H     6 K H   L V   F X U U H Q W O \   Z R U N L Q J   D
D Q G   , P P X Q R O R J \     6 K H   K D V   S X E O L V K H G   P R U H   W K D Q       S D S H U V   L Q   U H S X W H G   M R X U Q D O V   D Q G   S U H V H Q W H G   P R U

D Q M D Q D   J R H O # J O D   D F

Notes:

J Infect Dis Ther
ISSN: 2332-0877 JIDT, an open access journal

Euro Infectious Diseases 2016
September 05-06, 2016

Volume 4, Issue 5(Suppl)

Page 16