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## Cytokines in localized plaque psoriasis treated with by some bee products

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**Background:** Several therapeutic modalities have been used for treatment of psoriasis. Apitherapy entails the medical use of bee products as honey, bee venom and propolis.

**Objectives:** To evaluate bee venom honey and propolis, as a new therapeutic modality for localized plaque psoriasis.

**Materials & Methods:** Eighty patients were randomized into four treatment groups: Group-I: Received intradermal bee venom twice weekly, Group-II: Received topical propolis and honey ointment in Vaseline base, Group-III: Received oral propolis capsules 3 gm/day and group-IV: Received intradermal bee venom, oral and topical honey and propolis, Group-V: Received drugs. Response to treatment was assessed by calculating PASI score and measuring serum interleukins: IFN- $\gamma$ , interleukin (IL) 1 $\beta$ , IL-4, IL-6, IL-10, tumor necrosis factor alpha (TNF $\alpha$ ) was detected before and after 3 months of treatment.

**Results:** A significant reduction in both PASI score and serum level of IL-1 $\beta$  and IL 6 was observed in all groups. Changes in PASI score, IFN- $\gamma$ , interleukin (IL) 1 $\beta$ , IL-4, IL-6, IL-10, tumor necrosis factor alpha (TNF $\alpha$ ) were significantly reduced in groups I, IV and V compared to groups II and III. All treatments were tolerable with minimal adverse effects.

**Conclusions:** Intradermal bee venom and oral propolis are safe and effective treatments of localized plaque psoriasis with minimal tolerable side effects intradermal bee venom has superior results than oral or topical honey with propolis when used alone or in combination with propolis.

### Biography

Ahmed G Hegazi is currently a Professor of Microbiology and Immunology in the National Research Center, Egypt. He has received his Master's degree in 1979 and his PhD in 1981. He has been the Principal Investigator on multiple research projects within the National Research Center. He has published 211 scientific papers and articles in national and international journals. He has served on the board of multiple national and international scientific journals. He is also the President of the Egyptian Environmental Society for Uses and Production of Bee Products, Secretary of the Egyptian Society of Apitherapy, Secretary General of the African Federation of Apiculture Associations and a Member of the International Apitherapy Commission (APIMONDIA). He has received several awards which include First Class Decoration of Excellence (1995), The Senior Scientist Prize of National Research Center, (1996), The National Scientific Prize In Biological Sciences (1990), The Scientific Prize of The National Research Center (1989), 2 Bronze Medals from The International Innovation Fair of the Middle East, Kuwait (2007), awarded Ghazi Wad Allah Salon Prize (2008) and has 4 patents to his credit.

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