Bee products as immuno-potentiation

The uses of honey bee products for therapeutic purposes referred to Apitherapy. The apitherapy term comes from the Latin *apis*, which means “bee,” or bee therapy. Bee products included venom, bee pollen, raw honey, royal jelly, and propolis. These products from bees that are generally considered to have medicinal effects. A great interest in last decade of biologist, medical doctors and scientists are directed due to their biological and phytochemical activities of apitherapy.

Bee products contain physiologically active substances from floral origin of bee and plants. Bee products act upon both innate and adaptive immune response. At different levels, in the human innate response, these compounds decrease proinflammatory cytokine synthesis (IL-2, IL-12 and IL-4), inactivate both the classical and alternative complement pathway, and decrease superoxide anion production in neutrophils. Where in adaptive immune response, propolis and honey induce the increase of antibody production by plasma cells, enhance the secretion of TGF-β after the activation of T regulatory cells, so the aim of this review was to through more light on the role of bee products immune potentiation.

Biography

Ahmed G Hegazi worked as a Professor of Microbiology & Immunology, National Research Center, Dept. Parasitology, 1997-2000, Chair of Faculty of Medicine, Zagazig University, 1981-1997, part-time Professor and Supervisor of Immunology Section, National Research Center, 1990- till now. He is also Prof. of Microbiology & Immunology, African Federation of Apiculture Associations (AFAA), 2001- till now, Standing Commission on Apitherapy (APIMONDIA), 1999 - till now, Member of Standing Scientific Committee, National Research Center, 1998 – till now. He was awarded the Excellent Medal of the First Class, 1995, received the Senior Scientist Prize of National Research Center, 1996, and won The Second Best Research Paper award from International Congress of Propolis, Argentina, 2000. He has published in *Egyptian Journal of Immunology*, 1995, was in the Editorial Board of The Egyptian Association of Immunologists, 1992 –1997, Secretary General, Referee in 37 international journals patents: 4 Patents Educational Activities. He has published 193 articles in national and international scientific journals, 6 books in English and 7 books in Arabic.

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